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Medicare Reform: Evaluating the Fiscal Soundness of Medicare

AMERICAN ACADEMY *of* ACTUARIES

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Evaluating the Fiscal Soundness of Medicare

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Executive Summary

Medicare provides substantial support to older and disabled Americans in meeting their health care needs. Almost 98 percent of the population age 65 years or older in this country is covered by Medicare. No doubt in large part due to the significant number of Americans impacted by the program, public policy-makers continue to debate how Medicare should be modified in response to the changing health care environment in this country.

The American Academy of Actuaries Medicare Reform Task Force believes Medicare faces urgent financial problems that demand action. The financial problems are already evident and will accelerate around 2010, when the post-World War II baby boom generation begins coming onto the Medicare beneficiary rolls in large numbers. According to the 2000 trustees report, the Medicare Part A (hospital insurance or HI) program will exhaust its trust fund in 2025[1], based on the intermediate set of assumptions. Because of its different financing procedure, Medicare Part B (supplementary medical insurance or SMI) cannot exhaust its trust fund. However, its cost relative to gross domestic product (GDP) is expected to rise from about 0.9 percent today to about 2.2 percent around 2035 — a level that may not be affordable. The premiums that beneficiaries pay are expected to rise more rapidly than the Social Security benefits from which the premiums are deducted, and the government contribution will impose a huge burden on future generations of taxpayers. The magnitude of these financial problems raises obvious questions as to the long-term viability of the Medicare program in its present form.

The task force recommends that Congress act now to deal with these financial problems. Acting now is preferable to acting later, because delay will cause the necessary reforms to be more extreme and precipitous.

The task force also recommends evaluating Medicare's financial condition with HI and SMI *combined*. This union of the two trust funds should only be used, however, for evaluation purposes, since the existence of separate funds has imposed a level of constructive fiscal discipline on the program.

Various proposals have been advanced to improve Medicare's financial condition. Many proposals, some of which may superficially appear to be promising, would be relatively ineffective (such as raising Medicare's eligibility age) or potentially counterproductive (such as requiring employer-provided plans to cover retirees). The task force believes that the most promising of these proposals are increased cost sharing by beneficiaries and increased use of managed care and competitive bidding. Any proposed changes should address the problem of generational equity.

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[1] This year differs from that reported in the original Trustees' report. Subsequent to the report's release an error was found in the original computation of future interest earnings of the HI Trust Fund, which changed the year of exhaustion from 2023 to 2025.

Introduction

To further the discussion about Medicare and to help those involved in the development and implementation of public policy understand the consequences of some of the recently proposed reform initiatives, the American Academy of Actuaries is publishing a three-part series of monographs on Medicare reform. This monograph, *Evaluating the Fiscal Soundness of Medicare*, deals with how Medicare solvency is measured and discusses several proposals to strengthen the financial basis of the program. The first paper in the series, *Medicare Reform: Using Private-Sector Competition Strategies*, examines ways in which competitive pricing techniques used in the private insurance market could be applied to Medicare. A third monograph, *Providing Prescription Drug Coverage For Medicare Beneficiaries*, discusses the potential impact of a Medicare prescription drug benefit.

Any discussion of the financial viability of the Medicare program involves two separate and distinct issues. The first issue is whether the current system for financing Medicare (through payroll taxes, participant premiums, and general revenue financing) is sufficient to pay for the cost of the program. The second question is whether the overall cost of the program, regardless of how it is financed, is economically sustainable and politically supportable. There are different tests to determine the financial stability of Medicare for each of these issues.

Section I – Medicare Financing

Medicare financing is done in two parts: Hospital Insurance (HI, or Medicare Part A) and Supplementary Medical Insurance (SMI, or Medicare Part B). Almost everyone is automatically eligible for Part A of Medicare upon reaching age 65 or because they are permanently disabled and have met certain requirements. Individuals may participate in the Part B program if they enroll and agree to pay premiums.

Under current law, the financing methods used for each part are very different, reflecting the economic and political conditions when Medicare was created. The measures used to assess the adequacy of the financing of each of the programs also differ. This section of the monograph is intended to describe:

- The financing method of each program
- The requirements under the Federal Social Security Act for periodically assessing and reporting the financial status of each program
- Generally accepted actuarial principles for assessing the financial adequacy of the programs
- The conclusions of the Medicare trustees outlined in the most recent (2000) report summarizing the financial status of the programs

Medicare Trust Funds

The Medicare program is administered by the Health Care Financing Administration (HCFA) through two trust funds — one for Hospital Insurance and one for Supplementary Medical Insurance. A board of trustees manages the two funds. That board has six members: the Secretaries of the Treasury, Labor, and Health and Human Services; the Commissioner of Social Security; and two members of the public from different political parties, appointed by the president to four-year terms and subject to confirmation by the United States Senate. The Secretary of the Treasury is the managing trustee, and the administrator of HCFA serves as secretary to the Board.

Financing Methods

Hospital Insurance

Similar to Social Security, the HI program is intended to be self-supporting. That is, the benefits provided by the program should be funded entirely or almost entirely from the following sources:

- Earmarked payroll taxes,
- Interest income from assets accumulated in the HI trust fund, and
- Premiums paid by beneficiaries who voluntarily participate in the program (a very small group).

In fiscal year 1999, approximately 96 percent of all revenue into the HI trust fund came from these three sources, while most of the remaining four percent came from a portion of the revenue derived from the income taxation of Social Security benefits.[2] No fail-safe mechanism exists to ensure that the HI program has enough money to continue operating. The payroll-tax rate can be changed only by an act of Congress, which has been done periodically to maintain the financial adequacy of the program.

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[2] The Board of Trustees, Federal Hospital Insurance Trust Fund, 2000 Annual Report, March 30, 2000, p. 29, Table II.C.1.

Supplementary Medical Insurance

Unlike the HI program, the SMI program is not intended to be self-supporting. Beneficiaries who enroll in Medicare when they are first eligible are required to pay a monthly premium. Collectively these premiums are intended to cover 25 percent of the projected cost of the program for beneficiaries age 65 and over. Currently, however, the monthly premium covers a slightly lower percentage of the cost due to the phased-in transfer of some home health care expenses from the hospital insurance fund to the supplementary medical insurance fund. Beneficiaries who enroll later than their first eligibility period and who were not covered by employer-provided health care plans *as employees* are required to pay higher monthly premiums (10 percent higher for each full year of delay) than do beneficiaries who enroll at the earliest opportunity. In fiscal year 1999, approximately 24 percent of the SMI trust fund's revenue came from premiums paid by beneficiaries.[3]

Most of the cost of the SMI program is financed by general tax revenue of the federal government. The government contribution is the difference between the projected total monthly cost rate of the program for the year (determined separately for beneficiaries age 65 and over and for disabled beneficiaries under age 65) and the basic monthly contribution paid by the beneficiaries. In fiscal year 1999, approximately 73 percent of the SMI trust fund's revenue came from general tax revenues.[4]

To the extent that projected contributions are more than the cash expenditures of the SMI program, funds may accumulate in the SMI trust fund. These accumulated funds, which serve as a reserve for incurred but unpaid claims and as a contingency reserve, generate interest income that covers part of the cost of the program. In 1999, approximately 3 percent of the SMI trust fund revenue was from interest income.[5]

Because the federal government bases both its contributions and the amount of premiums paid by beneficiaries on the projected cost of the program for each year, contributions into the SMI trust fund are automatically updated annually to ensure that the program has enough money to continue operating.

Reporting Requirements of the Federal Social Security Act

The Social Security Act requires the board of trustees to report to Congress on the financial status of the Medicare trust funds by April 1 of each year. The annual reports include projections of future income and expenditures. The projections are prepared by the actuarial staff of HCFA, using assumptions specified by the board of trustees.

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[3] The Board of Trustees, Federal Supplementary Medical Insurance Trust Fund,2000 Annual Report, March 30,2000, p. 28, Table II.C.1.

[4] The Board of Trustees, Federal Supplementary Medical Insurance Trust Fund,2000 Annual Report, March 30, 2000, p. 28, Table II.C.1.

[5] The Board of Trustees, Federal Supplementary Medical Insurance Trust Fund,2000 Annual Report, March 30, 2000, p. 28, Table II.C.1.

Chief Actuary's Certification

The Social Security Act requires that the annual trustees reports include an actuarial opinion from the chief actuary of HCFA, "certifying that the techniques and methodologies used are generally accepted within the actuarial profession and that the assumptions and cost estimates used are reasonable."[6]

In the 2000 HI report, the chief actuary says that the "intermediate" set of assumptions — which are intended to represent the " best estimate" of future experience — are reasonable but may not be truly intermediate because the probability of adverse experience is greater than the probability of favorable experience. Similarly, the probability of experience being more adverse than the high-cost estimate is greater than the probability of experience being more favorable than the low-cost estimate. In the 2000 SMI report, the chief actuary simply affirms the reasonableness of the assumptions and cost estimates without qualification.

Measures of Trust Fund Financial Status

Hospital Insurance

To assess the financial status of the HI trust fund, the trustees provide the following measures in their report to Congress each year:

- Short-range status — Projection of operations and financial status over the next 10 years
- Actuarial status — Projection of the operations and financial status over the next 75 years

Both sets of projections are based on the income into the HI trust fund and benefits provided by the HI program under current law. The projections are performed on an open-group basis (i.e., current and future participants in the program are included in the projections). The effects of any changes to the program that have been enacted into law are included in the report.

The report includes the following measures of the short-range financial adequacy of the program:

- The estimated year of exhaustion of the HI trust fund
- A test of short-range financial adequacy, which is met if the ratio of HI trust fund assets to annual trust fund expenditures for the year meets one of the following conditions:

(1) The ratio is 100 percent at the beginning of the 10-year period,and remains at or above 100 percent for the entire 10-year period, or

(2) The ratio starts out lower than 100 percent at the beginning of the 10-year period and increases to 100 percent within 5 years and remains at or above 100 percent for the remainder of the 10-year period.

In addition, the report includes a test of the long-range financial adequacy of the program. The test focuses on whether the program meets the condition of "actuarial balance" over the next 75 years. In somewhat simplified form, the HI program is considered to be in actuarial balance if:

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[6] 42 U.S.C.1395i(b),1395t(b)

(1) the present value of the projected income of the HI trust fund over the next 75 years, as a percentage of taxable payroll, is not less than 95 percent of

(2) the present value of the projected expenditures from the HI trust fund over the next 75 years, as a percentage of taxable payroll.

The results of the tests are generally reported under three sets of assumptions: low-cost, intermediate, and high-cost. The trustees always report the results of the tests using the intermediate set of assumptions, which reflect the best estimate of future economic and demographic trends. In addition, the trustees may report the results of the tests using low-cost and high-cost assumptions as additional information, to show the sensitivity of the results. Table 1 in Appendix I shows the actuarial balances of the HI program under all three sets of assumptions.

Supplementary Medical Insurance

Because contributions to the SMI trust fund are adjusted annually to cover the projected costs of the SMI program, the trustees only provide a measure of financial adequacy during the upcoming year in the annual report to Congress. This measure includes a determination of whether projected income for the year is adequate to cover projected costs and whether the contingency reserve is adequate to cover any reasonable variation of actual costs from projected costs.

The report does include short-range (10-year) and long-range (75-year) projections of both the income and cost of the SMI program. These measures assess the projected growth rate of the cost of the program, determine those costs as a percentage of GDP, and illustrate the percentage of total income taxes potentially needed to cover the costs of the program over short-range and long-range periods. Table 2 in Appendix 1 shows the projection by the trustees of the HI and SMI disbursements as a percentage of GDP under the intermediate assumptions.

Similar to the HI measures,all of the SMI projections are based on the expected income into the SMI trust fund and benefits provided by the SMI program under current law. The projections are performed on an open-group basis. The effects of recently enacted changes to the program are included in the report each year.

The SMI report also includes information on the sensitivity of the assumptions used for the short-range projections. The measures are generally done under the same three sets of assumptions as the HI program: low-cost, intermediate and high-cost.

Combined Measures

The HI and SMI programs were created as separate programs, with separate financing methods, at a time when the patterns of health care expenditures were very different from current patterns. Specifically, when the Medicare program was created, most expenditures for health care services to seniors were for inpatient hospital services. In 1966, approximately 74 percent of Medicare expenditures were for hospital inpatient services. By contrast, in 1999, 40 percent of Medicare expenditures were for hospital inpatient services.

In addition, actuarial standards of practice and the practical aspects of evaluating the fiscal soundness of Medicare suggest that the current HI/SMI split may be outdated and may, in fact, confuse the issues relating to Medicare's fiscal soundness.

The American Academy of Actuaries Medicare Reform Task Force recommends that policy-makers consider whether conditions have changed enough to warrant combining the HI and SMI programs for purposes of assessing Medicare's financial status. The task force does not, however, recommend combining the HI and SMI trust funds, because the existence of the separate trust funds has imposed a level of constructive fiscal discipline on the programs. If the trust funds were to be combined, mechanisms must be put in place to assure comparable or improved fiscal discipline.

2000 Medicare Trustees Reports

HI Trust Fund

In their 2000 report of the status of the HI trust fund, the trustees report the results of the measures of financial adequacy described above as follows:

Financial Measure	Intermediate Cost	Low Cost	High Cost
Estimated year of exhaustion	2025	Indefinite	2012
Test of short-run financial adequacy	Met	Met	Not met
Test of actuarial balance	Not met	Met	Not met

For the first time since 1991, the HI trust fund meets the short-range measure of financial adequacy under the intermediate set of assumptions. The fund still fails the long-range measures of financial adequacy under the same set of assumptions, however. The trustees conclude that, although recent economic growth and legislated changes to the HI program improved the status of the program in the short-term, reform measures are still needed to preserve the program's long-range stability. The trustees urge Congress to make appropriate changes to improve the financial status of the program during the short period of time that the trust fund is projected to have a surplus.

SMI Trust Fund

The 2000 report of the status of the SMI trust fund states that the program meets the measures of financial adequacy for 2000 under all three projections (low-cost, intermediate-cost, and high-cost). The trustees note that while the short-range projections of SMI expenditures decreased slightly since 1999, costs continued to increase and are projected to continue to rise rapidly. The trustees urge Congress to take steps quickly to control presently rising SMI costs and to prevent crisis in the program in the long term.

Long-range Projections

The legislative history of the Social Security Act requires that the long-range financial projections for the Social Security program shown in its annual trustees report cover a 75-year projection period beginning with the year of the report. While this requirement does not apply to Medicare, the trustees have chosen to project the financial status of Medicare over the same period. For the HI trust fund, estimates of future income and expenses are shown for all three sets of assumptions for 75 years into

the future. The SMI trust fund report shows projections of the program's premium income and expenditures for 75 years relative to projected GDP, based on the intermediate set of assumptions.

Seventy-five-year projections based on a large number of demographic and economic variables should be regarded with some degree of skepticism. Consider for a moment the difficulty an actuary or other analyst in the year 1925 would have had projecting the experience of any complex government program (Social Security and Medicare did not exist then) 75 years ahead to 2000.

The 75-year projections are nevertheless useful in a broader sense. Combining the projected cost numbers for Social Security and Medicare and comparing the result to projected numbers for GDP or other economic indicators can serve as a basis for judgments about the ultimate economic and political viability of the two programs.

Actuarial Standards of Practice

In January 1998, the American Academy of Actuaries published *Actuarial Standard of Practice No. 32, Social Insurance*.[7] The purpose of this standard is to provide, "the actuary practicing in the field of social insurance with guidance concerning the nature of social insurance and a description of recommended practices." The scope of the standard explicitly states that it includes actuarial analyses of the HI and SMI programs. The standard goes on to describe issues that should be considered, recommended practices, actuarial methods and assumptions, and information that should be communicated to users of reports concerning social insurance.

The requirements of this standard suggest that an actuarial analysis of the HI and SMI Trust Funds should include or consider the following:

- The ongoing nature of the program based on current law and regulation
- All sources of income to the program, including payroll taxes, premiums, investment income, and general tax revenues allocated to the program
- Whether a test of financial adequacy is warranted (both short-range and long-range), given the fact that the income and benefit levels are statutory, and the sufficiency of any test that is selected
- The sensitivity of the results of the analysis to alternative assumption scenarios that differ from the expected scenario
- The impact of recent and/or pending changes to the program

In general,the recent annual reports of the Medicare trustees have contained actuarial analyses consistent with this standard.

7 Actuarial Standard of Practice No. 32, Social Insurance, January 1998, p.1

Section II – Medicare Reform Proposals

A number of proposals have been made over the past few years to change the Medicare program. The following is a review of some of the major components of those proposals.

Reduce payments to health care providers

Reductions in payments to healthcare providers such as doctors or hospitals have, historically, been the principal means of slowing the growth of the cost of the Medicare program. The goal has been to reduce federal budget deficits and/or prevent depletion of the trust funds. The reductions have also had the effect of extending the time period of financial adequacy of the Medicare program.

Reducing payments to providers has a number of shortcomings that limit its role in assuring the long-term adequacy of Medicare financing. First, the magnitude of future financial problems in the Medicare program is so large that reducing payments to providers is not a practical method for eliminating the entire long-range deficit. There is a potential that quality of care and access to care for Medicare beneficiaries would be affected.

In addition, reductions in provider payments probably add to incentives for over-utilization of Medicare services. When payments to providers have been reduced, providers have the incentive to increase the utilization of services to make up the loss of income from the reduced payments. The policy of reducing payments to providers also does nothing to slow the underlying trend of growth in the utilization of Medicare services. The future deficit in the Medicare program arises in significant part from that rapid growth.

Reduce or eliminate Medicare coverage for some services

Reducing or eliminating Medicare coverage of some health services could play a role in ensuring the adequacy of financing of the Medicare program. To have a significant impact, the services reduced or eliminated would have to be of considerable cost. One of the perils of reducing or eliminating coverage of significant services, however, is the inducement of offsetting costs. Medicare-covered services are interrelated, and coverage of any particular health care service is likely to result in some savings in other services. Home health agency and skilled nursing facility services, for example, probably result in some reduction in inpatient hospital stays.

In addition to or in place of eliminating covered services, policy-makers may wish to consider whether to develop rules for providing care to terminally ill patients. This consideration may also include developing specific guidelines for determining when to provide heroic care or including formal ways to advise patients, advocates, and relatives of choices available.

Increase Medicare deductibles or copayments

Increased cost sharing by Medicare beneficiaries has a powerful impact on both the magnitude and the rate of growth in health care expenditures. Studies have shown that for every health care dollar shifted from payment by a third party to out-of-pocket payment, a significant reduction occurs in total health care spending. This spending reduction varies by the type of medical provider. For physician services, for example, one estimate developed by HCFA's actuarial staff suggests that for every dollar paid for physician services that is shifted to out-of-pocket payment, total expenditures on physician services are reduced by $0.70.

Increased cost sharing by patients has also been found to affect the rate of growth in health expenditures. An important research paper published in Health Affairs, coauthored by Mark Freeland, Ph.D., and Al Pedon, Ph.D., shows that the acceleration in the rate of growth in health care expendi-

tures in the United States has been highly correlated with the shift toward increased prevalence of payment of health care expenses by third parties. Their research shows that every 10 percentage-point shift from out-of-pocket payments to third-party payments results in an increase in the rate of growth of health care costs of about 2 percent, and this accelerated rate of growth persists for about 10 years.[8]

Policy-makers may view the direct reduction of Medicare benefits as merely shifting costs from the Medicare program to beneficiaries. In fact, the original modest cost-sharing provisions of the Medicare program have actually shrunk relative to per-capita benefits, contributing to more rapid growth in the cost of the program. For example, the SMI deductible was $50 at the beginning of the Medicare program in 1966. Today it is $100. If the SMI deductible were in the same proportion to SMI per-capita costs today as it was in 1966, it would be approximately $1,500. Today, a health insurance program with a $1,500 deductible would be considered catastrophic protection. In addition, most beneficiaries today have Medicare supplement insurance, employer-provided coverage, or Medicaid that pays for the Medicare coinsurance and deductibles, so that these beneficiaries are insulated from even the modest cost-sharing requirements of the Medicare program.

If increased cost sharing by Medicare beneficiaries is going to occur in the future, two significant political obstacles would have to be overcome. First, policy-makers would have to understand that patient cost sharing reduces health care utilization and, therefore, is not merely cost shifting. Second, the laws regarding Medicare supplement insurance plans would have to be changed to forbid covering some or all of the increased Medicare cost-sharing amounts. This change to the law would only apply to Medicare supplement plans sold after the effective date of the amendment and would not affect existing policies.

In addition to the political obstacles, any changes in the Medicare program that resulted in additional out-of-pocket spending by beneficiaries would have to provide for the needs of low-income beneficiaries. This need could be met, for example, by expanded Medicaid eligibility for Medicare beneficiaries. Many beneficiaries (approximately 10 percent) already qualify for coverage of their Medicare deductibles and coinsurance under Medicaid.

Managed care and contracting out of services

Using managed care methodologies and contracting out certain services have the potential to reduce Medicare expenditures. Currently, Medicare benefits are provided to some beneficiaries through private health plans, although the majority of participants are enrolled in the traditional fee-for-service program. A number of the proposals to reform Medicare call for the use of managed care mechanisms to help deal with the increasing cost of health care. Managed care systems may include utilization review protocols, the use of primary care provider "gatekeepers," requirements for the prior authorization of medical services, and various types of medical provider contract incentives (See: American Academy of Actuaries, *Patient Protection and Managed Care*, Winter 1999).

Policy-makers may want to examine incentives to increase use of managed care contractors under the Medicare+Choice program by addressing complex contracting rules, fixing possible county-based payment discrepancies, or other methods. Policy-makers may also wish to consider the effectiveness of attempting savings through large-scale selective contracting with the medical providers who serve traditional Medicare. It has also been suggested that Medicare services should be subject to competi-

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8 Edgar A. Peden and Mark S. Freeland, "A Historical Analysis of Medical Spending, 1969-1990," *Health Affairs,* Summer 1995, 14:235-247; See also Edgar A. Peden and Mark S. Freeland, "Insurance Effects on U.S. Medical Spending (1960-1993),". *Health Economics,* 1998, 7:671-687.

tive bidding, similar to that used by the Federal Employees Health Benefits Program (FEHBP). This might involve traditional fee-for-service Medicare as one of the bidders competing with private health plans in certain markets. (See: American Academy of Actuaries, Using Private-Sector Competition Strategies, April 2000.)

Increase FICA tax rate

Increasing the FICA tax rate would likely play some role in extending the adequacy of financing of the HI program. The FICA tax rate, which currently stands at 2.9 percent (combined employee and employer rates), would have to increase to an average rate of 4.1 percent over the next 75 years, or to an ultimate rate of nearly 6.2 percent in 2075 in order to keep the HI program in actuarial balance if no reductions were made in the cost of the program. Large FICA tax-rate increases would put the onus of paying for increases in Medicare costs on the actively-at-work population, exacerbating disparities related to intergenerational equity. (See Section III.)

Increase SMI premiums

Premium increases represent one way in which the burden of the SMI program on the federal budget could be reduced. Originally, the SMI premium was set at 50 percent of the average program cost for Medicare beneficiaries age 65 and over (the only beneficiaries at the time). That amount has changed over the years, and today the SMI premium stands at 25 percent of the average program cost for aged Medicare beneficiaries.

Since SMI per-capita costs are currently increasing faster than general inflation, even maintenance of the SMI premium at 25 percent will likely result in an increase in the premium as a percentage of the average Social Security pension benefit. For example, in 2000, the standard SMI monthly premium of $45.50 is 5.7 percent of the average monthly Social Security retired-worker benefit of $804. If the premium level were increased to 50 percent, the SMI premium would be a not insignificant 11.3 percent of the average retired-worker benefit, and this percentage would grow over time.

Although the HI tax rates are based on income, the dollar amount of SMI premiums and all Medicare benefits are unrelated to income. Surveys of Medicare beneficiaries by the American Association of Retired Persons have indicated that many of their members feel all individuals have the right to the same Medicare benefits. However, some beneficiaries agree that higher income beneficiaries could possibly pay more of the cost of their benefits if the program is in financial difficulty. Higher income beneficiaries currently pay income taxes on Social Security benefits, which are expected to cover about 8 percent of HI costs in the long range. This source could be a means of increasing premium subsidies for SMI as well, and was contemplated in the short-lived Medicare Catastrophic Coverage Act of 1988.

Shift payment of benefits from the HI trust fund to the SMI trust fund

The Balanced Budget Act (BBA) of 1997 shifted the costs of certain home health benefits from the HI trust fund to the SMI trust fund in order to delay the projected date of depletion of the HI trust fund. While this shifting delays the date of depletion of the HI trust fund, it does nothing to resolve the underlying financial problems of the Medicare program. Shifting the payment of benefits between trust funds may undermine the fiscal discipline of the Medicare program by creating the illusion that significant progress has been made.

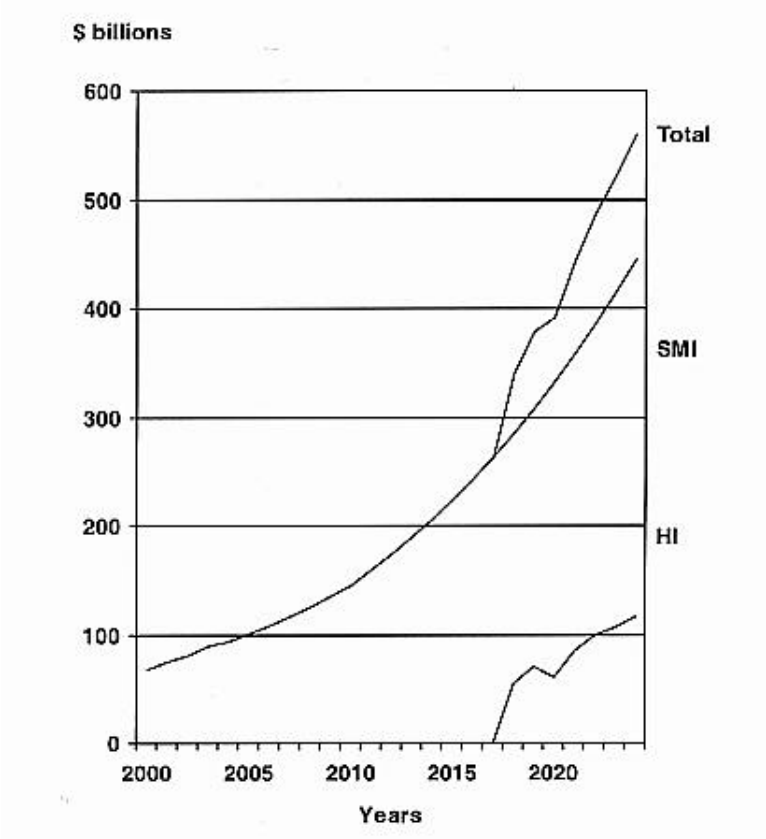
Direct transfer of general revenues to the Medicare program

Excluding interest on trust funds and federal income tax revenue allocated to the HI trust fund from income taxes on Social Security benefits, the HI program is currently self-sufficient,and the trust fund

will be increasing for the next 15 years. Using unallocated general revenue to finance any future deficits in the HI program and continued general revenue financing of 75 percent of the SMI program would increase the percentage of Medicare funded by general revenue to about 3.2 percent of GDP by 2075 under the trustees' intermediate projections.

The following graph shows necessary expenditures of Federal general revenue during 2000-2024. The projection illustrates a very rapid increase in general revenue requirements over the next 25 years, assuming no change is made in the current Medicare program. These are the amounts of general revenue that will be needed to keep the Medicare program solvent through 2024. For HI,the general revenue shown is the amount needed to maintain the HI trust fund at 100 percent once the trust fund would otherwise drop below 100 percent. (This funding change for HI would require new legislation.) For SMI, the general revenue shown is the amount required under current law.

Federal General Revenue Expenditures Years 2000 — 2024, HI and SMI



"General revenue" is defined for this purpose to be unallocated revenue of the federal government. It excludes "earmarked" revenue (primarily that portion of the revenue attributable to the income taxation of Social Security benefits that is transferred to the HI Trust Fund under present law - $7 billion in 1999), and (2) interest on the special-issue Treasury securities held by the Medicare trust funds ($13 billion in 1999).

Note: Projections shown are based on the 2000 Trustees Report,intermediate set of assumptions.

Raise the age for benefit eligibility

A number of issues should be considered in deciding whether to raise the eligibility age for Medicare. They are related to the increasing life expectancy in this country which, with long- term questions about fiscal soundness, motivated the previous changes made to Social Security. If an increase in the eligibility age on one specific date were implemented relatively soon, it would have an immediate effect of reducing the number of aged beneficiaries. If the change were implemented within a 5-year period, it would still help, because the baby boomers do not start to reach age 65 until the year 2010. Between the years 2010 and 2025 the population aged 65 and older is expected to grow about 3 percent per year.[9]

The Social Security amendments of 1983 raised the normal retirement age for Social Security benefits from 65 to 67. The change in retirement age was phased in starting in 2000 and will not be completed until 2027. The change has seemed to be so insignificant that the need for employers and individuals to adjust to it has barely even been considered in the nearly 20 years since enactment.

However, raising the eligibility age for Medicare must be viewed more critically. The HI trust fund is expected to be exhausted in 25 years. Therefore, we cannot afford to make age changes to Medicare eligibility that are deferred many years into the future, as was done with Social Security, because this will have essentially no effect on the problem.

Raising the eligibility age for Medicare would have much less effect on the financing for the program than was the case with Social Security. Medicare benefits increase in cost as beneficiaries age, while Social Security benefits remain constant, except for cost-of-living increases. People at ages 65 and 66 generally have health care costs 20 percent to 30 percent lower than the average Medicare beneficiary, so the cost saving is somewhat less than the pure reduction in number of eligible beneficiaries. Also, if the eligibility age for Medicare is raised, some of the individuals who would be excluded from coverage by reason of their age would still qualify for Medicare because of disability.

A 2-year increase in the eligibility age would reduce Medicare costs by about 5 percent. As significant as this change is, alone it is not nearly enough to compensate for the shortfall in funding. If Congress were to adopt a 2-year deferral of eligibility, it would have to be accomplished before 2010 to be effective in reducing cost.

The majority of employees today still retire before age 65 (even though increasing numbers of employees are working after age 65). Extending the age of Medicare eligibility would put pressure on employer plans to continue post-retirement health benefits longer, without reducing employer health plan costs through Medicare coverage for retired employees age 65 or older. Over the past five years, the number of employers providing post-retirement health benefits dropped approximately 25 percent. Any movement by the federal government to increase this cost indirectly through deferral of Medicare coverage would increase the employers' economic incentives to reduce or eliminate all retiree medical benefits.

Because the majority of employers might no longer provide health coverage for retired employees, raising the eligibility age for Medicare may result in more retirees being unable to afford health insurance. Many employees are working today primarily to maintain medical benefits until their Medicare coverage commences, thus gaining access to the "average" premium rates that reflect the blending of their health care costs with those of younger workers. If the eligibility age is raised, workers who retire before they can receive coverage from Medicare may find it difficult, if not impossible, to obtain health insurance to bridge the "gap."

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[9] David McKusik, "Demographic Issues in Medicare Reform" *Health Affairs*, Jan/Feb 1999, 18:194-207

In addition to employers needing to change their retirement policies relative to health benefits, policies would also have to change relative to retirement dates. If a large number of employees were to continue working to age 67,there may be considerable problems in adjusting collectively bargained or other types of pension plans because of the traditional reliance on age 65 as a retirement age, as well as the Employees Retirement Income Security Act's prohibition of such changes for qualified pension plans.

Require retirees to be covered by employer health plans

While over 90 percent of employers with 50 or more employees offer health insurance benefits as part of a package necessary to be competitive in hiring employees today, only about 50 percent of smaller employers (businesses with under 50 employees) do so. In addition, smaller employers generally terminate health coverage at retirement; fewer than 5 percent of these employers provide any health insurance benefits past the date of retirement.[10]

If Congress were to require employers that offer employee health insurance benefits to continue that coverage for retirees, it might cause more employers to stop offering health insurance altogether. In that case, younger employees would also suffer from eliminated coverage.

In addition, requiring employers to continue coverage of health insurance benefits past retirement would make it more difficult to reduce the number of uninsured people who are (1) employed by smaller employers, (2) young and in good health and wish to avoid significant deductions from their income to pay premiums, or (3) widowed or divorced women not yet eligible for Medicare.

Implement income-adjusted premiums or benefits

Social Security taxes and benefits are based, in part, on income. Although the HI taxes are based on income, the SMI premiums and all Medicare benefits are unrelated to income.

It would be possible to vary Medicare benefits by income using deductibles and contribution amounts based on beneficiaries' incomes, as is sometimes done with employer-sponsored plans. However, such a change would be difficult for HCFA to administer and would increase the administrative burdens imposed on Medicare supplement insurance plans, Medicare+Choice health plans, employer-provided plans, and beneficiaries.

An alternative would be to increase beneficiary-paid premiums. A proposal that would involve no change for families with incomes of less than $25,000 per year, a 50-percent increase in SMI premiums for beneficiaries earning from $25,000 to $75,000 per year and a 100-percent increase in SMI premiums for beneficiaries earning more than $75,000 per year, would increase SMI premium revenue by approximately 25 percent (about $5 billion per year) as of 1999.

This change would decrease the cost to the federal government of financing SMI by approximately 6 percent. With other significant changes this might be a viable and acceptable addition to refinancing.

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[10] Gail A. Jensen and Michael A. Morrisey, "Small Group Reform and Insurance Provision by Small Firms 1989-1995," *Inquiry*, Summer 1999,36:176-187

Section III – Impact of Medicare Reform Proposals

A number of proposals have been made to change how the Medicare program works, as discussed in Section II. Most of the suggested changes essentially involve either cutting benefits or putting more money in the program by raising taxes or the out-of-pocket costs paid by beneficiaries. All of these proposed modifications to Medicare must be viewed not only in terms of their impact on beneficiaries and the general public but also in how well they deal with the long-range financial viability of the Medicare program. The general impact of these changes is discussed in this section.A chart summarizing the impact of each proposal can be found in Appendix II.

Impact on the trust funds

Transfer of expenses from HI to SMI could have a major effect on the adequacy of financing of the HI trust fund. Such a shift or transfer would increase the need for federal general revenues, since such revenues finance 75 percent of SMI services.

Effects on the quality of care

There are several possible effects of these changes on quality of care. A number of health care providers argue that they are underpaid. For example, hospitals have complained about the removal of medical education reimbursements and sharp reductions in payments for hospital outpatient and home-care treatment. Some skilled nursing facilities have refused to accept Medicare patients because of what they perceive to be inadequate reimbursement. Reductions in Medicare payments to providers may reduce access to care or lead to decreases in the quality of care that providers can afford to deliver.

Intergenerational equity

The term "intergenerational equity" refers broadly to the issues that arise when changes in benefits or financing provisions disproportionately impact certain age groups of workers or beneficiaries. These issues affect how each group perceives the value they get from Medicare. Current beneficiaries (and those close to retirement age) have already paid nearly all of the payroll taxes they will ever be required to pay; the "value" they receive from the program can be affected only if premiums are increased or coverage reduced. The "value" current workers receive from Medicare can be affected by changes in taxes, benefits and premiums.

Historically, older beneficiaries receive better rates of return on the payroll taxes and premiums they have paid to support Medicare than beneficiaries who have followed them into the program and current workers. This is because older beneficiaries did not have to pay Medicare taxes their entire careers and their payroll tax rates were lower than current rates. Some analysts believe the older beneficiaries have received a "windfall."

Certain types of changes to the program would bring the rates of return for the two groups of beneficiaries closer together, while other proposals would exacerbate the disparity.

Examples of changes that would reduce the disparity between the two groups are reductions in Medicare benefits and increases in SMI premiums. These proposals shift part of the cost of restoring Medicare's financial adequacy back to beneficiaries. Reducing the perceived windfall received by older beneficiaries under current law would also bring the rates of return for workers and beneficiaries closer together.

Raising HI payroll taxes is an example of the kind of change that would exacerbate the difference between the rates of return of workers and beneficiaries. Such a change would reduce workers' rates of return while not affecting beneficiaries in any significant way.

Many of the proposed changes described in this monograph have more complicated and sometimes unpredictable effects on intergenerational equity, making them difficult to categorize. However, if it is decided that the present Medicare program is unsustainable politically and economically, any proposed changes should address the broader issue of intergenerational equity, as well as the long-range financial solvency of the program.

Section IV-Conclusion

The American Academy of Actuaries Medicare Reform Task Force believes that Medicare faces urgent financial problems that demand action. The financial problems are already evident and will accelerate around 2010, when the post-World War II " baby boom" generation begins coming onto the Medicare beneficiary rolls in large numbers. According to the 2000 trustees report, the HI program will exhaust its trust fund in 2025, based on the intermediate set of assumptions. Because of its different financing procedure the SMI program cannot exhaust its trust fund. However, total Medicare cost, relative to GDP, is expected to rise from about 2.3 percent today to about 4.6 percent around 2035 — a level that may not be affordable. The premiums that beneficiaries pay are expected to rise more rapidly than the Social Security benefits from which the premiums are deducted, and the government contribution will impose a huge burden on future generations of taxpayers. The magnitude of these financial problems raises obvious questions about the long-term viability of the Medicare program in its present form.

The task force recommends that Congress act now to deal with these financial problems. Acting now is preferable to acting later, because delay will cause the necessary reforms to be more extreme and precipitous.

The task force also recommends evaluating Medicare's financial condition with HI and SMI *combined*. This union of the two trust funds should only be used, however, for evaluation purposes since the existence of separate funds has imposed a level of constructive fiscal discipline on the program.

Various proposals have been advanced at various times to improve Medicare's financial condition. Many proposals, some of which may superficially appear to be promising, would be relatively ineffective (such as raising Medicare's eligibility age) or potentially counter-productive (such as requiring employer-provided plans to cover retirees). The task force believes that the most promising of these proposals are increased cost sharing by beneficiaries and increased use of managed care and competitive bidding.

Appendix I- Measure of Trust Fund Solvency

Table 1

Actuarial Balances of the HI Program Under Three Sets of Assumptions

Valuation Periods	Intermediate Assumptions	Low-Cost Alternative	High-Cost Alternative
25 years:2000-2024			
Summarized income rate	3.24 %	3.22 %	3.26 %
Summarized cost rate	3.36	2.64	4.45
Actuarial balance	-0.12	0.58	-1.19
50 years:2000-2049			
Summarized income rate	3.25	3.21	3.30
Summarized cost rate	4.06	2.65	6.71
Actuarial balance	-0.81	0.56	-3.41
75 years:2000-2074			
Summarized income rate	3.27	3.22	3.34
Summarized cost rate	4.49	2.71	7.94
Actuarial balance	-1.21	0.50	-4.60

25-year Subperiods	Intermediate Assumptions	Low-Cost Alternative	High-Cost Alternative
2000-2024			
Summarized income rate	3.10 %	3.08 %	3.12 %
Summarized cost rate	3.22	2.56	4.22
Actuarial balance	-0.12	0.52	-1.10
2025-2049			
Summarized income rate	3.27	3.20	3.35
Summarized cost rate	5.10	2.70	9.82
Actuarial balance	-1.83	0.50	-6.47
2050-2074			
Summarized income rate	3.35	3.24	3.52
Summarized cost rate	6.08	2.97	12.64
Actuarial balance	-2.73	0.27	-9.12

Source: The Board of Trustees of the Federal Hospital Insurance Trust Fund, 2000 Annual Report, March 30, 2000 p.52, Table II.E.3

Table 2

HI and SMI Incurred Disbursements as a Percentage of Gross Domestic Product Using Intermediate Assumptions

	Disbursement as a Percentage of GDP		
Calendar Year	**HI**	**SMI**	**Total**
1999	1.40	0.89	2.29
2000	1.39	0.94	2.33
2005	1.43	1.09	2.52
2010	1.53	1.22	2.75
2020	1.78	1.72	3.50
2025	2.00	1.95	3.95
2030	2.23	2.13	4.36
2035	2.42	2.22	4.64
2040	2.54	2.22	4.76
2045	2.60	2.19	4.80
2050	2.63	2.17	4.79
2055	2.65	2.18	4.83
2060	2.69	2.24	4.93
2065	2.76	2.31	5.07
2070	2.84	2.35	5.19
2075	2.92	2.36	5.28

Disbursements are the sum of benefit payments and administrative expenses.
Source: The Board of Trustees of the Federal Hospital Insurance Trust Fund, 2000 Annual Report, p.82, Table III.B.I.

Appendix II - Impact of Medicare Reform Proposals

Proposed change	Reduce payments to providers	Reduce/ eliminate coverage for some services	Increase Medicare deductibles and copayments	Use of managed care/ contracting out	Increase FICA taxes	Increase supplementary medical insurance (SMI) premiums	Shift Payments from hospital insurance (HI) to SMI	Direct transfer of general revenue	Increase eligibility age	Require employers to provide retiree coverage	Means testing premiums/ benefits
Impact on trust fund											
	Reduces expenditures	Reduces expenditures	Reduces expenditures	May reduce expenditures	Increases HI fund income; no impact on SMI fund	No impact on HI fund. Likely increases SMI fund income	Reduces HI fund expenditures. Increases SMI fund income and expenditures	Increases HI and SMI fund income	Reduces HI and SMI fund expenditures	Reduces HI and SMI fund expenditures	Increases income and/or reduces expenditures
Impact on price of services											
	Reduced, though may be some offset from upcoding	No significant change	No significant change	May reduce payments to providers	No significant change	No significant change	No significant change	No significant change	No significant change	No significant change	No significant change
Impact on utilization of services											
	May increase utilization (provider-induced demand)	Reduces level and growth of utilization	Reduces level and growth of utilization (unless increases are covered by Medicaid or Medicare supplement insurance)	May reduce level and growth of utilization	No significant change	Reduces utilization if people choose not to participate in SMI	No significant change	No significant change	Reduces level of utilization	Reduces level and growth if services covered by employer plan	May reduce level and growth of utilization
Impact on quality of care											
	May reduce	May reduce	May reduce if beneficiaries cut back on needed health care	May reduce	No significant change	May reduce if beneficiaries choose not to participate in SMI	No significant change	No significant change	May reduce for those below the new eligibility age	Improves quality of care for those who are covered by employer plans	May reduce if beneficiaries cut back on needed health care
Impact on access to care											
	Reduces number of providers who accept Medicare beneficiaries as patients	May reduce	Unless made up by Medicaid, could reduce ability of low-income beneficiaries to access care	May reduce	No significant change	May reduce if beneficiaries choose not to participate in SMI	No significant change	No significant change	Reduce for those below the new eligibility age	Improves access if employers offer coverage	May reduce if beneficiaries cut back on needed health care
Impact on beneficiaries											
	May reduce quality of care and access to care	May reduce quality of care and access to care	Increased costs, unless made up elsewhere; may initiate ability to get care	May reduce quality of care and access to care	No significant change	Increased premium payments, decreased income; may not be able to afford SMI	May increase income tax	May increase income tax	No impact on current beneficiaries; delayed coverage for future ones	Improves total coverage for those who did not have employer coverage before	Higher income beneficiaries would pay higher premiums or receive lower benefits

Proposed change	Reduce payments to providers	Reduce/ eliminate coverage for some services	Increase medicare deductibles and copay-ments	Use of managed care/ contracting out	Increase FICA taxes	Increase sup-plementary medical insur-ance (SMI) premiums	Shift payments from hospital insurance (HI) to SMI	Direct transfer of general revenue	Increase eligibility age	Require employers to provide retiree coverage	Means testing premiums/ benefits
Impact on Workers	Possibly reduced access. Higher costs due to cost-shifting by providers	No significant change	Likely reduction of employer-provided retiree health coverage	No significant change	Decreased after-tax income	Employers who subsidize premiums may reduce or eliminate subsidy	May shift tax burden from payroll tax to income tax	May increase income tax	No significant change	Possible offset-ting decrease in other wages and/or benefits, as a trade-off for better retiree health coverage	Retiree coverage may be eliminated or reduced
Impact on Providers	Reduced income; some may no longer be finan-cially viable	Reduces income if beneficiaries cut back on care	Reduced fees due to lower utilization	May reduce pay-ment for services	No significant change	Lower total fees if beneficiaries drop SMI	No significant change	No significant change	Reduced fees from reduced utilization	Increased access leads to increased fees	No significant change
Impact on Employers	Possibly impact-ed by cost-shifting	No significant change	Increase costs if plan picks up cost of services; may cause them to eliminate or reduce retiree coverage	No significant change	Increased payroll tax, decreased earnings	Increased cost for those who subsi-dize SMI premi-ums	May shift tax burden from payroll tax to corporate income tax	May increase corporate income tax	Increase cost of retiree coverage; employers may choose to reduce or eliminate retiree coverage	Increased costs to employers; some employers may drop health coverage for employees/ retirees	May eliminate or reduce coverage if they cannot afford the additional cost of premiums/ benefits shifted away from Medicare
Impact on Health Insurers	Reduced cost of Medicare supplement poli-cies; other lines impacted by provider cost-shifting	May be impacted if they pick up coverage for those services	Increase cost of Medicare supplement insurance if deductibles and copayments are covered	May increase number of insurers participating in Medicare	No significant change	No significant change	No significant change	No significant change	No significant change	Increased demand from employers for policies, especially for small employers	No significant change
Impact on Other Social Programs	No significant change	May be impacted if they pick up coverage for those services	Shift cost to Medicaid if deductibles and copayments are covered	No significant change	No significant change	Shift cost to Medicaid if it picks up increase in premium	No significant change	No significant change	Increases cost for Medicaid cover-age of low income retirees	No significant change	No significant change

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