

RESTRUCTURING MEDICARE FOR THE LONG TERM PROJECT

Final Report of the Study Panel on
Medicare's Long Term Financing

Financing
Medicare's
Future

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Foreword

This report is the final product of a study panel convened by the National Academy of Social Insurance (NASI) as part of its *Restructuring Medicare for the Long Term* project. The study panel's assignment has been to analyze options for financing Medicare benefits over the next three decades. Three earlier NASI study panels examined the role of capitation and choice in Medicare's future, potential changes in the fee-for-service program, and Medicare's larger social roles. Three additional panels to be convened in 2000 and 2001 will explore issues of Medicare governance, the relationship between Medicare and markets, and how Medicare might better meet the needs of chronically ill beneficiaries.

The panel is composed of 12 individuals with diverse philosophical and professional backgrounds. Each brought relevant expertise drawn from the worlds of economics, public health, law, private industry, political science, public policy, trade unions, or actuarial science.

Through regular meetings, commissioned papers, and writing by individual study panel members and staff over a two-year period, the study panel analyzed the historical foundation for Medicare's financing, the program's likely needs for the future, and options for meeting those needs.

In an early decision, the study panel chose to define its charge as not only financing for Medicare, but more broadly as financing health services for Medicare beneficiaries. This allowed the panel to consider the implications that particular policy choices might have for other payers of health care — especially beneficiaries themselves.

Over the last three years, a robust economy and new cost containment measures have substantially improved Medicare's financial outlook. Even with these recent improvements, projected growth in the overall economy, and the potential to save money through more efficient use of health care and new contributions from beneficiaries towards their own health care, the panel's analysis shows that Medicare will require substantially more revenues over the coming decades than now envisioned.

The panel examined implications of using the federal budget surplus to fill the projected gap in financing. In addition, it explored the pros and cons of new tax revenues for Medicare including raising the federal payroll, income, and excise taxes, imposing a consumption tax, taxing Medicare benefits for some beneficiaries as is done for Social Security benefits, and including employer-provided health benefits among workers' taxable income.

The study panel did not attempt to make recommendations about which of these approaches policy makers should adopt. Indeed, given the philosophical diversity of the group, such consensus probably would not have been possible. In this report, however, the panel does attempt to



lay out the implications of each strategy in a clear manner to help policy makers who will have to grapple with such choices. The analysis demonstrates that Medicare's financing challenges are manageable, even if the policies to do it may involve some difficult tradeoffs.

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Executive Summary

Despite enormous popularity, Medicare will require changes in its financing if the program is to continue to protect beneficiaries from the costs of illness. The need for new revenues is the result of rising health care costs,¹ the impending retirement of the Baby Boom generation, and increasing longevity of the American population. In addition to changes to shore up Medicare's finances, policy makers are also considering whether to change the program's benefits or to restructure it in order to improve efficiency, to reflect changes in the delivery of health care, and/or to better meet beneficiaries' health care needs. Such proposals will affect how much money the program will require.

This report describes options for financing Medicare beneficiaries' health care under several likely approaches for changing its structure and benefits. It is the final report of a nonpartisan study panel convened by the National Academy of Social Insurance. The 12 members of this NASI study panel represent a broad diversity of philosophical perspectives, disciplinary training, and professional experience.

MEDICARE FINANCING IN CONTEXT

Medicare financing derives from current and future beneficiaries through a combination of payroll taxes, beneficiary premiums, and general tax revenues. Beneficiaries rely on other resources such as family income and assets and other insurance including Medicaid to pay for the 45 percent of their health care expenses not covered by Medicare.

The fragmented nature of the American health care system means that policy makers have only limited opportunities to consider alternative uses of any given health care dollar. Each health care policy or program, whether it is making the value of health benefits provided by employers tax exempt, Medicaid, or proposals to provide health insurance for those who lack coverage, has its own implicit philosophical foundations and constituencies. Decisions about how to change or finance Medicare are made largely in isolation of debates about providing financial access to health care for younger populations. At the same time, the politics of Medicare reflect not only the interests of beneficiaries, but health care professionals, manufacturers of medical goods, and localities in which Medicare plays a significant role in overall economic activity and health care infrastructure.

Medicare is a social insurance program designed to spread financial risk for the medical care of its beneficiaries broadly across the U.S. population. Medicare accomplishes this by raising much of its money from members of society before they are eligible. In the current program, this includes money from payroll and income taxes as well as beneficiary premiums. Risk spreading is limited by the amount beneficiaries contribute towards their own health care needs through services not covered by Medicare and through Medicare's cost-sharing requirements. Choices about financing can affect its ability to spread the financial risk associated with illness among healthy and sick individuals, between

¹ Increases in health care costs are themselves largely the result of new medical technologies and increased intensity in the use of medical services.

younger and older people, among those of different economic means, and among different areas of the country.

Policy makers will have to decide how much of future Medicare expenses to fund in advance. One option would be to finance Medicare totally on a “pay as you go” basis in which the program raises just enough money each year to cover that year’s expenditures. Given that Medicare’s costs will increase significantly over the next three decades, this strategy would entail lower taxes (and/or higher benefits) in the near term and higher taxes (and/or lower benefits) in the longer term than if Medicare were to engage in some advance funding. Part A (hospital insurance) is partially advance funded Part A (hospital insurance), but Part B (supplementary medical insurance) is financed on a “pay as you go basis.” There have been several recent proposals to advance fund all of Medicare. They vary in the extent to which they make individuals responsible for saving for their own health care needs versus pooling and redistributing individual contributions. Among other concerns, such proposals require that savings (or other resources) be adequate to cover health care expenses over the entire course of retirement, and that workers fund both their own future health care expenses as well as those of current beneficiaries during a transition period. Another issue is how such resources should be held — i.e. in government or private securities.

Although the question of whether to advance fund Medicare is largely a decision about whether to “pay now” or “pay later,” the political difficulty of raising taxes at any time complicates this decision. In addition, advance funding through a payroll tax may

lessen employers’ incentives to hire or to provide pensions and retiree health plans since it would increase their employment costs. The portion paid by other taxpayers may lessen incentives for savings since advance funding would decrease disposable income.

Any particular financing option will also raise a variety of other questions for policy makers as they decide how to pay for Medicare: How much of Medicare’s financing needs does it meet? How does this change over time? How are different types of taxpayers affected? Does any increased reliance on general revenue funding change Medicare’s status as social insurance? What effects would a particular option have on the larger economy? How easy would it be to administer? What are its effects on access to and the efficient use of health care services? How are other public and private programs affected?

MEDICARE’S FINANCING NEEDS UNDER CURRENT LAW

The money to pay for Medicare services is held in the Hospital Insurance (HI) Trust Fund for Part A benefits and the Supplementary Medicare Insurance (SMI) Trust fund for Part B. In 2000, the trustees of these funds reported that their best estimate was that without changes the HI Trust Fund will run out of money in 2025. They project that the SMI program will grow more quickly than HI, although SMI cannot run out of money since it draws funds as needed from beneficiary premiums and general tax revenues.

An alternative way of looking at Medicare’s future costs is the share of gross domestic product (GDP) that the program would absorb. This measure shows how much of society’s total resources are devoted to

Medicare and allows one to assess the combined costs of HI and SMI. In 1998, the Medicare trustees projected that spending would reach 5.85 percent of GDP by 2030, up from its 1998 level of 2.65 percent. Using updated information in 2000, the Trustees projected that Medicare spending would only reach 4.36 percent of GDP in 2030. This 25 percent reduction in a mere two years illustrates how an improved economy and slowed Medicare spending can improve the outlook. It also shows the potential uncertainty of these expenditure estimates over time.

Because the study panel commissioned most of its analysis for this chapter when only the 1998 estimates were available, they are the basis for the panel's assessment of Medicare's future financing needs. Despite the significant improvement in Medicare's financial outlook that occurred between the Trustees' 1998 and 2000 reports, however, the analysis presented in this chapter is still useful for policy makers:

- The orders of magnitude of most changes in spending on the program would move in a consistent fashion between the two sets of estimates, so at a minimum, the panel's analysis gives a sense of the relative impacts that different changes in the program would have its projected financing needs.
- Furthermore, the improvement over the last two years also means that some of the slowdown in spending growth that might be obtained from some of the reform proposals examined by the study panel (and discussed below) is now implicitly incorporated into the baseline. Savings from enacting such reforms will therefore be of a smaller order of magnitude than in the past.

- Third, the fact that Medicare's financial outlook can improve so dramatically so fast in one direction means that at some point in the coming decades, it could worsen just as quickly.
- And finally, even with the improvement, the current system will still find itself in need of new revenues (by 2025 in the case of HI). Medicare's share of GDP is still projected to rise 87 percent between 2000 and 2030 as the number of beneficiaries more than doubles.

Another useful way to talk about Medicare's resource consumption is to look at the share of this spending that taxpayers must bear — i.e. HI and SMI spending net of the Part B premium paid by beneficiaries. Using the 1998 estimates, the taxpayer share would be about 5.09 percent of GDP in 2030 (compared to 2.45 percent in 1998). Using the 2000 estimates, the taxpayer share would be 3.83 percent of GDP in 2030 (compared to 2.10 in 2000).

Projections about future costs also need to take into consideration the costs that beneficiaries will bear. By 2025, for example, out-of-pocket health care spending (including premiums for Part B of Medicare) could average nearly 30 percent of the income of a typical elderly beneficiary (compared to 19 percent in 1999) if those costs rise in tandem with Medicare's projected cost increases.

THE FINANCING NEEDS OF A RESTRUCTURED MEDICARE PROGRAM

Proposals to change Medicare would affect its future costs. Some proposals would lower those costs to the government; others would raise them; still others may be budget

neutral. To place some upper and lower bounds on the cost implications of commonly discussed Medicare proposals, the study panel commissioned analysis by Actuarial Research Corporation. In addition, it drew on existing government estimates by HCFA actuaries, the Congressional Budget Office, and the National Bipartisan Commission on the Future of Medicare of how particular proposals would affect Medicare spending through 2030. Table A summarizes the results of this analysis.² The percentages in the table represent the panel's best estimate of how much higher the taxpayers' contributions to Medicare would be for the year 2030 compared to 1998. For example, the first row in the table shows (based on 1998 Trustees' estimates) that making no changes in Medicare, revenues from taxpayers in 2030 will have to be 111 percent more than they were in 1998 to pay for Medicare services (i.e. over two times current levels). If policy makers raise the age of eligibility for Medicare to 70, the program will still require 93 percent more in taxpayer revenues in 2030 than it did in 1998.

Table A illustrates that all of the proposals examined in this report (as well as Medicare under current law) will require additional revenues even after accounting for growth in the overall economy. The most restrictive change examined, switching to a defined contribution approach in which increases in government spending for each Medicare ben-

eficiary are held to increases in the consumer price index (CPI), would still require 52 percent more revenues in 2030 than in 1998.

As one would expect, proposals to expand Medicare by adding a prescription drug benefit, catastrophic coverage, or a buy-in option for individuals under age-65 would add to Medicare's revenue needs. Of these potential benefit expansions, however, prescription drug coverage with an annual limit on beneficiaries' out-of-pocket spending ("stop loss") would require substantially more revenues than the other options presented here as one looks out to 2030. This is because the level of the stop loss is assumed to increase at the same rate as the CPI, but prescription drug spending is projected to increase substantially more as science yields new pharmaceutical therapies. Adding a drug benefit with a \$200 deductible, 20 percent coinsurance requirement, and a \$2,000 stop loss would require 171 percent more revenues for Medicare in 2030 than were required in 1998.

Finally, proposals to simplify Medicare's complicated system of cost sharing could be designed to add little or no increase in revenue needs over current law.³ Similarly, adding catastrophic coverage, which would limit beneficiaries' total out-of-pocket spending to a certain amount, could be done in a manner that would require no additional revenues than would be required under current law. Chapter 2 discusses the proposed

2 In September, 1999, the study panel released an interim report, *The Financing Needs of a Restructured Medicare Program, Medicare Brief No. 5*, which reported slightly different numbers in its Table 1 than are reported here in Table A. The numbers differ because of minor technical adjustments in the analysis made since the printing of the interim report.

3 The panel's analysis only looked at implications for overall Medicare spending; it did not examine how lower or upper income groups or other groups of beneficiaries would be affected. Coinsurance and deductibles affect beneficiaries who are sick more than beneficiaries who are healthy since the former group is more likely to need Medicare services.

Table A

**Estimated Increases in Taxpayer Contributions
to Medicare in 2030 Compared to 1998^a**

	Approximate Increase in Revenues Needed in 2030 Compared to 1998
Current law, projected spending in 2030 ^b	108%
Changes in Medicare Designed to Produce Savings:	
Interim Breaux-Thomas proposal to the Medicare Commission ^c	83%
Defined contribution: Hold per beneficiary increases in Medicare spending to growth in the consumer price index (CPI)	50%
Raise age of eligibility to 67 ^d	101%
Raise age of eligibility to 70	87%
Expansions in Medicare:^e	
Outpatient prescription drug coverage (\$200 deductible, 20% coinsurance, \$2,000 maximum benefit).	136%
Outpatient prescription drug coverage (\$200 deductible, 20% coinsurance, \$2,000 stop loss)	182%
Stop loss of \$3,000 per year	122%
Stop loss of \$5,000 per year	117%
Allow buy-in at ages 62-64	113%
Allow buy-in at ages 60-64	114%
Changes in Cost Sharing:	
\$300 Part B deductible tied to CPI, 1 annual hospital deductible, no hospital coinsurance, 10% home health coinsurance	99%
\$300 Part B deductible tied to CPI, 1 annual hospital deductible, no hospital coinsurance, 10% home health coinsurance, \$3,000 stop loss	115%
\$300 Part B deductible tied to CPI, 1 annual hospital deductible, no hospital coinsurance, 10% home health coinsurance, \$5,000 stop loss	108%

- a Taxpayer contributions are defined as all Medicare expenditures except for the 25 percent of Part B costs paid by beneficiaries themselves in premiums. Payroll taxes and general tax revenues make up the bulk of the taxpayer contributions. This table presents the percent increase over 1998 in taxpayer contributions to Medicare as a percentage of Gross Domestic Product (GDP). Because tax revenues tend to rise at the same rate as GDP, estimates in the table are a reasonable approximation of how much revenues would need to rise over their 1998 level to meet Medicare spending needs under each of the illustrative scenarios presented in the table.
- b 1998 baseline projection by the Social Security and Medicare Trustees of Medicare costs in 2030.
- c The "interim" Breaux-Thomas proposal contained a provision for an income-related premium for Medicare subsequently dropped from the final version voted on (but not adopted) by the Bipartisan Commission. Hence, the revenue needs of the final version would have been larger than those shown here for the interim proposal. The subsequent Breaux-Frist legislation (S. 106-1895 and S. 106-2807) also differs from the version of Breaux-Thomas analyzed here. Box 2-3 discusses those differences.
- d All analysis from this row to the end of the table is based on cost estimates developed for the National Academy of Social Insurance by Actuarial Research Corporation, Springfield, Virginia.
- e The estimates assume all features of the Medicare program other than the specific expansions noted remain as under current law.

Source: National Academy of Social Insurance, 1999.

changes in Medicare, the estimates presented here, and their limitations in greater detail.

One proposal not included in the analysis above is the package of changes put forth by the Clinton administration in 1999 and 2000. No estimates of its impact through 2030 are available at the time of this report. In addition, no cost estimates exist for changes that the President made in his plan in June, 2000 (see Box 2-4). However, March 2000 estimates by the Congressional Budget Office (CBO) projected that the February 2000 version of the plan would add \$68.6 billion in program expenditures for the period 2001-2010. The CBO attributed savings to the part of the plan that would reduce payments to providers and replace Medicare+Choice with a “competitive defined benefit” program to foster greater competition among health plans for beneficiaries. The proposal for an outpatient prescription drug benefit would add significantly to program costs, while CBO estimated the opportunity for some individuals under age-65 to “buy into” Medicare to be about budget neutral. Table A does include the longer-term cost implications of two changes very similar to provisions of the Clinton proposal — a drug benefit and “buy in” options.

Any estimates that look thirty years out into the future are very uncertain. It is unlikely that Medicare’s revenue requirements in 2030 will be just as projected here. However, the consistency of the analysis (no matter what set of benefits and structure Medicare is assumed to take on) is striking. All scenarios demonstrate the need for significant new revenues. In addition, analysis like that presented here allows one to compare the magnitude of revenue needs implied by different proposals for reform. While the actual

numbers are uncertain, understanding the relative costs of new benefits and what drives them is useful for policy makers considering options for future Medicare financing.

OPTIONS FOR FINANCING MEDICARE

The study panel examined the implications of alternative ways of filling the projected gaps in Medicare financing. In addition to analyzing the revenue impact of each option, the panel explored their implications for families, the government, and the overall health care system.

The study panel does not make any recommendations about which policies should be adopted to finance Medicare. The diversity of philosophical perspectives among members of the group would likely make such a consensus difficult to achieve. The panel believes, however, there is great value in laying out the tradeoffs and difficult choices facing policy makers in a clear, accurate, and unbiased manner. It is the panel’s hope that this analysis will make it easier for policy makers and the American public to choose among options to construct a workable, acceptable financing solution.

There are four general approaches to meeting Medicare’s projected financing needs:

(1) Reducing Program Costs Through Efficiencies. One strategy would be to reduce Medicare’s financing needs (i.e. its costs) by creating incentives for beneficiaries and providers to make more efficient use of health care services. Such savings are embodied in medical savings accounts (MSAs) as well as the proposals by Breaux and Frist and by the Clinton administration. The analysis of tax options below includes several

scenarios of projected Medicare costs, including one scenario that assumes Medicare achieves savings through such efficiencies.

(2) Asking Beneficiaries To Pay More. As better health care technology and other factors cause Medicare costs to rise, it is reasonable to consider what additional contributions beneficiaries can make to financing their own health care at the same time as considering options for taxpayer contributions. Policy makers could increase premiums and/or cost sharing or reduce the benefits covered by Medicare. With no changes in the program, beneficiary liability⁴ is already projected to more than double between 1999 and 2025 to \$3,074 with the average beneficiary spending 29 percent of her income on all out-of-pocket health care expenses. In addition, as overall Medicare costs rise, so too will beneficiary contributions through Part B premiums. Increasing beneficiary liability would require a concomitant rise in low-income subsidies to assure affordable health care for all beneficiaries.

(3) Using The Budget Surplus. For the first time since the 1960s, the federal government is taking in more money than it is spending. In July, 2000, the CBO projected the total federal budget surplus for the 2001-2010 period to be \$2.2 trillion⁵. A number of policy makers on both sides of the political aisle have proposed financing Medicare's future costs with the current non-Social Security budget surplus — the so-called on-budget surpluses. The basic proposal is to allocate some of the budget surplus to the Part A (HI) trust fund to extend its solvency.

One way to think about this issue is to consider the nature of a surplus and what policy makers can do with it. In a period of budget surplus, more dollars are coming into the Treasury each year than are needed to cover current spending commitments. These surplus resources can be devoted to one of three uses: (1) increased spending; (2) reducing taxes; or (3) retiring existing debt held by the public. Under the third of these options, surplus dollars are used to pay the holders of Treasury securities as they come due and the outstanding debt balance falls. If there were no surplus, the Treasury would roll over the securities coming due; in other words, the Treasury would issue new securities and use the proceeds of that borrowing to pay off holders of securities that mature.

The proposal to use the surplus to extend the life of the Medicare trust fund, however, does not fall as neatly into one of the three categories described above. Rather, this proposal involves a three-step process:

- First, the on-budget surplus dollars would be given to the Medicare HI trust fund.
- Second, since the trust fund does not need these resources to pay for current Medicare expenditures it would “loan” the sum to the Treasury to be invested in special Treasury securities.
- The Treasury now has the surplus dollars to use for one of the three things cited above. If the surplus funds are used to buy current goods and services or reduce taxes, the long term ability of the trust fund to meet its obligations

4 Beneficiary liability includes Part B premiums and all cost sharing requirements paid by or on behalf of beneficiaries.

5 This estimate is for the on-budget surplus (i.e. without projected balances, revenues or expenditures for the Social Security and Medicare Trust Funds) and assumes discretionary spending will grow at the rate of inflation after 2000.

would be improved. However, the ability of the government to pay the trust fund when Medicare seeks to redeem its Treasury securities would *not* be improved. Alternatively, if the dollars are used to retire debt held by the public, the government's ability to pay Medicare costs in the future for its securities would be enhanced. Government spending on debt service costs will be lower because the amount of debt held by the public will be lowered by the amount of the Medicare surplus that has been used to retire debt held by the public. In addition, a portion of the additional national saving represented by this debt retirement will augment investment, modestly boosting the size of the economy and tax revenues.

Whether the surpluses are used to pay down national debt or used to finance tax cuts and spending increases, Medicare has received “promises to pay” from the rest of government. As long as the trust fund has ample reserves, it will be politically difficult to cut Medicare benefits or raise HI payroll taxes.

In either scenario, when Medicare begins to redeem its securities because Medicare expenditures each year begin to exceed annual receipts into the trust fund, the burdens of meeting these obligations will fall on citizens at that time. At that point, in order to meet its Medicare obligations, the government will either have to raise general revenue taxes, reduce spending on other services, or redeem Medicare's securities by issuing new debt to the public — that is, to state local and foreign governments, individuals, or businesses

and institutions outside of government. If the Medicare's surpluses have been used to reduce the public debt earlier, then it will be less of a problem to increase the public debt at a later point in time; in that sense, reducing current debt does help with financing Medicare's future burdens. However, when people buy Treasury bills or bonds (and even though they treat them as assets), this means that other current spending or investment will be lower. Regardless of how the obligations to Medicare are financed, the burdens will be felt at that time.

A related, but somewhat different concept is the creation of a “lock box” to protect whatever balances are in the Part A trust fund. The concept of a “lock box” is probably best thought of as another way in which policy makers are seeking to reassure that public about the commitment to the future of Medicare. The concept essentially means keeping Medicare “off budget” so that any savings generated for the program are kept in Medicare and cannot be used to balance the rest of the budget.

(4) Raising Revenues Through Taxes. If savings through efficiency, additional beneficiary contributions, or the budget surplus are not sufficient to meet Medicare's financing needs, policy makers will need to turn to taxpayers to raise the additional revenues.

The study panel analyzed options for new tax revenues along several dimensions — its ability to meet Medicare's revenue needs (under different assumptions about what those needs will be),⁶ the populations affected,

6 As discussed in greater detail in Chapter 3, the study panel defined Medicare's revenue shortfall as the difference between projected revenues under current law and projected expenditures through 2030. Projected revenues under current law are assumed to be: payroll tax revenues, beneficiary premiums equal to 25 percent of Part B costs, and general revenue subsidies that equal 0.71 percent of GDP (the same percentage they were in 1999).

Table B

Comparison of Illustrative Medicare Revenue Options^a – Part 1

Revenue Option	Tax Rate Needed to Fund Through 2030 (Percent)^b	Populations Affected	Progressivity and Equity Considerations	Economic Considerations	Administrative Burden
Increase Payroll Tax Rate	1.95% ^c	Workers	Somewhat regressive. Slight increase in burden for younger people relative to older people.	Lower wages could lead to some potential net drop in labor force participation and jobs.	Minimal
Impose an Income Tax Surcharge	8.43% ^d	Comprehensive ^e	High progressivity. Slight increase in burden for older people relative to younger people.	Some potential net drop in labor force participation. Increase in non-taxable compensation and deductible uses of income.	Minimal
Institute Broad-Based Consumption Tax ^f	2.02%	Comprehensive	Regressive. Increase in burden for older people relative to younger people.	Increase in non-taxable consumption.	Substantial
Institute Narrow-Based Consumption Tax ^g	3.29%	Comprehensive	More progressive than broad-based option.	Increase in non-taxable consumption.	Substantial

a Analysis uses Medicare Trustees' 1998 intermediate cost projections as baseline for estimating Medicare's future financing needs.

b Amount to be raised is the difference between projected revenues under current law and projected expenditures as a percent of GDP through 2030. Projected revenues under current law are assumed to be: payroll tax revenues, beneficiary premiums equal to 25 percent of Part B costs, and general revenue subsidies that equal 0.71 percent of GDP (the same percentage they were in 1999). All estimates are based on the panel's "intermediate," assumptions (i.e. current law continues). The full report presents results for alternative sets of assumptions. All analysis presented in this table assumes "advance funding," — i.e. that a set percent of GDP would be raised each year sufficient to pay bills through 2030 with excess amounts in any given year held in a trust fund.

c Employer and employee portions combined. This amount would be added to the current 2.9 percent for a total payroll tax of 4.84 percent.

d Tax rate is defined a percentage of taxes that would otherwise be owed in every tax bracket.

e "Comprehensive" in this instance does not mean that everyone pays; rather, no single group is excluded by any characteristic other than income.

f Taxable consumption would represent 67 percent of GDP.

g Taxable consumption would represent 45 percent of GDP.

Source: National Academy of Social Insurance, 2000.

Table C

Comparison of Illustrative Medicare Revenue Options^a – Part 2

Revenue Option	Percent of Projected Financing Shortfall Covered ^b	Populations Affected	Progressivity and Equity Considerations	Economic Considerations	Administrative Burden	Other Considerations
Double All Federal Excise Taxes	54%	Comprehensive	Regressive	Less consumption of taxed items.	Minimal	Little connection between most taxed items and Medicare.
Double Federal Alcohol and Tobacco Taxes	12%	Users	Regressive	Less consumption of taxed items.	Minimal	
Tax 85 Percent of HI and 75 Percent of SMI Above Income Thresholds	2010: 24% ^c 2020: 36% 2030: 49%	Beneficiaries	Progressive. Increases burden on older people relative to younger people.	Potential increase in delayed retirement and part-time work by beneficiaries.	Low to Moderate	
Tax Health Insurance Subsidies Received From Employers	2010: 91% ^c 2020: 98% 2030: 108%	Workers, Beneficiaries	Progressive. Increases burden on younger people relative to older people. Substantial variations in premiums/employer subsidies for the same insurance.	Some decrease in compensation and jobs. Significant decrease in spending on health insurance.	Moderate to Substantial	Would finance Medicare while increasing un-insurance among working taxpayers. Policy makers are considering this revenue source to address lack of health insurance.

a Analysis uses Medicare Trustees' 1998 intermediate cost projections as baseline for estimating Medicare's future financing needs.

b Amount to be raised is the difference between projected revenues under current law and projected expenditures as a percent of GDP through 2030. Projected revenues under current law are assumed to be: payroll tax revenues, beneficiary premiums equal to 25 percent of Part B costs, and general revenue subsidies that equal 0.71 percent of GDP (the same percentage they were in 1999). All estimates are based on the panel's "intermediate," assumptions (i.e. current law continues). The full report presents results for alternative sets of assumptions. For options that would tax Medicare and employer health insurance subsidies, the percent of Medicare's financing shortfall that would be

covered varies by year; this table presents results for 2010, 2020, and 2030. All analysis presented in this table assumes "advance funding" — i.e. that a set percent of GDP would be raised each year sufficient to pay bills through 2030 with excess amounts in any given year held in a trust fund.

c For options that would tax Medicare and employer health insurance subsidies, the percent of Medicare's financing shortfall that would be covered varies by year; this table presents results for 2010, 2020, and 2030. All analysis presented in this table assumes "advance funding," — i.e. that a set percent of GDP would be raised each year sufficient to pay bills through 2030 with excess amounts in any given year held in a trust fund.

Source: National Academy of Social Insurance, 2000.

progressivity (i.e. the extent to which higher income individuals bear more of the burden), how each option affects the larger economy and health care system, administrative burden, and other considerations. Tables B and C present the results.⁷ The study panel focused on six illustrative tax policies:

(A) Payroll taxes currently finance Part A (HI) of Medicare — 2.9 percent of payroll split evenly between employers and employees. The analysis examines raising this tax rate. Assuming current Medicare law continues (i.e. no new benefits or other changes), the panel estimates that raising this tax by 1.95 percentage points today for a total tax of 4.84 percent would be sufficient to fund Medicare through 2030.⁸ Payroll taxes are proportional to wage income. Since eligibility for Medicare is directly related to payment of the current payroll tax, this financing option supports Medicare’s status as social insurance. To the extent that high income people receive larger shares of their income from pensions or asset holdings (interest, dividends, rent, etc.), payroll taxes are somewhat regressive (i.e. tax rates are higher at lower incomes). They also slightly increase the burden on younger people relative to older ones, and could lead to some decline in labor force participation. Because the federal government already levies a pay-

roll tax, the administrative burden of this option would be minimal.⁹

(B) Income taxes are the major source of general revenue that helps fund Part B (SMI). Our analysis examines adding a surcharge to income taxes to help finance Medicare. Assuming current law, the panel estimates that an 8.43 percent surcharge levied on income taxes already owed in every tax bracket would fully fund Medicare through 2030. For example if a family’s federal income tax without the surcharge were \$1000.00, their tax with the surcharge would be \$1,084.30. Income taxes are paid by a large portion of the population, are highly progressive (i.e. tax rates increase with income), and would involve minimal new administrative burden. This option would represent a slight increase in the burden borne by older people and could lead to some drop in labor force participation and an increase in non-taxable compensation and uses of income.

(C) Consumption taxes are levied on the value of the purchase of goods and services. The study panel examined a broad-based consumption tax in which only a few types are expenditures are tax-exempt and a narrow-based consumption tax in which a larger number of expenditures are excluded. Consumption taxes would affect almost all

7 The information presented in the second column of Table B is different from that in Table C because the revenue proposals presented in the two tables differ. In Table B, the second column shows the tax rate that would be necessary to raise the additional funds necessary for projected Medicare costs through 2030. However, because the proposals in Table C include a specified (or implicit) tax rate, the first column shows what percentage of gap in Medicare’s financing through 2030 the proposal would cover.

8 All options assume current taxpayer revenues for Medicare as a percent of GDP would continue. New revenues would fund the difference between these projected revenues and projected spending for Parts A and B (HI and SMI) combined.

9 On the other hand, because Social Security is currently financed almost exclusively through payroll taxes and will also face financing pressure as the population ages, policy makers may be less willing to rely significantly on this source of revenues for Medicare as well.

populations, and are usually considered regressive. Narrowing the types of items taxed by excluding a larger share of “necessities” — food, housing, medical care, etc. — could make it more progressive, but would require a higher tax rate. To fund Medicare under current law fully would require a tax rate of 2.02 percent for the broad-based consumption tax (67 percent of GDP taxable), while a narrow-based consumption tax (45 percent of GDP) would require a tax rate of 3.29 percent. Consumption taxes would represent a slight increase in the tax burden for older people relative to younger ones, would increase consumption of non-taxable goods and services, and would involve substantial administrative costs to implement.

(D) Excise taxes are levied on the consumption of specific products such as alcohol, tobacco, gasoline, and airline tickets. Doubling all federal excise taxes would cover 54 percent of the projected shortfall in Medicare financing between now and 2030 assuming current law continues. Doubling federal taxes on only alcohol and tobacco (an option with some clear connection to health) would cover only 12 percent of the shortfall. Excise taxes only affect the users of the taxed items and discourage their consumption.¹⁰ They are regressive, but would involve little new administrative burden. Excise taxes can reduce jobs in industries they target.

(E) The panel considered an option to **tax the Medicare benefits of upper-income beneficiaries** in a manner parallel to the current tax on Social Security benefits.¹¹ This is a relatively progressive option that would

increase the financing burden on older people relative to younger ones. It could cause some beneficiaries to delay retirement or take on part-time work and would carry some additional (but not substantial) administrative costs. One feature of this option as analyzed is that there is no provision for the income levels above which beneficiaries would be taxed to rise with inflation. Because incomes will rise with inflation, more and more beneficiaries would pay this tax with time.¹²

Detractors point out that this tax is equivalent to income-relating Medicare, even though its financing is already income-related. Because the payroll tax that finances Part A is not “capped” at a given income level (as are Social Security payroll taxes), higher income individuals pay 2.9 percent (employer and employee contributions combined) on every dollar earned. It would tax only a narrow segment of the population, which would move the program somewhat farther away from the concept of universal, contributory financing of social insurance programs. In addition, three-quarters of Part B is financed through general revenues, which is progressive. While this option would pay for 24 percent of the projected shortfall in 2010, it would cover 49 percent in 2030 because the tax burden would fall on a larger share of the beneficiary population.

(F) The panel also considered an option to **include the value of workers’ health insurance benefits provided by employers as taxable income** and to use this revenue for Medicare. This option would affect both current workers as well as some retired workers

10 The panel's estimates overstate the impact of these options on the Medicare shortfall because they do not take account of the fact that the taxes would lead to less consumption of the taxed goods and, hence, less revenue.

11 Chapter 3 spells out the proposal in detail.

12 This same feature is built into the current tax on Social Security benefits.

with supplemental coverage from their employers. It is generally progressive since both health insurance subsidies from employers and income tax rates rise with income. It also increases somewhat the financing burden on younger people relative to older ones, and would likely lead to decreases in jobs, compensation, and the proportion of the population with health insurance. This option would also entail some substantial new administrative costs to implement and run. However, it is a rich revenue source, and as such, policy makers are also considering it as a way to address the problem of the uninsured. In 2010 it could cover 91 percent of Medicare's shortfall; by 2030, that would rise to 108 percent.

We drew several observations from this analysis. First, securing additional financing for Medicare will be necessary to avoid eroding the financial protection Medicare provides.

Second, while the ultimate solution will involve tradeoffs, it is possible to do. The specific options examined by the panel may be undesirable in one or more ways, but the burdens on families and the aggregate economy are generally manageable. Furthermore, changes such as those contemplated by the panel have precedent. Lawmakers have adjusted the Medicare payroll tax rate nine times (all increases except one) since the program's beginning, raised (and eventually eliminated) the amount of income subject to the tax, and periodically changed the proportion of Part B costs to be paid by beneficiaries.

Third, the panel recognizes that raising taxes is neither popular nor without drawbacks. Americans will have to decide whether new revenues are preferable to eroding the financial protections that Medicare offers its bene-

ficiaries. Each of the options available to policy makers carries pros and cons. As table B illustrates, policy makers will have to balance distinct tradeoffs among equity, efficiency, and the administrative burden each approach carries. Some of the undesirable effects of any given approach may be mitigated by combining more than one revenue source in a package and making other alterations. For example, if policy makers decide to tax health insurance subsidies that employees receive through their jobs, they may decide to tax only the portion that exceeds a certain threshold. Such flexibility may allow them to better balance the "winners" and "losers" in a politically viable manner. One drawback to combining several revenue sources together in one package is that some taxes (e.g. consumption taxes) require policy makers to establish a new infrastructure to collect the money. This infrastructure carries substantial fixed costs. The government would have to bear such costs no matter how much money is raised.

Fourth, these analyses point out the role of timing in public finance decisions. Although recent optimistic projections may leave policy makers disinclined to adopt changes that will involve any pain, Medicare will eventually still need new revenues. Starting early to raise those revenues (or enact cuts) will make tax increases faced by families in any given year smaller than if we wait until the significant revenue needs are close at hand. The panel believes it is important to begin this process as soon as possible.

The study panel also believes it is important to point out that even if policy makers were to enact changes today based on our analysis or others', they will almost certainly need to make additional changes before 2030.

Year-to-year changes in the economy have substantial effects on future Medicare finances. Furthermore, we can do virtually nothing to predict economic cycles for more than a few years in the future. Predicting the state of the economy thirty years in the future is impossible. The news over the last three years has been good. However, unforeseen changes in future years could lead to an equally dramatic worsening of Medicare's financial forecast. Furthermore, we know little about what technological changes will occur in medicine, how policy makers will change Medicare's benefits, or what changes will take place in the delivery of health care services. The chances that policy makers will "get it right" now for the next thirty years are not very likely.

The study panel also believes strongly in the value of systematic analysis in making financ-

ing decisions for Medicare's future. Because such analysis is hard to do and fraught with uncertainty, it is tempting not to do it — especially for the long-term. Although we may not know exactly when the HI Trust Fund would run out of money without changes, we do know that health care cost increases and the retirement of the Baby Boom generation will necessitate changes. Without analyses such as these, we would not have the opportunity to understand or address Medicare's financing difficulties until we found ourselves in a crisis. And through analysis we have a much better idea of the range of changes that might be necessary to solve the problem. The problem is not intractable, but it is crucial to understand some of the tradeoffs these changes will represent.

Chapter 1

Medicare Financing in Context

During the second half of the 1990s, policy makers began considering significant changes in the Medicare program. This federal health insurance program, which covers individuals over age 65 as well as some younger people with permanent disabilities, remains extremely popular with the public and has been an important mechanism for keeping many of its beneficiaries from financial ruin when faced with illness (Bernstein and Stevens, 1999).

Medicare will require changes for the next generation, however. Its benefit package has changed little since its inception in 1965. As medicine has evolved, the financial protections afforded Medicare beneficiaries have eroded. They have had to devote ever greater portions of their own resources to pay for care not covered by Medicare. Chief among the benefits commonly provided by private insurance, but not Medicare, are outpatient prescription drugs and a limit on beneficiaries' out-of-pocket spending. In addition to better meeting beneficiaries' needs and/or assuring the program reflects the way health care is currently delivered, some have proposed restructuring Medicare to rely more on managed care as does the private insurance held by most working-age Americans. However, a prime motivator of the latter change is the projection that earmarked funds to cover program expenditures will become inadequate in the future, as health care costs continue to rise and the number of beneficiaries grows as the Baby Boom generation retires.

This is the final report of a nonpartisan study panel convened by the National Academy of Social Insurance (NASI) to consider options for financing Medicare for future beneficiaries. NASI is a nonpartisan organization, and the analyses produced by its study panels attempt to be comprehensive, accurate, balanced, and understandable. The 12 members of this NASI study panel (listed at the beginning of this report) represent a broad diversity of philosophical perspectives, disciplinary training, and professional experience. Appendix A discusses the composition, charge, and work of the study panel in greater detail.

CHOICES ABOUT FINANCING MEDICARE AND OTHER HEALTH CARE

This report is about choices in financing health care. Subsequent chapters examine Medicare's financing needs over the next several decades and consider the range of public policies that could help meet those needs. This chapter provides a backdrop for that analysis by examining how we as a society choose to pay for health care in older age and disability. In particular, it addresses four questions: (1) How do we decide what to spend on health care for different parts of the population? (2) How much of the financial risk associated with health care in old age and disability do we want individuals to bear themselves versus spreading the risk through social insurance? (3) Do we want to prefund some or all of these health care costs before they are incurred? (4) What other criteria might we want to use in choosing how to

finance Medicare? The chapter also describes Medicare's current financing and how that financing has evolved over its time.

The question of how to finance Medicare goes beyond decisions about taxes and premiums. It involves a series of implicit or explicit choices that we as a society make about the health care services we want provided to older individuals and those living with disabilities. Taken together, these choices set the stage for deciding how to raise the revenues needed to pay for Medicare expenditures.

How Do We Decide How Much To Spend On Health Care And For Whom?

The first of these choices has to do with the portion of our national resources we devote to health care. In the United States, we do not set a national health care budget. As a society, however, we do implicitly make decisions about how much health care we wish to consume. Health care spending in the United States is the result of a series of decisions made in isolation of one another. For example, we choose eligibility criteria and benefits for Medicare and Medicaid. We have a series of policies that encourage the training of new health care professionals. We have payment policies for Medicare and other programs that encourage and maintain other health care providers. We have established subsidies to encourage employers to provide health insurance to their employees. All levels of government have programs designed to protect public health. Public policies including biomedical research funding, tax subsidies, and payment policies have all encouraged the development of new medical technologies that improve health, but also contribute to health care costs. Indeed, most research to date suggests that the new tech-

nologies are the leading cause of historical health care cost increases (Newhouse, 1992). The private sector too is important in setting policies that create our current health care system. Employers contribute their own subsidies to provide health insurance in order to retain their employees. Private firms in the health field write insurance policies, run hospitals or other health facilities, research and manufacture pharmaceuticals and medical devices, and provide other services to return a profit to their investors. All of these individual decisions contribute to the amount that the United States spends on health care.

Allocating The Health Care Dollar

These decisions not only affect how much this country devotes to health care, they also reflect implicit priorities in how we allocate our health care resources. Again, because we do not have a single, unified health care system, decisions are made in isolation of one another. Some employers provide subsidies to their employees for health insurance. We have established Medicare for older people and some of those with disabilities. Medicaid and the State Children's Health Insurance Program (SCHIP) reflect decisions to provide health care coverage to certain groups of low-income individuals, while others in the population have no health insurance coverage. Public policy debates about how best to assure their access to health care influence our allocation of resources. These debates along with the current discussion of 555 changes in Medicare represent a sorting of priorities about who receives how much insurance protection.

Values, Politics and Other Considerations

Public policies reflect both values and politics. For example, to some, the debate about Medicare's future has been one of what we as

a society can afford: How much of the government's resources do we wish to devote to Medicare versus other public uses of that money versus returning that money to taxpayers through tax cuts? How much should we devote to health care for children? What public resources should we devote to working Americans without health insurance? How should we allocate resources among health care, national parks, education, defense, and other needs? In other words, what need is most deserving of any given dollar of public spending?

Implicit in such a discussion is also the issue of how large government can and should be. Medicare's "affordability" is also a question of how much of our resources we want to spend in the public sector versus leaving them to be spent in the private sector.

Another aspect of these decisions that involves value judgments is when in the course of a lifespan we want individuals to pay for the health care they will need in later years. Do we want them to pay while they are working or when they actually need the care? To what extent do we want any given generation to finance their parents' health care versus paying for their own when they consume it?¹ These are all normative questions.

Because different individuals and groups in society bring different values to bear on how to allocate resources for health care and other purposes, politics becomes a mechanism to express those values and make social choices. Those with particular interests in an issue attempt to influence the elected and appointed officials who make public policy. To accomplish this, they use voting behavior,

organization, and other resources available to them. As suggested above, the amount ultimately spent on health care is the outcome of many other, more narrowly focused decisions.

Although each health care program or issue has its own politics, the particular politics of Medicare are illustrative. They show how competing interests and multiple decisions ultimately result in the current program and set the stage for the debate about its future. In addition to making health care affordable for its beneficiaries (who vote in larger numbers than other American citizens), Medicare also plays important roles in assuring the incomes of providers including hospitals, physicians, other health care professionals, home health agencies, and the manufacturers of health care supplies and equipment. Furthermore, Medicare is important within local communities not only in maintaining a health care infrastructure where patients receive health care, but also as an engine of local economic activity. Health care providers, suppliers, and manufacturers are often important employers in their communities. As a more than \$200-billion-a-year program, Medicare receives significant attention from beneficiaries, providers, and those representing particular geographic locales. These politics play out in the decisions about Medicare's eligibility requirements and benefits package, but also in the thousands of technical details that determine how the program is administered and how much providers are paid (Vladeck, 1999; Smith, 1992).

In addition to values and politics, technical analyses of the relative strengths and weak-

1 The questions of how much of Medicare beneficiaries' financial risk associated with health care should be spread by social insurance and issues of intergenerational equity are discussed later in this chapter.

nesses of a particular option can also play a part in whether it is adopted. Technical analyses can improve estimates of the impact and cost of policy changes. They can also help policy makers assess whether particular proposals are likely to achieve their intended consequences. An they can help policy makers anticipate (and perhaps mitigate) unintended side-effects of particular changes. For Medicare, there have been advisory commissions such as the National Bipartisan Commission on the Future of Medicare and the Medicare Payment Advisory Commission (MedPAC) that provide such analyses to help inform policy decisions about Medicare. The legislative and executive branches have analytic expertise in their own agencies. Scholars and research organizations also produce analyses to help clarify the normative and other implications of making any particular choice. Some of these analyses reflect a particular point of view and support a particular outcome; others attempt to produce balanced analysis. Even when decisions are made largely on the basis of values or politics, analysis becomes part of the debate and can affect how much we ultimately spend on health care in the United States and for whom.

This report falls into the category of technical analysis. The study panel that produced it has attempted to identify the options for financing Medicare beneficiaries' health care over the next generation and help the reader understand the implications of making various choices.

Who Bears Risk?

Medicare provides a mechanism for spreading risk for the program's beneficiaries. The question of how much of a beneficiary's health care we want to finance through

Medicare is essentially the same as asking how much risk we want to spread. For Medicare beneficiaries, risk stems from uncertainty about their health care needs and the costs of meeting them. These uncertainties include: how long will we live? what health care problems will we encounter? what technologies will be available to treat those problems, and how much will they cost? how well will the economy as a whole perform and allow us to save adequately to meet health care expenses? (Moss, 1998). As we age or become disabled, our risk of incurring high medical costs increases significantly. To protect against the possibility that these risks might impoverish retirees, including those who save money during their working lives, Congress created Medicare in 1965.

Medicare is a social insurance program. Participation in Medicare Part A is compulsory for all workers and eligibility is based in part on earlier contributions to the program. Other social insurance programs in the United States include Social Security, unemployment insurance, and workers' compensation. Box 1-1 discusses the characteristics of social insurance in greater detail. Private insurance is also a mechanism for spreading risk. Why did policy makers seek to establish a social insurance program to pool some of the financial risk associated with beneficiaries' health care needs? They did so because private insurance markets could not provide affordable coverage to large numbers of older persons. Because the elderly and disabled use more health care than the working population, premiums for private insurance for these populations would be higher than they are for younger populations. At the same time, as will be discussed in greater detail below, the income and assets of Medicare beneficiaries are, on average, substantially more modest than they are for working Americans.

BOX 1-1

WHAT IS SOCIAL INSURANCE?

Government-run social insurance programs are created to protect individuals against certain forms of insecurity. The United States has a number of social insurance programs, including Social Security, unemployment insurance, workers' compensation, and Medicare. These social insurance programs protect people from risks such as old age, disability, job loss, work injuries and poor health.

Medicare is the social insurance program created to ensure that the elderly and disabled have access to health care. Medicare is "insurance" because it works like other forms of insurance by pooling risk. It is "social" because of its role in protecting large numbers of people who would not otherwise be able to purchase insurance in the marketplace. The Medicare program, thus, manages risk and guarantees universal coverage.

The following are seven characteristics that distinguish social insurance as it applies to Medicare:

1. Universality: Social insurance programs are usually mandatory for most or all of the population. In the case of Medicare, Part A is a mandatory national program for almost all workers; participation in Part B is voluntary.

2. Government Sponsorship: Governments create and supervise social insurance programs. The programs may, however, be administered under the scrutiny of the government by private sector institutions, a combination of public agencies and private contractors (as Medicare is), or directly by a public sector agency (the Social Security model).

3. Contributory Finance: Most of the resources needed to run the program are raised through payroll taxes, other taxes or earmarked revenues. Medicare Part A is funded mainly by a flat-rate contribution by employers and employees; Part B relies on general revenues and beneficiary premiums.

4. Eligibility Derived from Prior, Covered

Work: Benefit eligibility is dependent on an individual either contributing currently or having previously worked for a minimum period in jobs where the employer and employee have paid appropriate payroll taxes. Eligibility for Part A of Medicare eligibility depends on prior contributions. To be eligible for Part B (including the government subsidy of about 75 percent of its costs) requires enrollment in Part A plus payment of monthly beneficiary premiums that equal 25 percent of the program's costs. Both parts of Medicare also have special provisions for individuals who do not qualify on the basis of past contributions to buy Medicare coverage at its full actuarial cost. An individual's contributions also make family members eligible, as is the case of spouses of covered persons in Medicare.

5. Benefits Prescribed in Law: Uniform sets of entitling events and schedules of benefits are developed, announced and applied to all participants. The provisions of the law and regulations determine who should get benefits and how much they should get. Annual congressional appropriations are not required in order to spend money on these benefits.

6. Benefits Not Directly Related to

Contributions: Social insurance generally provides a prescribed benefit. Program payments for health care generally redistribute resources to lower from higher income groups; social insurance allows lower-income people to obtain the same coverage as higher-income people.

7. Separate Accounting and Explicit Long-

Range Financing Plan: Social insurance contributions are usually earmarked to pay the social insurance benefits. Governments typically keep separate accounts that permit comparisons of program receipts and program benefits and projects program revenues and expenditures into the future.

This underscores the importance of the redistributive aspects of social insurance. As also discussed below, a relatively small percentage of Medicare beneficiaries account for a majority of all program dollars in any given year. Although many of these heavy users may not know ahead of time they will need health care, the individual is often in a better position than a private insurer to predict such use. If health insurance is not mandatory, sicker individuals are likely to seek more insurance than healthier ones, thus driving up premiums. Furthermore, if people with insurance have more information about their likely health care needs than insurers, insurers can find it difficult to set appropriate premiums and may ultimately drop out of the market.

A fundamental observation underlying social insurance is that private markets do not always provide adequate protections against the financial catastrophes that can accompany events such as recession, widowhood, disability, retirement, loss of a job, or poor health. Hence, largely as a result of the economic upheavals in the first part of the twentieth century, developed nations concluded that in order for individuals to be willing to engage in the risks that a capitalist economy requires to realize economic growth, those individuals must have some base of economic security (Dionne, 1997). Social insurance provides that security by pooling the risks associated with these various vicissitudes of life. Medicare pools risk in several ways — between healthy and sick beneficiaries, between current and future beneficiaries, among individuals of different economic means, and across different parts of the country.

Spreading Risk Among Healthy and Sick

Most Medicare beneficiaries are healthy. For about 58 percent of them in 1996, the feder-

al government provided less than \$1,000 in Medicare benefits (see Figure 1-1). However, a very small number of beneficiaries are sick enough to account for the bulk of all dollars spent by Medicare. In 1996, the most expensive ten percent of elderly beneficiaries had average reimbursements of \$31,680, while the average reimbursement for the remaining 90 percent averaged \$1,675 (Moon, 2000).² Medicare makes the health care it covers more affordable to those with significant health care needs by pooling their risk together with the majority of beneficiaries with minimal needs. An 85 year-old with multiple health problems pays the same Part B premium as the healthy 65 year-old recent retiree. The private insurance that many beneficiaries have to supplement Medicare does not offer as much risk sharing as does Medicare, putting substantial burdens on some older beneficiaries.

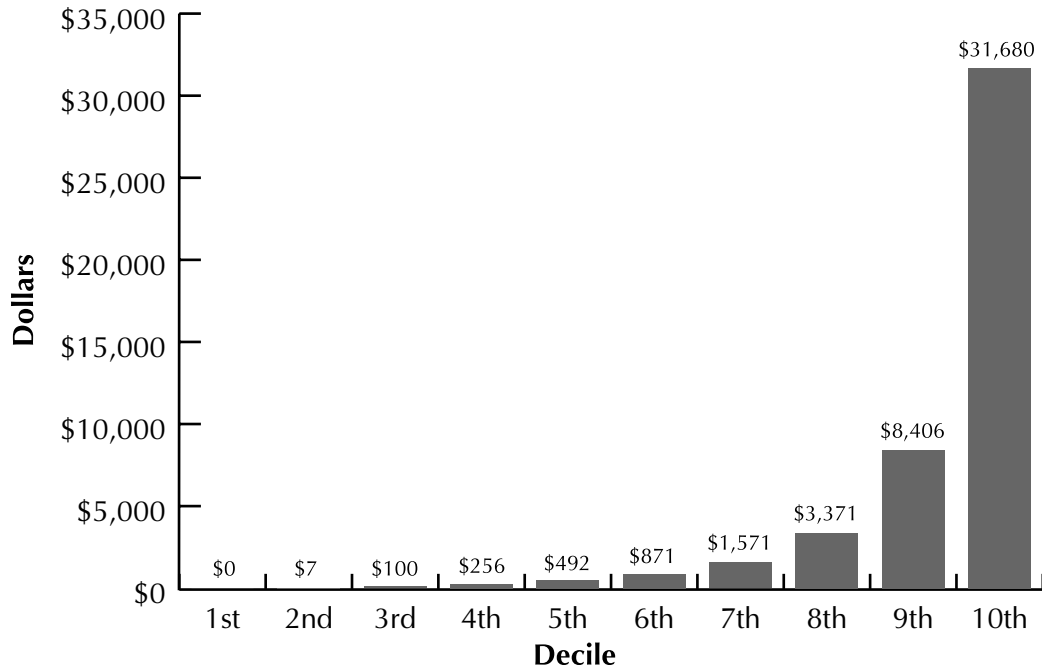
Spreading Risk Among Current and Future Beneficiaries

Another way in which Medicare spreads risk is between current and future beneficiaries. Of particular relevance to this report, Medicare finances Part A (hospital insurance) through a payroll tax and three-quarters of Part B through general tax revenues. The bulk of these taxes are paid by younger workers. The rationale for this intergenerational transfer is at least two-fold. First, by contributing to the program through these mechanisms, most workers pay into a program at a time when their incomes are higher than they will be once they are retired. They are contributing at a time that is more affordable to them. Second, if there were no Medicare, many workers would be forced to help absorb the costs of their parents' health care needs. Medicare essentially makes those

2 This same pattern of a small number of people accounting for most health spending is not unique to the Medicare population. It is also found in the general population.

Figure 1-1

Average Medicare Expenditures by Decile, 1996



Note: Excludes Medicare HMO and end-stage renal disease (ESRD) beneficiaries.

Source: Marilyn Moon, The Urban Institute. Data from the 1996 Medicare Current Beneficiary Survey.

costs more predictable for workers by relying on payroll taxes, income taxes, and other general revenues. This allows workers to plan better for their own needs and those of their younger and older relatives.

Traditionally, this link across generations has been seen to foster a shared commitment to Medicare and help maintain its long-term political stability. In recent years, however, the debate over Medicare’s “affordability” has brought this sense of shared commitment across generations into question. While larger numbers of younger Americans are without adequate health insurance, the aging of the

population and the growing intensity and technological capabilities of medicine have caused health care costs for all populations to grow. Rather than emphasizing fairness to all over the course of a lifespan, those who argue that Medicare is “unaffordable” are attempting to achieve what they believe to be fairness for younger cohorts (i.e. “Generation X”) relative to older ones (i.e. the Baby Boom generation and their parents) (Bernstein and Stevens, 1999). In addition, some argue that fairness requires that contemporary generations have a fuller understanding of financing burdens they are imposing on future generations.³

³ For two different views of the question on intergenerational equity in Medicare and other retirement programs, see Kotlikoff (1992) and Daniels (1988).

Spreading Risk Among People of Different Means

Over the course of an individual's career, many unforeseen circumstances can affect their economic well-being once they retire. Loss of a spouse, unemployment, low salaries, temporary or permanent disability, divorce, and illness can all impede a worker's ability to save for retirement. Medicare is somewhat redistributive in its benefits and financing. All Medicare recipients, regardless of how much they have paid into the Medicare system over the course of their lives, are entitled to the same set of standard benefits.⁴ At the same time, however, individuals who earn more money during their lives contribute more to Medicare financing. The Part A payroll tax is 1.45 percent of earnings from employees and employers both with no cap on the amount of income subject to the tax.⁵ Furthermore, the main source of the general revenues that finance about 75 percent of Part B is the income tax which has a "progressive" rate structure — i.e. taxpayers with higher incomes owe larger percentages of it in taxes than do taxpayers with lower incomes.

The redistributive nature of Medicare is limited by the program's benefit package. Because Medicare does not pay for prescription drugs or place a limit on out-of-pocket liabilities, beneficiaries must rely on additional insurance or other available resources to pay these expenses. This chapter discusses Medicare beneficiaries' ability to meet these financial obligations below.

Spreading Risk Across Different Parts of the Country

The United States is a large and diverse country. Medical practice and the cost of providing health care services vary greatly across the country. As a national program with uniform financing and benefits, Medicare has the effect of spreading the financial risk associated with health care in high cost areas across the entire country. Average 1996 Medicare payments for each beneficiary in Idaho, Montana, North Dakota, South Dakota, Nebraska, and Iowa were under \$3,800, while in California, Texas, Louisiana, Florida, New York, and Massachusetts, they exceeded \$5,400 (Figure 1-2).

How Much Risk Does Medicare Spread?

To what extent does Medicare spread the financial risk associated with becoming sick in old age or disability? This section examines the how Medicare actually shares responsibility for this risk with other payers of health care. It then looks in detail at the portion of that risk that is not spread — i.e. out-of-pocket health expenditures by beneficiaries themselves.

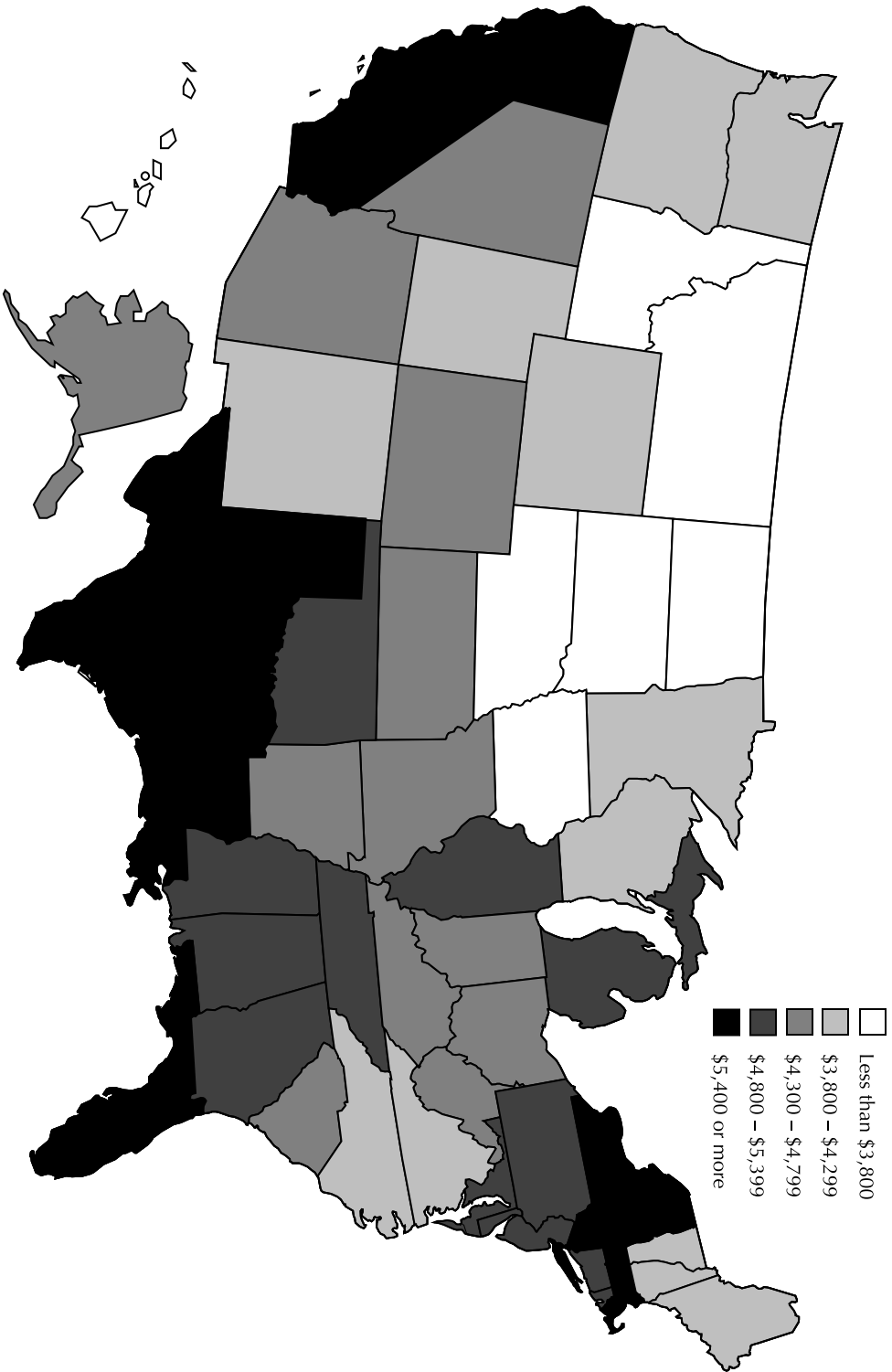
The fact that 90 percent of beneficiaries have insurance to supplement Medicare as well as the popularity of recent proposals to expand the Medicare benefit package to include outpatient prescription drugs underscore that Medicare does not spread all of health care risk (Rice and Bernstein, 1999; Gluck, 1999). As discussed in greater detail in

4 Some beneficiaries who receive their care through a Medicare+Choice managed care plan receive more than the standard benefits.

5 Prior to 1991, the payroll tax for Medicare was levied on only a portion of a worker's income (the first \$51,300 of income in 1990). This cap was phased out over three years beginning in 1991. The earnings base for the Social Security payroll tax remains capped (\$76,200 in 2000).

Figure 1-2

Average Medicare Payments Per Enrollee By State, 1996



Source: Health Care Financing Administration. Data from the Office of Strategic Planning.

Chapter 2, decisions to spread more of these risks by expanding Medicare's benefits increase the program's financing needs.

Medicare beneficiaries pay for their health care through several public and private sources. As shown in Table 1-1, personal

health care expenditures⁶ in 1995 for both aged and disabled beneficiaries totaled \$333 billion, with Medicare paying over half of that amount (55 percent). Because of limitations in the Medicare benefits package, about 90 percent of beneficiaries have some form of

Table 1-1

Medical Service	Total Expenditures (\$ millions)	Proportion of Total Expenditures (as a % of column total)	Source of Payment (as a percent of row total)				
			Medicare	Medicaid	Private Insurance	Out-of-Pocket	Other Source
Inpatient Hospital Services	\$98,871	29.7	89.0	1.2	5.9	2.4	1.6
Outpatient Hospital Services	27,972	8.4	62.7	3.5	20.9	9.3	3.6
Physician/Supplier Services	77,135	23.2	65.1	2.4	13.5	17.9	1.1
Dental Services	6,530	2.0	0.8	0.7	15.3	81.7	1.5
Prescription Medicines	21,599	6.5	2.9	11.0	29.5	49.3	7.4
Medicare Hospice Services ^a	1,472	0.4	100.0	0.0	0.0	0.0	0.0
Medicare Home Health Services ^a	17,604	5.3	92.7	0.4	0.5	5.9	0.5
Services in Long-Term Care Facilities ^b	81,829	24.6	10.9	42.6	2.1	32.4	12.1
Total Medical Services	\$333,013	100.0%	55.0%	12.4%	9.4%	18.7%	4.5%

a One limitation of the MCBS data set (as presented in the Olin, *et al.* publication presented here) is that it does not capture spending on home health and hospice services that do not qualify for Medicare reimbursement. Hence, these data overestimate the proportion of such services paid by Medicare and underestimate the absolute and relative amount paid by other sources.

b Expenditures for long-term care in facilities include facility room and board expenses for beneficiaries who reside in a facility for a full year; room and board expenses for beneficiaries who resided in a facility for part of the year and in the community for part of the year; and expenditures for the short-term facility stays (institutional events), primarily in skilled nursing facilities, for full-year or part-year community residents, which were reported during a community interview or created through Medicare claims. For Medicare HMO enrollees, their capitated payments are allocated to specific types of services in the same proportions as other Medicare beneficiaries used those services.

Source: Olin, G.L., Liu, H., and Merriman, B., *Health and Health Care of the Medicare Population: Data from the 1995 Medicare Beneficiary Survey*, (Rockville, MD: Westat, November 1999).

6 Personal health care expenditures include health care goods and services associated with individual health care. They exclude health expenditures for construction of facilities, administration, governmental public health activities, and research (U.S. Department of Health and Human Services, 1995).

additional insurance to cover at least some of the costs not covered by Medicare. This insurance includes Medicaid for low income beneficiaries, Medicare+Choice managed care plans, group private health insurance obtained through a former employer, and individually-purchased supplemental (Medigap) policies.⁷ Out-of-pocket expenditures by beneficiaries (or their families and friends) ranked second after Medicare among payers (19 percent), followed by Medicaid (12 percent), private health insurance that beneficiaries carry in addition to Medicare (9 percent), and other sources (5 percent).

Because of the nature of the Medicare benefits package, the percentages paid by Medicare and other sources varies by type of service. For example, out-of-pocket spending by beneficiaries represents the largest single source of payments for dental services and prescription medicines (82 percent and 49 percent respectively in 1995); Medicare covers neither of these items.⁸ Medicaid is the predominant payer for care at long-term care facilities⁹ such as nursing homes (43 percent) followed by out-of-pocket (32 percent). Medicare is the predominant payer for other services including hospice care (nearly 100

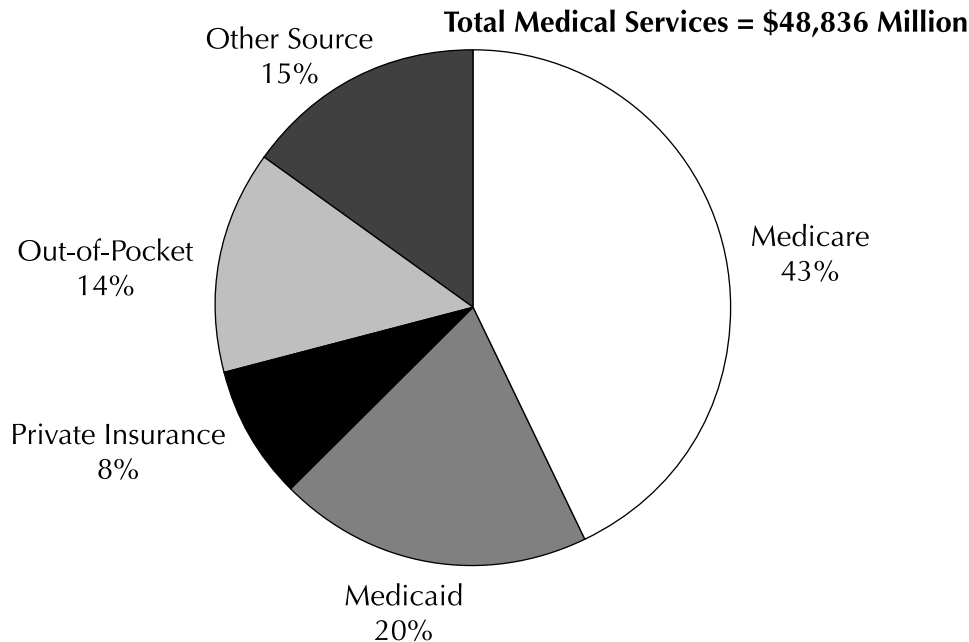
percent), home health care (93 percent),¹⁰ inpatient and outpatient hospital care (89 percent and 63 percent respectively), and physician services/outpatient supplies (65 percent).

Most Medicare beneficiaries are over 65 years old, nearly percent (in 1999) were under 65 and qualified for Medicare because of a permanent disability or end-stage renal disease. Although Medicare costs for these beneficiaries are approximately the same as those for older beneficiaries (\$4,916 versus \$5,583),¹¹ Figure 1-3 shows Medicare's share represented only 43 percent of their personal health care expenditures compared to 55 percent for elderly beneficiaries (Olin, Liu, and Merriman, 1999). Medicaid paid greater portions of these beneficiaries health care bills than it did for over-65 beneficiaries (23 percent for under-65 beneficiaries versus 12 percent for elderly beneficiaries). Higher rates of Medicaid eligibility reflect lower incomes and/or higher health care expenses among disabled beneficiaries than among over-65 beneficiaries (U.S. Department of Health and Human Services, 1998b). The fact that Medicaid provides a fuller range of benefits than does Medicare with little or no cost-

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- 7 For a full discussion of insurance that supplements Medicare, see Rice, T., and Bernstein, J., "Supplemental Health Insurance for Medicare Beneficiaries," *Medicare Brief No. 6* (Washington, DC: National Academy of Social Insurance, May 1999).
- 8 Medicare covers no dental services and only pays for prescription drugs when administered on an inpatient basis in a facility covered by Part A plus a few specific drugs administered on an outpatient basis.
- 9 In these data, long term care includes facility room and board for beneficiaries who reside in nursing homes and skilled nursing facilities for all or part of the year.
- 10 One limitation of the Medicare Current Beneficiary Survey data (at least as presented in the Olin, et al. publication cited here) is that it does not capture spending on home health and hospice services that do not qualify for Medicare reimbursement. Hence, the these data overestimate the proportion of such services paid by Medicare and underestimate the absolute and relative amount paid by other sources.
- 11 Excludes ESRD beneficiaries (those covered by the HI program solely due to their end-stage renal disease condition). Total ESRD enrollment in 1995 was 233,000 (Shatto, 2000). Per beneficiary costs for ESRD beneficiaries by themselves are significantly higher (\$38,574 in calendar year 1996) than the costs for other beneficiaries (U.S. Department of Health and Human Services, 1998a) (\$38,574 in calendar year 1996).

Figure 1-3

**Personal Health Care Expenditures for Medicare Beneficiaries
64 Years and Younger (Disabled) by Source, 1995**



Note: Figures do not include 233,000 end-stage renal disease (ESRD) beneficiaries. For Medicare HMO enrollees, their capitated payments are allocated to specific types of services in the same proportions as other Medicare beneficiaries used those services.

Source: Olin, G.L., Liu, H., and Merriman, B., *Health and Health Care of the Medicare Population: Data from the 1995 Medicare Beneficiary Survey*, (Rockville, MD: Westat, November 1999).

sharing also helps explain the lower out-of-pocket expenditures for this group (12 percent of total expenditures for the health services they receive) than for beneficiaries over age 65 (Olin, Liu, and Merriman, 1999). Private insurance is also particularly important for those beneficiaries with a worker in the family.

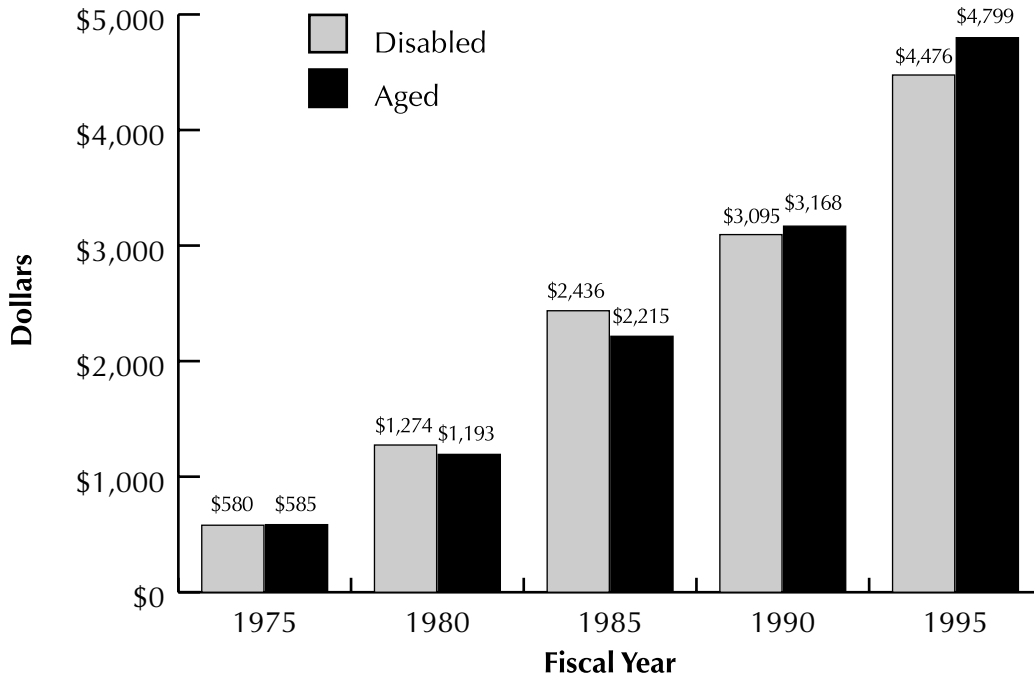
The role of Medicaid in financing the health care of disabled beneficiaries is particularly apparent among prescription drug expenditures, a service covered by Medicaid, but not Medicare. Medicaid paid for 25 percent of drug expenditures for the disabled group

(compared to 11 percent for all beneficiaries), while their out-of-pocket share for pharmaceuticals was 38 percent (compared to 49 percent for all beneficiaries) (Olin, Liu, and Merriman, 1999).

Because those individuals with disabilities who qualify for Medicare have changed over time, so too has the way in which their health care costs have been spread among Medicare and other payers. Since the 1980s, the percentage of disabled Medicare beneficiaries qualifying because of mental impairments has grown. In 1975, mental impairments (other than mental retardation)

Figure 1-4

Per Capita Medicare Reimbursement in Dollars, Selected Years



Note: Figures do not include end-stage renal disease beneficiaries.

Source: National Academy of Social Insurance, 2000; based on data from the Health Care Financing Administration, Office of the Actuary, March 15, 2000.

constituted 11 percent of new SSDI awards,¹² but grew to 25 percent by 1994 (Mashaw and Reno, 1996), and since these beneficiaries come on at a younger age, on average, their share of the total beneficiaries is likely to be even higher. As late as 1985, the average cost to Medicare of a disabled beneficiary exceeded that of a beneficiary over age 65 (see Figure 1-4) — a trend that

has since reversed.¹³ Because Medicare has very limited mental health benefits, it is not surprising that Medicare would constitute a smaller percentage of disabled beneficiaries' health care expenses than it does for aged beneficiaries.

Out of pocket spending and low-income beneficiaries. In establishing Medicare in

12 Individuals become eligible for Medicare after receiving Social Security (SSDI) payments for 24 months. Hence, changes in characteristics of new SSDI beneficiaries are an indicator of subsequent changes found among disabled Medicare beneficiaries. However, not all new SSDI recipients remain on the program long enough to receive Medicare benefits. Attrition due to mortality and other causes disproportionately occurs more frequently among certain types of disability such as infectious disease. As a result, individuals with other types of disorders including mental and musculoskeletal impairments are likely to constitute a greater percentage of long-term SSDI and disabled Medicare beneficiaries (Mashaw and Reno, 1996).

13 These data also exclude the 233,000 ESRD beneficiaries.

1965, the federal government sought to spread the financial risk of being sick. At the time, health care costs represented a substantial and sometimes impoverishing expense for many elderly in 1965.¹⁴ An important indicator of how well Medicare has achieved its original goal is the extent to which it has protected lower-income families from impoverishing out-of-pocket health care expenses.

Although the economic status of the elderly has improved since the 1960s,¹⁵ many still remain near poverty and depend largely on Social Security and Medicare to provide for their needs. In 1996, the poorest two-fifths of elderly households (incomes below \$13,000) received 81 percent of their income from Social Security. The most vulnerable elderly include those with the least education, those living alone, and the oldest old (Clark and Quinn, 1999). Women living alone also figure prominently among this vulnerable group. Unmarried women over age 65 are more likely than elderly couples to have incomes below the poverty line (18.6 percent of unmarried women compared to 13.5 percent of unmar-

ried men and 5.0 percent of couples). Furthermore, women living alone constitute 44 percent of all elderly households (Social Security Administration, 2000). Most Medicare beneficiaries are of modest means. While less than 10 percent of Medicare beneficiaries had household income in 1998 of more than \$75,000, more than half had income of less than \$25,000, and almost a third had incomes of less than \$15,000 (Figure 1-5). Moreover, they still spend more than three times as much on health care as do their younger counterparts (U.S. Department of Health and Human Services, 1997).

Medicare beneficiaries contribute towards their health care expenses through payments for the program's Part B premiums, cost sharing requirements, and the services it does not cover. Given the economic vulnerability of many Medicare beneficiaries, the amount of health care they pay out-of-pocket is of particular interest. In 1999, the average non-institutionalized¹⁶ beneficiary is projected to have spent \$2,430 of her money towards health care. This represented 19 percent of

14 In writing about Medicare in 1970, Robert Myers noted that "persons aged 65 and older face health care costs that, on average, are three times as high as for younger persons, while at the same time they have only half as much income" (Myers, 1970).

15 While 29 percent of beneficiaries had household income below the poverty line in 1968, only 13 percent fell below that threshold in 1997 (Dalaker, 1999).

16 Data is based on AARP Public Policy Institute (PPI) projections of average out-of-pocket health care costs for non-institutionalized Medicare beneficiaries age 65 and older, 1999. These estimates cannot be compared to previous PPI analysis of out-of-pocket health spending (see Gross, et al., 1997) for three reasons. First, they include the costs of short-term nursing facilities care, which had previously been excluded. Because this projection is based on data from beneficiaries living in the community at some point during the year, the out-of-pocket expenses are predominantly for short stays in nursing homes — that is, care in a nursing home that does not last for the entirety of 1999. Second, they differentiate between spending patterns of beneficiaries who qualify for full-year Medicaid benefits and those enrolled in Qualified Medicare Beneficiary (QMB) and Specified Low-Income Medicare Beneficiary (SLMB) programs, which provide assistance with some Medicare-related costs to lower income beneficiaries who are not eligible for full Medicaid benefits. Past estimates could not differentiate among these groups of Medicaid recipients. Finally, the current estimates were derived from a revised benefits simulation model that incorporates more recent data, reflects more representative estimates of spending by HMO enrollees, and incorporates Medicare spending trends resulting from legislative changes in the Balanced Budget Act of 1997. The out-of-pocket spending estimates were derived from a microsimulation model developed for AARP by the Lewin Group, Inc. This model projects 1999 out-of-pocket health spending from the 1995 Medicare Current Beneficiary Survey (MCBS) Cost and Use Files (Gross and Brangan, 1999). For a discussion of the methodology used in making these projections see Gross, DJ., et al., *Out-of-Pocket Health Spending by Medicare Beneficiaries Age 65 and Older: 1997 Projections* (Washington, DC: AARP Public Policy Institute and the Lewin Group, December 1997).

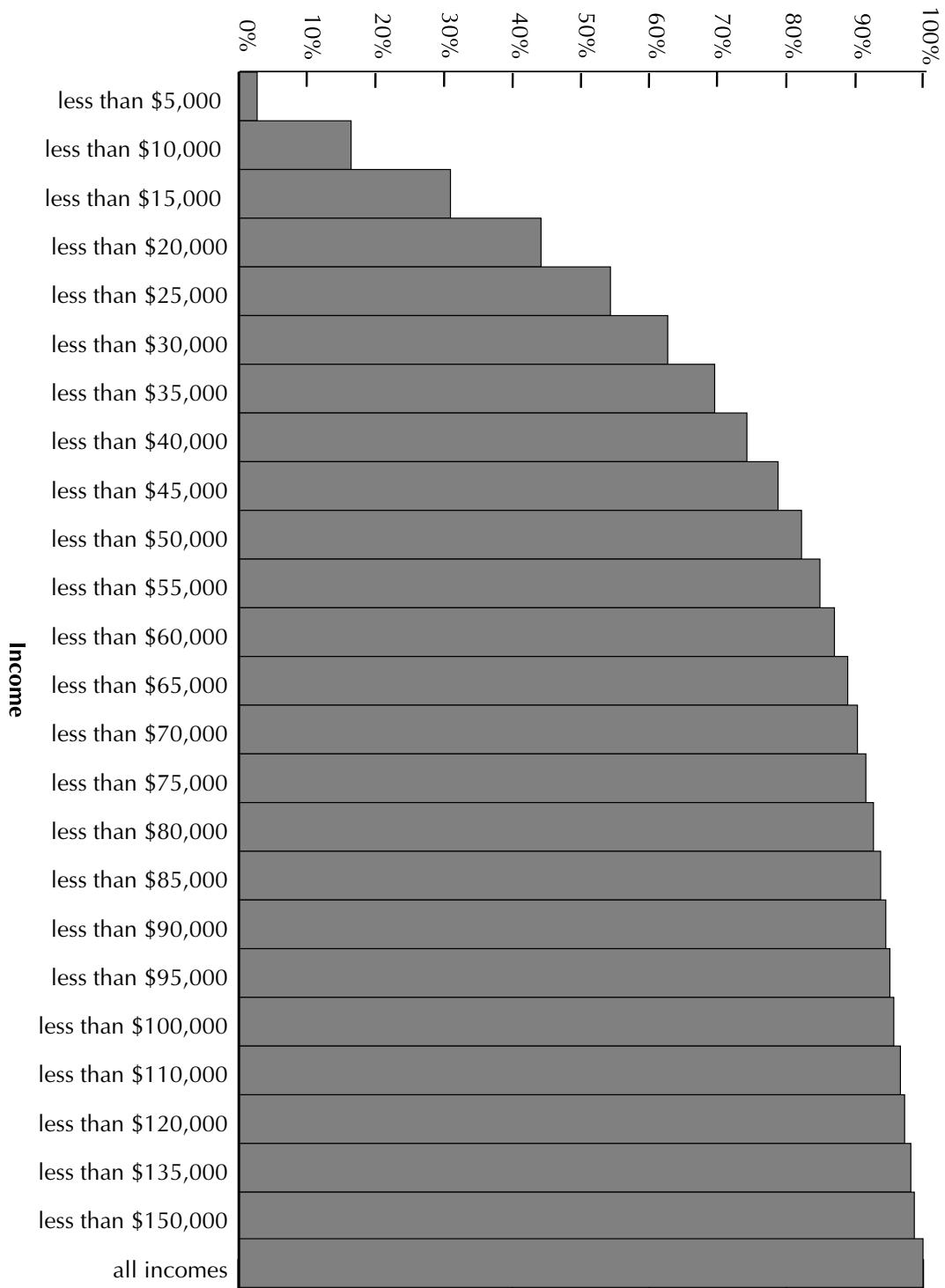


Figure 1-5
Percent of Medicare Beneficiaries With a Given Level of Income, 1998

Source: The National Academy of Social Insurance, based on data from an analysis of the 1997 Current Population Survey done by Marilyn Moon and colleagues at The Urban Institute, 1998.

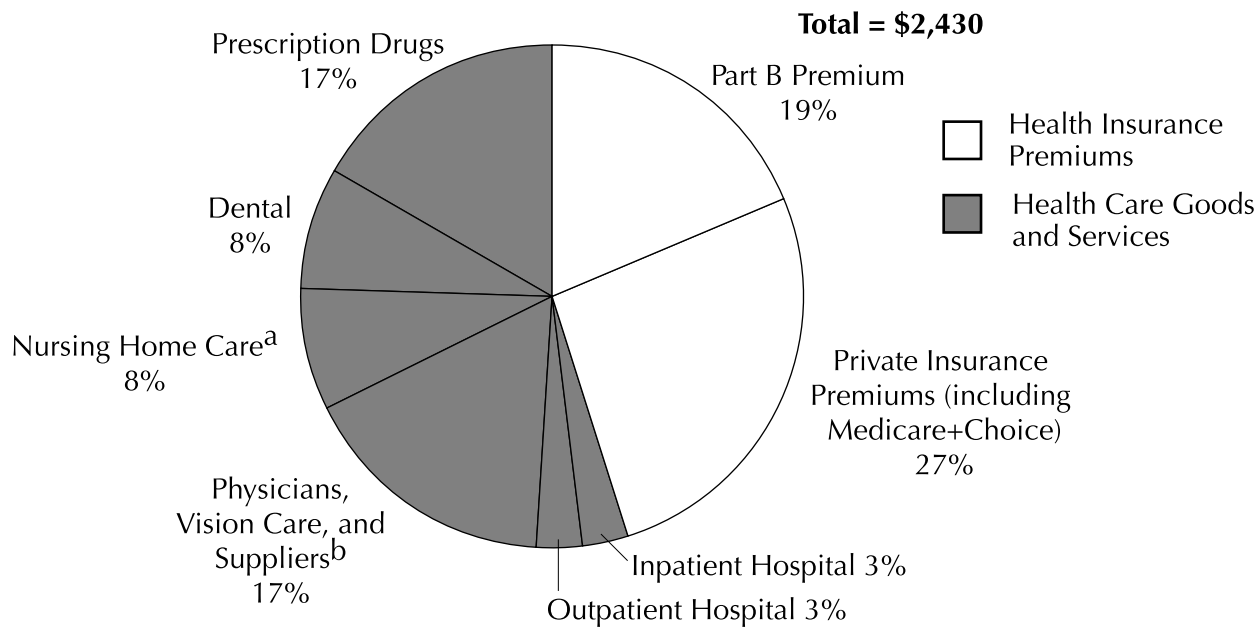
income for the average beneficiary, almost double the 10 percent of income beneficiaries spent on average in 1972-73 (Gross and Brangan, 1999; U.S. Department of Health and Human Services, 1996). Out-of-pocket expenses include premiums for Part B of Medicare, private supplemental insurance premiums (including for HMOs), deductibles and coinsurance, and the cost of health care goods and services not covered

by Medicare or other insurers. As shown in Figure 1-6, premiums represented about half (46 percent) of these out-of-pocket costs (Gross and Brangan, 1999).

Lower-income beneficiaries also devote larger portions of their incomes toward financing their own health care than do higher income beneficiaries (Figure 1-7). While poor beneficiaries¹⁷ over age 65 spend 33 percent of

Figure 1-6

Average Out-of-Pocket Spending on Health Care by Non-Institutionalized Medicare Beneficiaries Over Age 65, by Type of Service, 1999



a Includes costs for short-term nursing facility care only.

b The Medicare Benefits Model does not separate spending on physician services, supplier, and vision items. Prior studies suggest that out-of-pocket spending for physician services account for about 85 percent of the combined physician/supplier/vision spending. See Gross, et al., 1997.

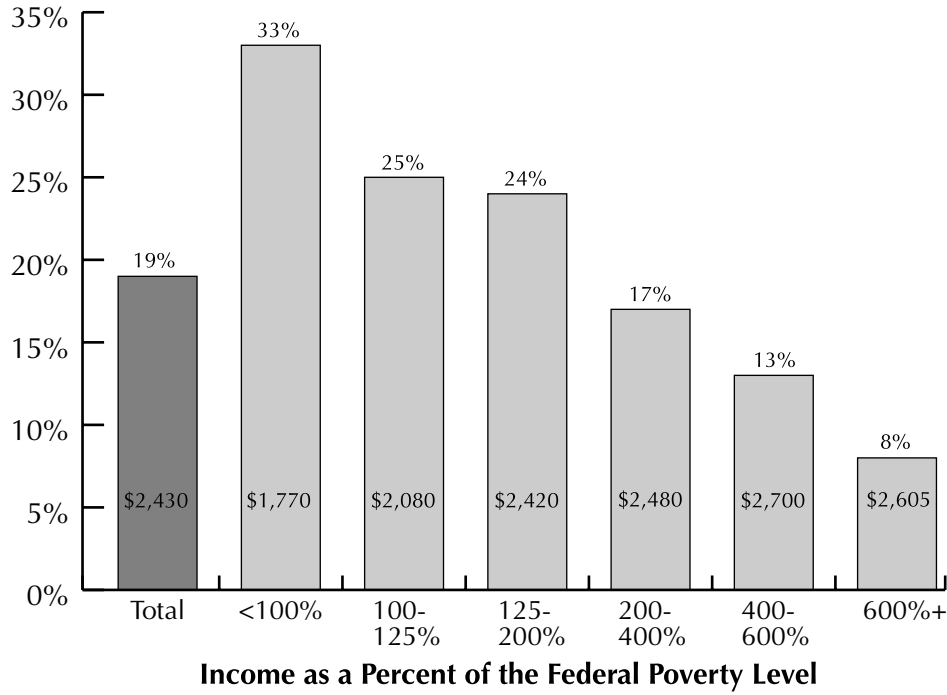
Note: Figures may not sum to 100% due to rounding.

Source: AARP Public Policy Institute (PPI) analysis using Medicare Benefits Simulation Model (Version 2.0), Gross, D.J., and Brangan, N., *Out-of-Pocket Spending on Health Care by Medicare Beneficiaries Age 65 and Older: 1999 Projections* (Washington, DC: AARP Public Policy Institute, December 1999).

17 Poor beneficiaries are those with incomes less than or equal to 100 percent of the federal poverty level. These data do not include institutionalized beneficiaries.

Figure 1-7

**Average Out-of-Pocket Spending on Health Care by Medicare Beneficiaries^a
as a Percent of Income, by Income Level, 1999**



a Non-institutionalized beneficiaries age 65 and over:

Note: The federal poverty level for persons age 65 and older in 1999 is projected to be \$8,075 for individuals and \$10,185 for couples.

Source: AARP Public Policy Institute (PPI) analysis using Medicare Benefits Simulation Model (Version 2.0), Gross, D.J., and Brangan, N., *Out-of-Pocket Spending on Health Care by Medicare Beneficiaries Age 65 and Older: 1999 Projections* (Washington, DC: AARP Public Policy Institute, December 1999).

their incomes on health care, high income beneficiaries (with incomes over 600 percent of the federal poverty level) spend only 8 percent of their incomes on such expenses. Poor beneficiaries who do not qualify for Medicaid are particularly vulnerable to paying out-of-pocket for their health care. They paid, on average, \$2,520 (or 49 percent of their incomes) out-of-pocket. By contrast, those poor beneficiaries who do qualify for Medicaid face few out-of-pocket costs. On

average, they paid \$280 (or 5 percent of their incomes) in 1999. Out-of-pocket expenses among poor Medicare beneficiaries are highest for those who purchase individual Medigap policies (\$2,903), largely reflecting the cost of premiums (Gross and Brangan, 1999).¹⁸

With a few exceptions prescription drugs are not covered by Medicare when prescribed outside of a hospital stay. Over Medicare's

18 For a discussion of sample premiums for such policies, see "Medicare: New Choices, New Worries," *Consumer Reports* (September 1998): 27-39

history, pharmaceuticals have become a more important part of beneficiaries' medical care reflecting scientific advances. In recent years, spending on prescription drugs has increased faster than any other health care good or service, and this trend is expected to continue over the next generation (Smith, et al., 1999). Like other health care services, most beneficiaries face modest out-of-pocket costs for pharmaceuticals in any given year, but a minority have very high expenses. As shown in Figure 1-8, 14 percent were projected to spend \$1000 or more on drugs, even though 51 percent had expenses of \$199 or less. Because of increases in premiums for Medigap policies that cover prescription drugs and cutbacks in the generosity of other

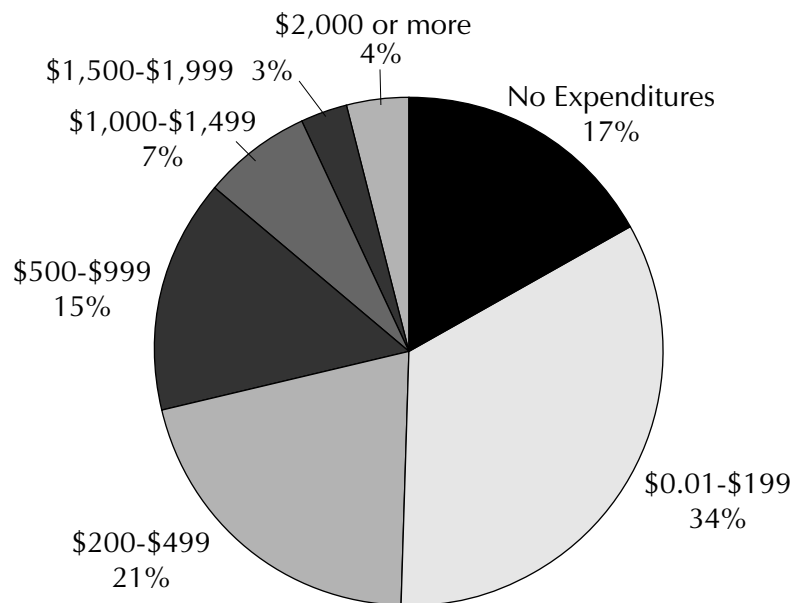
supplemental policies, out-of-pocket spending on pharmaceuticals will likely increase over time (Gluck, 1999; Gibson, et al., 1999). As discussed in Chapter 2, this has led to proposals to add an outpatient prescription drug benefit to Medicare as well as other proposals to help lower beneficiaries' out-of-pocket expenses and maintain financial protections afforded through the program.

Should We Advance Fund Medicare?

The previous section examined how Medicare allows us to spread the costs of health care across different groups of people. Another decision that society and its policy makers must make in financing Medicare is

Figure 1-8

Out-of-Pocket Spending on Outpatient Prescription Drugs by Medicare Beneficiaries, 1999



Note: Includes all non-institutionalized Medicare beneficiaries except those who enrolled in Medicare+Choice plan at any point during the calendar year. Total spending equals out-of-pocket spending by beneficiaries plus payment by insurers.

Source: National Academy of Social Insurance, 1999; Estimates by Actuarial Research Corporation based on data from the 1995 Medicare Beneficiary Survey.

the extent to which it wants to spread those costs over time — i.e. the degree to which we want to finance future Medicare expenses in advance. Currently, Medicare Part A benefits are financed from payroll taxes, surpluses accumulated in the Hospital Insurance (HI) Trust Fund from previous years, and interest earned on those surpluses. Because the Supplementary Medicare Insurance (SMI) Trust Fund (by design) never carries a significant surplus, it is financed almost entirely on a “pay-as-you-go basis.” Estimates in 2000 project that without changes, HI expenditures will exceed revenues (excluding interest) beginning in 2010 and that the HI Trust Fund will be exhausted in 2025 (Social Security and Medicare Board of Trustees, 2000). To meet Medicare’s obligations, Congress will need to change Medicare’s financing. Because advance funding is a continuum, policy makers will have to decide to what degree they want to incorporate it into future Medicare financing. A few hypothetical scenarios help explain the choices policy makers face:

- **Total Pay-As-You-Go** – Policy makers could decide to finance Medicare by raising just enough revenues to cover that year’s expenditures. This means no advance funding. The revenues each year could come in any of the forms through which Medicare receives revenues now — payroll taxes, general revenues, or beneficiary premiums — or they could come through other forms

of revenue such as excise taxes, a consumption tax, or from the federal budget surplus.¹⁹ Given demographic trends and Medicare’s projected spending, this scenario implies lower taxes in the short-run, but much higher taxes over time. No advance funding also implies that tax rates would change each year to meet revenue needs; advance funding makes taxpayers’ obligations more predictable from year-to-year. With no changes, Medicare’s spending is projected to rise from 2.33 percent of gross national product (GDP) in 2000 to 3.95 percent in 2025 and 4.80 percent in 2050 (Social Security and Medicare Board of Trustees, 2000). Medicare beneficiaries, who represented 14 percent of the population in 1995, are expected to represent 22 percent by 2030 (U.S. Congress, 1996). At the same time, for every Medicare beneficiary, the number of workers available to contribute to the program’s financing through taxes is projected to fall from 3.9 in 1999 to 2.3 in 2030 and 2.0 in 2070 (Medicare Board of Trustees, 2000). To the extent that Medicare financing relies on revenues from non-beneficiaries, no advance funding maximizes intergenerational risk sharing. With current demographics, the financing burden on the cohort that follows the Baby Boom generation would be substantially higher than it has been for their parents.²⁰

19 Chapter 3 discusses each of these forms of revenue in greater detail along with their particular benefits and drawbacks.

20 An alternative scenario that is also “total pay-as-you-go” would be for Medicare beneficiaries to finance their own health care (either individually through their own resources or as a group through premiums). The current Medicare system requires beneficiary financing through premiums that pay for 25 percent of Part B and through uncovered services (such as outpatient pharmaceuticals) and cost-sharing requirements for which beneficiaries must find their own resources. If Medicare were to shift a greater portion of its financing to beneficiaries themselves, younger cohorts would technically pay less. However, such a move reduces Medicare’s ability to

- **Partial Advance Funding** – Medicare costs will rise with time. Under this scenario, the government raises more money in the short term than it would with no advance funding in order to mitigate the financing burden in later years. While Part B of Medicare has been funded almost entirely on a pay-as-you-go basis (through beneficiary premiums and general revenues), Medicare Part A has traditionally had some advance funding. The Hospital Insurance Trust Fund, which pays Part A claims, currently takes in more money in revenues (excluding interest) each year than it has paid out. The Medicare Trustees project that it will continue to do so until 2010. The extra money is held in government securities that provide interest income to the trust fund. After 2010, expenditures will exceed new revenues and the Medicare will use interest payments and the surplus in the trust funds to finance benefit payments. With no changes, the Trustees project that the trust fund would be exhausted in 2025. One way to extend the life of the trust fund would be to raise the payroll tax rate enough to build a surplus that would pay Medicare's bills for some desired period of time.²¹

Raising taxes at any time is politically difficult, and if the money is not needed for at least a decade, advance funding may be particularly difficult. On the other hand, the prospect of higher taxes in later years that would accompany no advance funding is also not politically appealing.²² Furthermore, advance funding can affect incentives for other forms of saving and have other implications for the larger economy. For a more complete discussion of these issues, see Diamond, 1999. Policy makers would want to take into account all of these considerations in deciding whether and how to advance fund.

- **Total Advance Funding** – With complete advance funding, each generation would essentially finance its own retirement health care needs while it is still working. In theory, one could envision a Medicare program in which all of the funds necessary to pay for current beneficiaries' health care would have been raised and available in a trust fund when they begin drawing benefits. Because such a system would draw no money from general tax revenues or beneficiary premiums, the burden on taxpayers to build up an appropriate trust fund would be significant.²³

spread risk among healthy and sick and between the more and less well-off. Furthermore, there would still remain a potential burden on younger individuals who may need to help pay for their parents' health care.

- 21 Raising the payroll tax is mentioned only as one example of the many ways in which the program's financing needs might be met. Each has its own benefits and drawbacks. Chapter 3 discusses all of the options in greater details.
- 22 The political difficulties in raising new revenues has led some policy makers to focus on proposals that would use market forces or other mechanisms to realize greater efficiencies and lower Medicare's financing needs. Chapter 2 addresses such restructuring proposals in greater detail.
- 23 Chapter 3 analyzes alternative ways of raising revenues needed for Medicare through 2030. In doing so, it looks at revenue policies that assume total "pay-as-you-go" as well as advance funding. However, it is important to draw a distinction between advance funding as we examine it in Chapter 3 and the description of total advance funding discussed here. In Chapter 3, we assume that policy makers are only trying to finance the projected gap between revenues to be raised under current law and Medicare's projected spending. Because the current system of raising revenues is a mixture of advance funding and pay-as-you go, none of the options examined in Chapter 3 would create total advance funding.

Although this last scenario is probably not realistic given the difficulty in projecting Medicare’s future financing needs without substantial uncertainty (as discussed in greater detail in Chapter 2), other proposals that would combine advance funding with “individualizing” Medicare have received significant attention in recent years. Under such proposals, workers would make contributions to individual accounts during their careers.²⁴ Upon retirement, the funds would be used to purchase a private health plan, usually with a high deductible (Chollet, 1999; Feldstein, 1999; Ferrara, 1998). These proposals raise significant questions for policy makers: How would we move from the existing system in which current Medicare beneficiaries rely in large part on current workers to finance their health care to a system in which current workers finance their own retirement health care needs? What if savings are not enough to purchase insurance for all of an individual’s retirement because of greater than anticipated health care cost increases? (Or, what if no insurance company is willing to sell an adequate policy?)²⁵ What happens if low-wage workers or individuals who spend time outside the labor force do not have suf-

ficient funds to purchase adequate health insurance? How are sicker people treated when they try to buy health insurance? What happens if a health plan or insurer goes bankrupt or withdraws from the market? How would the funds be invested prior to retirement, and who makes that decision? Would the program still provide for people with permanent disabilities? The transitional costs of such a shift could be substantial.²⁶

What Else Is Important In Choosing Among Financing Options?

Thus far, we have identified several broad considerations that underlie discussions of Medicare financing — how we choose to spend money on health care in the United States, to what extent we want to employ social insurance and risk spreading in designing a health insurance program for the aged and disabled, and the extent to which we might want to advance fund some of Medicare’s future expenditures. There are other, more specific criteria we may wish to use to distinguish among particular financing options for Medicare. These include:

- **Ability to raise revenue** – To what extent does a particular option close the gap between projected Medicare expenditures and projected revenues under

24 Under some proposals, these accounts would be managed by the government. Under others, they would be privately managed accounts.

25 One feature of the current system is that risk associated with changing health care technology and its associated costs are shared between current and future beneficiaries. A system of complete advance funding of Medicare does not allow for this type of risk sharing.

26 A system of total advance funding need not rely on individual savings. To address some of the issues mentioned above, Gramm, Rettenmeir, and Saving (1998) have proposed a system of total advance funding in which 10-year cohorts pool their savings. Each year the pooled contributions are redistributed in equal amounts to the accounts of all workers in the cohort, thus mitigating the downside risk for low-wage workers. They also propose a very long transition to ease the burden of saving for one’s future health care costs while still helping to fund current Medicare benefits. Other proposals attempt to deal with some of the issues raised above in other ways. A proposal by Ferrara would establish individual “health bank accounts” with no pooling or redistribution, but with a new federally-guaranteed safety net program for those individuals whose accounts, for whatever reason, are not sufficient to purchase minimal health care coverage. A separate Academy publication analyzes these proposals in greater detail (Chollet, 1999).

current law? Over time, how does this change? Does the revenue it generates grow faster, slower, or at the same rate as the overall economy? as projected Medicare expenditures?

- **Distribution of burden** – Who are the “winners” and “losers” if a particular option is adopted? How are different types of taxpayers affected — i.e. low income taxpayers? high income taxpayers? Medicare beneficiaries? employers? other groups of taxpayers?
- **Impacts or distortions on the broader economy** – To what extent does the option reduce employment, private investment, or have other consequences that affect economic growth?
- **Administrative efficiency** – How easy would it be to implement the option and collect the new revenues? Can the mechanism make use of the Internal Revenue Service or another existing system, or would it require a new apparatus to gather the revenues and assure compliance?
- **Impacts on access to care** – Does the option increase beneficiaries’ out-of-pocket expenses in a way that makes it more difficult for them to afford needed care (or supplemental insurance)? Are sicker beneficiaries able to purchase insurance? If so, are they asked to pay more than those with fewer health needs?
- **Impacts on incentives for efficient use of health care services** – To what extent does the option affect incentives for beneficiaries (and their providers) to use health care services only when they are necessary and worth their cost?
- **Connection to Medicare as social insurance** – Part A of Medicare is financed largely by payroll taxes. Payment of those taxes by all workers is

a key determinant of eligibility for Medicare benefits. Financing greater portions of Medicare from general taxes unrelated to health or program eligibility may make the program look less like universal social insurance based on universality and contributory finance and more like welfare.

- **Effects on other programs** – Does the option directly or indirectly change the Medicaid rolls? Does it change incentives for employers to offer health insurance to their employees and retirees? Does it change the delivery of health care in other ways?
- **Other necessary changes** – What other coordinating changes in Medicare or the tax code would have to take place to implement the option?

The rest of this report examines technical questions related to financing Medicare’s future. Chapter 2 examines projected expenditures over the next three decades for the current program as well as for a number of the changes that policy makers have proposed in recent years. Chapter 3 analyzes specific options to meet those needs and returns to the questions and criteria outlined above. Changes in Medicare’s structure and financing not only affect the program’s ability to protect elderly and disabled individuals against the cost of illness, but they could also alter the program’s philosophical foundations, the health care system as a whole, and the larger economy. Although the study panel does not make recommendations about how to structure Medicare or pay for future beneficiaries’ health care, it has tried to keep in mind the fundamental issues outlined in this chapter in mind in presenting its analysis in the subsequent chapters. We hope that by laying out the implications of each option, policymakers themselves might be better able to make these choices.

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Chapter 2

Medicare's Financing Needs

The previous chapter focused on the variety of choices implicit in decisions about financing health care for Medicare beneficiaries. This chapter begins by reviewing how we finance Medicare benefits now. It then turns toward the future. How much money will be required to finance those benefits over the next 30 years? In addition to examining Medicare's projected financing needs under current law, the chapter also examines a number of proposed changes in the program's structure and benefits. Projections of Medicare costs depend on many factors, many of which are uncertain themselves. How will medical practice and technology change? What benefits will Medicare offer over the next generation? How much will they cost? How many beneficiaries will there be? How many people will be employed and able to contribute to the program? What will they earn? How will the economy function? This chapter attempts to structure this uncertainty and make some reasonable estimates of Medicare's spending over the coming few decades. In the next chapter, we use these results to consider options for meeting these needs.

HOW IS MEDICARE FINANCED?

What revenues does the program receive, and how has Medicare financing evolved over its history? At the outset in 1965, Part A of the program, funded through the HI Trust Fund and covering hospital, home health, and certain skilled nursing facilities, was financed by a payroll tax of 0.7 percent, divided equally between the employer and employee, on the first \$6,600 of income. Part B of the pro-

gram, funded through the SMI Trust Fund and covering physician and surgeon services, some other outpatient services, and related supplies, was financed half from general revenues and half from premiums paid by beneficiaries.

In 1972, amendments to the 1965 act expanded Medicare eligibility to persons who have received Social Security Disability Insurance (SSDI) for two years and to people with end-stage renal disease (P.L. 92-603). Amendments in 1982 extended coverage federal civilian workers (P.L. 92-603) and, in 1986, state and local government employees (P.L. 99-272) to those who pay the HI payroll tax and who receive benefits when turning 65 or becoming disabled. Over time, Congress added new benefits, such as hospice care under Part A and various screening tests, immunizations, and diabetes management education under Part B. In 1997, Congress shifted much of the financing of home health from Part A to Part B.

Many of these changes increased Medicare's financing needs. Over time, Congress raised both the payroll tax and the level of earnings subject to that tax (Table 2-1). Since 1986, the tax rate has been 2.9 percent (still divided equally between employer and employee). Since 1994, the tax has been calculated on all earnings (rather than on only the first \$72,600 of income as is the case for the Social Security payroll tax).

The financing of Part B has also evolved over time. In 1972, Congress adopted a provision that limited the increase in Part B premiums to no more than the cost-of-living increases

Table 2-1

Medicare Hospital Insurance Payroll Tax Rate and Earnings Base, 1966-2000

Year	Tax Rate in percent	Earnings Subject to Tax
1966	0.7	\$6,600
1967	1.0	6,600
1968	1.2	7,800
1969	1.2	7,800
1970	1.2	7,800
1971	1.2	7,800
1972	1.2	9,000
1973	2.0	10,800
1974	1.8	13,200
1975	1.8	14,100
1976	1.8	15,300
1977	1.8	16,500
1978	2.0	17,700
1979	2.1	22,900
1980	2.1	25,900
1981	2.6	29,700
1982	2.6	32,400
1983	2.6	35,700
1984	2.6	37,800
1985	2.7	39,600
1986	2.9	42,000
1987	2.9	43,800
1988	2.9	45,000
1989	2.9	48,000
1990	2.9	51,300
1991	2.9	125,000
1992	2.9	130,200
1993	2.9	135,000
1994	2.9	unlimited
1995	2.9	unlimited
1996	2.9	unlimited
1997	2.9	unlimited
1998	2.9	unlimited
1999	2.9	unlimited
2000 & after	2.9	unlimited

Source: National Academy of Social Insurance, 2000. Data drawn from Myers, R.J., *Summary of the Provisions of the Old-Age, Survivors, and Disability Insurance System, the Hospital Insurance System, and the Supplementary Medical Insurance System*. (Washington, DC: January 1999).

in Social Security benefits. Because Medicare usually deducts Part B premiums from monthly Social Security checks, this provision assured beneficiaries that there would be no net decrease in these checks from year to year. Because Part B program costs grew faster than the Social Security cost-of-living adjustments, by the early 1980s the Part B premium had declined from half to less than 25 percent of program costs. Beginning in 1984, Congress set the premium at 25 percent of the costs of an elderly beneficiary, a provision it made permanent in 1997 (P.L. 105-33).

The only other major change in Medicare financing came in 1988 when Congress passed the Medicare Catastrophic Coverage Act (P.L. 100-360). Among the new benefits of this legislation was a limit on beneficiaries' Part B out-of-pocket costs and an outpatient prescription drug benefit.¹ The legislation financed the new benefits through an increase in the Part B premium for all beneficiaries and through a new income-related premium on individuals eligible for Part A. The additional Part B premium would have been \$23.28 per year in 1991, rising to \$108 per year in 1994. The income-related premium in 1991 would have been \$10.36 per \$150 of income tax liability up to a maximum premium of \$800 per year. By 1994, this would have risen to \$13.20 per \$150 of income tax liability up to a maximum of \$1,200 per year (U.S. Congress, 1989). Due in part to the unpopularity of the new premiums among beneficiaries, Congress repealed

the legislation in 1989 (P.L. 101-234) (Moon, 1993).

Medicare Revenue Sources Over Time

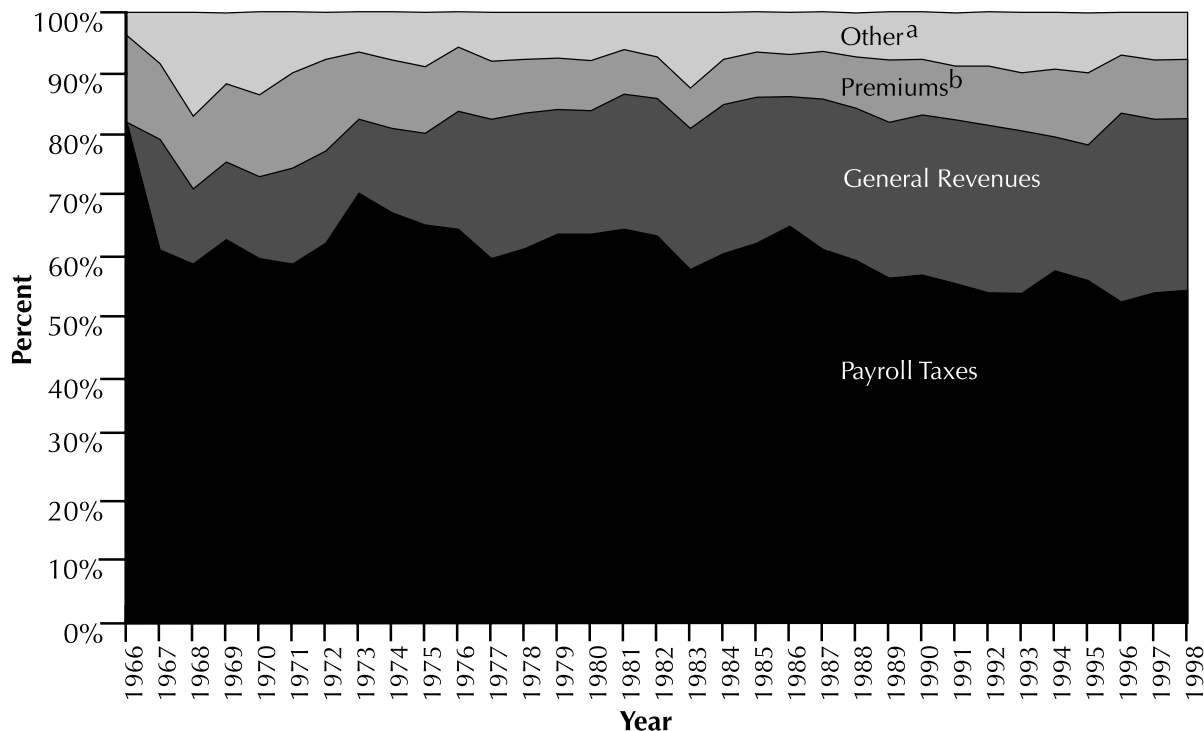
What has been the impact of Medicare financing laws on the source of funds available to the program? How much has come from beneficiaries, from current workers through the payroll tax, and from general revenues? How has this changed over time? Figure 2-1 shows the relative shares of payroll taxes, general revenues, premiums from beneficiaries, and other sources as income into the combined Medicare trust funds. Over the course of the program's history, the two sources of income that come largely from non-beneficiaries, payroll taxes and general revenues, have increased somewhat when viewed together (72 percent in 1970 versus 83 percent in 1998). However, when viewed separately, the share from payroll taxes has declined while general revenues increased. Beneficiaries' share of revenues from premiums fell by almost half during the first two decades to about 7 percent in 1985.

In recent years, the beneficiaries' share has climbed again and represented almost 10 percent of Medicare revenues in 1998. Although beneficiaries premiums have not yet reached the level they were when the program began (14 percent of Medicare revenues), they will continue to climb as the shift of some home health benefits from HI to SMI is fully implemented and if, as expected, health care continues to be provided outside of hospital and other institutional settings. Furthermore, beneficiaries' total

¹ The prescription drug benefit would have a set a deductible at a level such that the 16.8 percent of Medicare beneficiaries with the highest prescription drug expenditures would have had their drug costs above that deductible paid by Medicare. The catastrophic benefit on Part B expenses would have similarly set a deductible such that 7 percent of beneficiaries would have benefited.

Figure 2-1

Income of Medicare Hospital Insurance (HI) and Supplementary Medical Insurance (SMI) Trust Funds by Source, Calendar Years 1966-1998



a "Other" includes income from taxation of Social Security benefits, interest, railroad retirement account transfers, reimbursement for uninsured persons, payments for military wage credits, recoveries of amounts reimbursed from the trust fund which are not obligations of the trust fund, amounts from the fraud and abuse control system, and a small amount of miscellaneous income.

b "Premiums" include premiums from voluntary enrollees in HI and all enrollees in SMI.

Source: National Academy of Social Insurance, 1999; data based on 1999 Trustees Report of HI and SMI Trust Funds.

contribution to program financing has gone up since the mid-1980s (per Figure 2-1) because Part B's share of the total Medicare bill has also grown steadily over this period.

PROJECTIONS OF THE CURRENT SYSTEM

The money to pay for Medicare services is held separate from other governmental revenues in two "trust funds" (see Box 2-1).

The Hospital Insurance (HI) Trust Fund pays Part A benefits. The Supplementary Medical Insurance (SMI) Trust Fund pays Part B benefits. A Board of Trustees consisting of three cabinet officers, the Administrator of Social Security, and two public trustees appointed from different political parties oversee these funds as well as those that pay Social Security benefits. Each year, the trustees report on the financial status of the program. Because these reports

BOX 2-1: FEDERAL TRUST FUNDS

The HI (Hospital Insurance, or Medicare Part A) and SMI (Supplementary Medical Insurance, or Medicare Part B) Trust Funds, established by the 1965 legislation that created the Medicare program, are among 110 federal trust fund accounts. Trust funds are typically set up for programs to which the government has a long-term commitment. A fund of the Treasury Department becomes a trust fund after being authorized by law, then designated as such by the Office of Management and Budget. This concept of “trust” differs from that used in private accounting (in which one party, the trustee, holds a second party’s funds in a fiduciary capacity) (Koitz and Winters, 1998).¹

Although federal trust funds are often mistakenly perceived as reservoirs of financial assets, they are, in fact, “record-keeping devices that account for the spending authority available for certain programs” (Koitz and Winters, 1998). They track income to and disbursements for the fund’s designated purpose. They also earn interest through investments of their balances in federal securities. Congress invests trust funds with the obligation to pay automatically for the programs they finance. This promise to pay is parallel to the obligation that characterizes private bonds.

When depositing money to a trust fund account, the Treasury Department “posts an interest-bearing, non-marketable federal security (a bill, note, or bond) to the account.” In making expenditures, “the Treasury Department issues checks and reduces the amount of securities posted to the trust fund account” (Koitz and Winters, 1998). For the HI and SMI Trust Funds, as well as for the two Social Security trust funds (Old Age and Survivors Insurance and Disability Insurance), benefit payments represent almost all (over 98 percent in 1999) of these funds’ expenditures. Administrative expenses, which account for the remaining expenditures from these funds, pay federal salaries and related expenses in administering the trust funds themselves as well as support for fiscal intermediaries (generally insurance companies) that process claims on behalf of Medicare.

¹ As shown in Table 1, at the beginning of FY 2000, the HI Trust Fund Balance was \$138.4 billion.

In addition to the Medicare and Social Security trust funds, other major federal trust funds include unemployment compensation, military and Federal civilian employee retirement, foreign military sales and highway programs. Most of these trust funds receive at least some of their income from the public in the form of excise taxes, user fees or premiums (e.g., gasoline tax and SMI beneficiary premiums.) Income may also come from interest earned on the trust funds’ investments, other federal revenues, and receipts from other trust fund accounts. At the start of FY 2000, the 110 federal trust funds had a combined balance of \$1.876 trillion (Executive Office of the President, 2000) (See Table 1).

HI Trust Fund

In January 2000, the HI Trust Fund’s assets were \$141.4 billion, an increase of \$21.0 billion over 1999 (Medicare Trustees, 2000). With projected income during FY 2000 of \$158.7 billion and expected disbursements of \$136.4 billion, the balance at year’s end is expected to be \$163.7 billion. The major source of financing for the HI Trust Fund is a payroll tax of 2.9 percent, paid half, respectively, by employers and employees. A small amount of revenue from taxation of upper-income beneficiaries’ Social Security income is also deposited into the HI Trust Fund.

Over the long-term, the HI Trust Fund will require changes to avoid running out of money. Since the HI Trust Fund is primarily funded through a tax on workers, as the Baby Boom generation reaches age 65, there will be fewer workers per HI beneficiary. More significantly, health care costs per person will continue to rise faster than the overall economy or prices for other goods and services. Without changes to the program, the HI trust fund assets are expected to be depleted in the year 2025 (Medicare Trustees, 2000).

SMI Trust Fund

In January 2000, the SMI Trust Fund assets were \$44.8 billion, a decrease of \$1.4 billion from 1999. Income into the SMI Trust Fund includes premiums from beneficiaries (\$45.50 per month in 1999), which are calculated annually to be 25 percent of the projected Part B costs. The remainder of SMI income includes interest and an amount from general federal revenues sufficient to pay Part B costs for that year (Medicare Trustees, 1999).

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Unlike the HI Fund, the SMI Fund is not at risk of bankruptcy, because financing is set each year to meet the next year's projected costs. The issue instead, is growth of expenditures. Though expenditures declined somewhat in 1999, eight percent annual increases are expected for the following ten years (Medicare Trustees, 2000). This rise in SMI expenditures will increase demands on the federal budget and the proportion of beneficiaries' income spent on SMI premiums and coinsurance.

Major Trust Funds and Balances

Trust Fund	Balance as of beginning of FY 2000 (in billions of dollars)
Federal Old-Age, Survivors and Disability Insurance Trust Funds	\$855.0
Federal Civilian Employees Retirement Funds	491.9
Military Retirement Fund	151.9
Federal Hospital Insurance (HI) Trust Fund	138.4
Unemployment Trust Fund	77.7
Federal Supplementary Medical Insurance (SMI) Trust Fund	45.6
Highway Trust Fund	29.0
Railroad Retirement Trust Funds	14.3
Veterans Life Insurance Trust Funds	13.7
Airport and Airway Trust Fund	12.4
Federal Employees Health Benefits Fund	5.8
Foreign Military Sales Trust Fund	5.5
Other Trust Funds	34.8
Total	\$1,876.0

Source: Executive Office of the President, Office of Management and Budget, *Analytical Perspectives, Budget of the United States Government, Fiscal Year 2001*, (Washington, DC: U.S. Government Printing Office, 2000).

direct public attention to Medicare's long-term financing needs and alternative approaches to restructuring the program, both the projections and the assumptions underlying them receive scrutiny (Box 2-2). In 2000, the trustees' best estimate was that without changes the HI Trust Fund will run out of money in 2025. The SMI program is projected to continue to grow more quickly than HI, although technically it cannot run out of money since it draws funds as needed from beneficiary premiums and general tax revenues.

Focusing only on the health of the trust funds does not give an overall picture of the Medicare program. Public attention often focuses only on the year in which the HI fund is depleted and the size of projected deficits.² This is a particularly limited view given that SMI expenditures are currently growing faster than HI and could overtake HI at some point in the coming decades. An alternative measure of Medicare's future costs is the share of gross domestic product (GDP) that the program would absorb. Spending as a share of GDP is a useful measure because it shows how much of society's resources are devoted to the Medicare program. This measure shows the combined costs of Parts A and B of the program.

A growing economy can absorb at least some higher spending on Medicare even if the same share of GDP is devoted to the program. This is because the Medicare trustees and other experts assume that GDP is to grow at about 2.1 percent a year in real terms over time (Medicare Board of Trustees, 2000). Yet, this growth in GDP is

2 Such deficits are usually expressed as a percentage of the nation's total payroll since that is the major source of HI revenue. See, for example, the annual reports of the Trustees of the Federal Hospital Insurance Trust Fund.

**BOX 2-2:
THE ANNUAL MEDICARE
TRUSTEES' REPORTS**

Each spring, the Social Security and Medicare Boards of Trustees — composed of the Secretaries of the Treasury, Labor, and Health and Human Services, as well as the Commissioner of Social Security and two public members — issue a statutorily mandated report on the financial health of Social Security and Medicare. These reports address the current status of the Old Age and Survivors Insurance (OASI) program, the Disability Insurance (DI) program, the Hospital Insurance (HI) program, the Supplementary Medical Insurance (SMI) program, as well as their projected financial condition over a 10-year (short-term) and 75-year (long-term) period.

In recent years, politicians and the press have begun to talk more about the reports' release, thus helping focus the public's attention on the financial outlook for Medicare and Social Security. The March, 2000 report projected that without changes, the HI Trust Fund will run out of money in 2025, an extension of eight years over the 1999 report due to a strong economy and a decrease in actual Medicare spending in 1999. Although the SMI trust fund cannot be depleted, the 2000 report showed that SMI spending is currently growing faster than HI. As shown in the table below, between 2000 and 2025, it is projected to more than double from 0.94 percent of gross domestic product (GDP) to 1.95 percent (Medicare Board of Trustees, 2000).

	2000	2025	2050	2074	% Increase 2000 to 2073
HI	1.39	2.00	2.63	2.91	109
SMI	0.94	1.95	2.17	2.36	151

As the 1999 Trustees' report states, "Projections are expert 'guesses' about the future and not predictions of what will actually happen." They depend on numerous assumptions about things

that influence both revenues into and expenditures from the trust funds. But because the trustees' reports have become a barometer of Medicare's financial health, the assumptions underlying them have become significant in themselves to Medicare policy discussion. If incorrect assumptions lead to estimates of Medicare costs that are too low or estimates of income that are too high, the trustees' projections may understate the need or urgency for policy changes to bolster the program's financial health. If incorrect assumptions lead to estimates of Medicare costs that are too high or estimates of income that are too low, the projections may overstate the need for reform.

The projections for Medicare and Social Security share some assumptions that affect projections about revenues into the program and numbers of future beneficiaries (Chollet, 1998):

- Demographic assumptions – mortality, fertility, marriage and divorce, and net immigration
- Economic assumptions – real wage growth, interest rates and inflation, and labor force participation and unemployment rates

Revenue estimates for Medicare's two parts differ, as the HI program (Part A of Medicare) is funded primarily through a payroll tax, paid by both employees and employers, while the SMI program (Part B of Medicare) is funded through beneficiary premiums, interest, and general federal revenues. The programs' estimated expenditures are largely based on the number of Medicare beneficiaries enrolled in the programs, as well as the cost of their health care services.

- In projecting health care costs, assumptions about the following are specific to HI program expenditures:
- Inpatient utilization and HI payments per admission;
- Assumptions related to other HI payments – payments for skilled nursing facilities (SNFs), home health (in transition to SMI under 1997 legislation), hospice care and payments to Medicare+Choice plans.

Assumptions that specifically affect SMI expenditures address:

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- Physician payments, as influenced by physician fee updates and changes in service intensity;
- Institutional and other service payments (e.g., hospital outpatient services, home health agency services, group practice prepayments and independent laboratory services)
- Rates at which eligible elderly and disabled persons enroll in SMI

The trustees periodically review these assumptions. In addition, the trustees recognize the inherent uncertainty in the assumptions by making three sets of projections to reflect the possibility of low costs to the program, high costs, and intermediate costs that represent the trustees' "best guess."

Nevertheless, the trustees' reports have been criticized in recent years, in particular for some of their economic and demographic assumptions (Chollet, 1998). Among those who would alter the assumptions, most believe that the program's financial outlook is more positive than projected; their changes would improve the forecast. Such arguments include:

- Assumptions should give greater weight to more recent experience, discounting distant past trends. Former Labor Secretary Robert Reich, for example, stated that projections of real wage growth should reflect a continuation of the current economy's high productivity growth, rather than the much lower productivity growth of past years (Reich, 1998).
- Economic assumptions should more closely mirror rates assumed in private-sector projections of the economy.

Others believe that the outlook is more dismal than projected. They propose altering the assumptions to lower financial projections, arguing that:

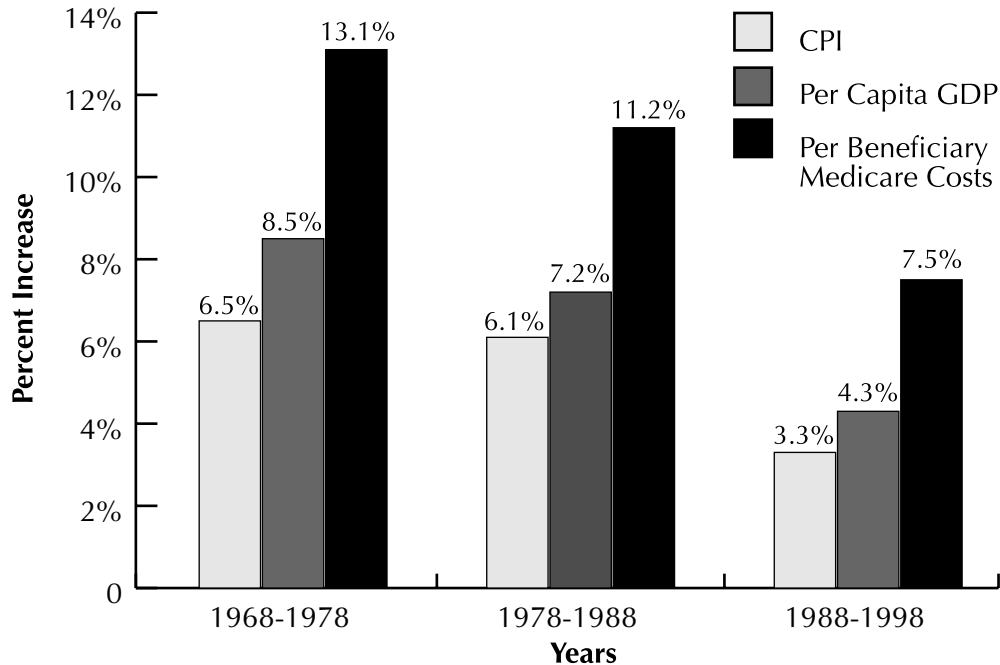
- Assumptions should reflect historical trends more closely and consider historical trends of other developed countries. For example, fertility rates based on other countries' experience, rather than recent national experience, would assume a lower fertility rate.

- HCFA's cost assumptions do not sufficiently reflect gains in life expectancy that might occur with advances in health care technology.
- Long-range assumptions about per capita growth in health care costs have no basis in history. They believe it is incorrect for HCFA to assume that Medicare costs will ultimately decline to match the projected growth in national per capita income.

The Trustees review and, when appropriate, update their assumptions every year. Changes adopted in the 1998 report with the greatest potential impact on the projections were a lower assumption of future inflation and a higher real interest rate (Social Security and Medicare Board of Trustees, 1998). Periodic commissions also review the assumptions and can recommend changes. In January 1999, the independent governmental Social Security Advisory Board convened a technical panel to review the assumptions shared by Social Security and Medicare projections (the first since 1995) (Social Security Advisory Board, 1999). The panel concluded that the trustees' reports underestimate the intermediate and long-term Social Security and Medicare deficit. It recommended that the upcoming Trustees' reports increase life expectancy dramatically and real wage differential projections and decrease the real interest rate on government securities. The panel also suggested new methodologies and models be used, and that the format of the report be simplified and made more user-friendly for policy makers and the public. The 2000 Medicare reports do incorporate substantial changes, although not as large as those suggested by the panel. For 2000, the Trustees included an alternative modeling technique but incorporated more modest changes in economic and demographic assumptions than those recommended by the panel. Specifically, the Trustees lowered their assumed mortality rates (thus increasing life expectancy and Medicare's projected costs) while fertility and economic growth assumptions were modified in ways that improve Medicare's financial outlook.

Figure 2-2

Average Annual Percent Increase in the Consumer Price Index (CPI), Per Capita Gross Domestic Product (GDP), and Per Beneficiary Medicare Costs



Source: National Academy of Social Insurance, 1999; data provided by HCFA (Office of the Actuary), the Department of Commerce (Bureau of Economic Analysis), the Department of Labor (Bureau of Labor Statistics), and the Census Bureau.

not enough to absorb both growth in the number of beneficiaries and *per capita* costs of care that rise faster than the general Consumer Price Index (CPI). The number of Medicare beneficiaries has grown at an average of 1.6 percent per year in the 1990s, and that growth will increase as the Baby Boom generation retires starting in 2010. Between 2015 and 2025, Medicare enrollment is projected to grow at an average of 2.7 percent per year.³ Furthermore, Medicare spending (like all health care spending) has gone up on average in excess of the CPI (figure 2-2).

1998 Versus 2000 Projections

In 1998, the Medicare Trustees projected that Medicare spending would reach 5.85 percent of GDP by 2030, up from its 1998 level of 2.65 percent. Using updated information in 2000, the Trustees projected that Medicare spending would only reach 4.36 percent of GDP in 2030 (Table 2-1) (Medicare Board of Trustees, 2000). This considerable drop from 5.85 percent illustrates the sensitivity of the Trustees' projections to their underlying assumptions. This 25 percent reduction within a mere two years reflects both how much an improved econo-

3 Historical and projected Medicare enrollment data provided by the HCFA Office of the Actuary, March 30, 1999. Calculated increases are average annual compound growth rates.

my, cuts in reimbursement rates (through the Balanced Budget Act of 1997), efforts to curb waste, fraud, and abuse, and slowing overall health care spending can improve the outlook. It also shows that uncertainty of such estimates over time.

Because the study panel commissioned most of its analysis for this chapter when only the 1998 estimates were available, they are the basis for the panel's assessment of Medicare's future financing needs. Despite the significant improvement in Medicare's financial outlook that occurred between the Trustees' 1998 and 2000 reports, however, the analysis presented in this chapter is still useful for policy makers for the following reasons:

- The orders of magnitude of most changes in spending on the program would move in a consistent fashion between the two sets of estimates. The results give a sense of the relative impacts that different changes in the program would have its projected financing needs.
- Furthermore, the improvement over the last two years means that some of the slowdown in spending growth that might be obtained from some of the spending reform proposals examined in this chapter is now implicitly incorporated into the baseline. Savings from enacting such reforms will therefore be of a smaller order of magnitude than in the past.
- Third, the fact that Medicare's financial outlook can improve so dramatically so fast in one direction means that at some point in the coming decades, it could worsen just as quickly.

- And finally, even with the improvement, the current system will still be in need of new revenues (by 2025 in the case of HI). Medicare's share of GDP is still projected to rise 87 percent between 2000 and 2030 from 2.33 percent to 4.36 percent of GDP. This occurs because the program will go from covering one in every eight Americans to one in every four and health care costs are projected to rise.

Taxpayer Burden

Another useful way to talk about Medicare's resource consumption is to look at the share of this spending that taxpayers must bear. This is a measure of Part A and B Medicare spending net of the Part B premium paid by beneficiaries, and thus it captures the costs of the program that would come from taxpayers in the form of payroll taxes plus general revenue financing. Using the 1998 estimates, the taxpayer share would be about 5.09 percent of GDP in 2030 (compared to 2.41 percent in 1998).⁴ This approach is a valuable way to examine proposals that include, for example, raising the Part B premium under Medicare. If the taxpayer share of GDP rises over time, new revenue sources will be needed. Table 2-2 summarizes these projections of Medicare spending assuming no changes in the program's basic structure or benefits using both the 1998 Trustees' estimates as well as their 2000 numbers. Later in this chapter we return to this concept of the taxpayers' contribution towards Medicare.

Projections about future costs also need to take into consideration what will happen to costs that beneficiaries will bear. By 2025, for

4 The more recent 2000 estimates project that the taxpayer share would be 3.83 percent in 2030 (Medicare Trustees, 2000). This is significantly lower than the 1998 estimates for 2030, but it still represents a substantial increase when compared to the 2.1 percent of GDP supplied by taxpayers in 2000.

Table 2-2

1998 and 2000 Projections of Medicare Financing Needs Under Current Law

	<u>Total Medicare Spending as a Percent of GDP</u>	<u>Taxpayer Contribution to Medicare as a Percent of GDP</u>
Current law, 1998 spending	2.65	2.41
Current law, 1998 projection of spending in 2030	5.85	5.09
Current law, 2000 spending	2.33	2.10
Current law, 2000 projection of spending in 2030	4.36	3.83

Source: National Academy of Social Insurance, 2000; data from the 1998 and 2000 *Annual Reports of the Trustees of the Federal Hospital Insurance and Supplementary Medical Insurance Trust Funds*.

example, out-of-pocket health care spending could average nearly 30 percent of the income of a typical elderly beneficiary if those costs rise in tandem with Medicare’s projected cost increases (Moon, 1999).⁵

THE FINANCING NEEDS OF A RESTRUCTURED PROGRAM

Although projected shortfalls in revenues are a major impetus for discussing potential changes in Medicare, a number of other broad changes have also been proposed in recent years. 55 specific objectives vary, but in general the changes are justified as ways of “modernizing” a program whose basic structure has stayed the same for over 30 years, even in the face of significant changes in the practice of medicine. Some are means of limiting the government’s contribution to Medicare and would decrease the program’s costs. Other proposals would expand Medicare’s benefit package to address the inadequacies of the services that the program currently covers. And still others would make changes in Medicare (e.g. rationalizing cost-

sharing) that do not necessarily significantly alter the estimates of costs under current law.

Because each of these changes would likely alter the course of projected revenues of Medicare in some way, it is useful to sketch out the fiscal implications of each type of change. It is not known which of these changes, if any, will ultimately be incorporated into Medicare, or when such changes may take place. Furthermore, as with the Trustees’ projections, any estimates of cost increases or cost savings associated with reforms carry substantial uncertainty. Nonetheless, understanding the direction and relative magnitude of these changes in costs helps structure the discussion about how to pay for Medicare, whatever other reforms are ultimately adopted. This section considers how several of the proposals to alter Medicare might affect the program’s cost projections through 2030. Although the potential reforms discussed here do not represent the universe of such reforms, they do give a good sense of how the types of pro-

5 This would represent a 50 percent increase over the 19 percent of income spent by the average beneficiary in 1998. Also see Fuchs, 1999.

posals currently receiving policy makers' attention would affect program financing.

The particular reforms discussed here fall into three categories:

- (1) Proposals that designed to limit the growth in Medicare expenditures;
- (2) Proposals that would increase Medicare's benefits;
- (3) Proposals that would alter Medicare's current cost-sharing rules.

One major proposal put forth by Senator Phil Gramm and Professors Tom Saving and Andrew Rettenmeir of Texas A and M University is not discussed here. The core of their idea, already described in Chapter 1, is to transform Medicare so that it is completely advance funded. Their proposal says little about the benefits that Medicare would provide or how they would be delivered. It focuses mainly on how the program would be financed — in particular, on the timing of that financing. As such, it does not necessarily preclude some of the potential changes in Medicare's structure that are discussed in this chapter.⁶

Options That Reduce Financing Needs

Reducing the amount of money Medicare needs could be accomplished in four ways:

- (1) limiting payments to providers, (2) delivering Medicare services more efficiently, (3) decoupling the taxpayer's contribution to Medicare from the cost of providing those services, or (4) limiting eligibility or benefits.

Of these possibilities, the first has been the traditional means of constraining Medicare's costs, but the second is also receiving serious consideration at the moment. However, all four have been a part of policy discussions in the last decade. For illustrative purposes, this section also considers how raising the age of eligibility or limiting the government's contribution to each beneficiary's health care to a given dollar amount would affect Medicare's financing needs. However, this report does not undertake a full analysis of these proposals and their potential implications.

Breaux-Thomas and Breaux-Frist Proposals

In early 1999, Senator John Breaux (D-LA) and Congressman Bill Thomas (R-CA), chairmen of the Bipartisan Commission on the Future of Medicare, proposed adopting a "premium support" model for Medicare. In November of the same year, Senator Breaux and Senator Bill Frist (R-TN), expanded on this proposal in S. 106-1895. In spring of 2000, Breaux and Frist revised their proposed legislation in S. 106-2807 (referred to as Breaux-Frist 2000). Under their system, beneficiaries could choose to receive their Medicare benefits from private or government-run health plans in their local area. Plans would offer current Medicare benefits as well as a "high option" package that included outpatient prescription drugs and an out-of-pocket spending cap.⁷ Medicare would subsidize the premiums according to a formula based on the national average premium for the standard package. For low income beneficiaries (up to 135 percent of poverty), Medicare and Medicaid would pay all of their

6 Although Chapter 3 also does not consider the Gramm-Saving-Rettenmeir proposal in any detail, it does examine the dynamic of "advance funding" versus "pay-as-you-go," which is at the heart of their proposal.

7 In Breaux-Frist 2000, prescription drug coverage would become a separate, optional, private policy subsidized by the federal government.

premiums for the high option plan. The government would also absorb at least some of the cost of a drug benefit for all beneficiaries who choose the high option. Box 2-3 lays out the key provisions of the plan.

In designing this plan, its architects sought to provide an incentive for beneficiaries to enroll in more efficient, less costly health plans by reducing the premiums beneficiaries would pay for plans with costs below the national average and increasing them for plans above the average. Beneficiaries would face incentives to choose less costly plans. Further, the premium formula provides an incentive for plans either to compete on the basis of price and/or to attract enrollees who are healthier and less costly than average. To guard against the latter possibility, the premiums that plans receive from the government would be adjusted to reflect the relative risk of their enrollees actually using Medicare services. Proponents of this system argue that in seeking to cut costs to attract enrollees, health plans will deliver Medicare services more efficiently than under the current system and lead to lower spending. Others look to the experience of recent withdrawals from the Medicare+Choice program and the importance of reimbursement levels in the success of the program. The amount that the government provides to the health plans with whom it contracts could affect the quality of care provided to beneficiaries, and the health plans' willingness to participate at all.

To date, the HCFR Office of the Actuary has offered limited analysis of some parts of the Breaux-Frist plan, but has not yet provided systematic estimates of its impact on future

Medicare expenditures and revenues. In response to a Congressional request, they note that a by-product of moving to the Breaux-Frist premium support system will be higher premiums for beneficiaries who remain in a government-run fee-for-service system than would be the case under current law. They estimate the total beneficiary premium under the Breaux-Frist plan in 2003 would be 47 percent higher than would be the Part B premium under current law in that year. In part this reflects some expectation that risk adjustment will not work perfectly and that the average cost for enrollees in private plans will be lower than that in fee-for-service. In addition, the proposal would require that beneficiaries' premiums be set at 12 percent of the national per capita Medicare cost. Because the current SMI premium is estimated to 9.8 percent of costs in 2003, the 12 percent rule will raise beneficiaries' costs.⁸ If Breaux-Frist were to draw more beneficiaries from fee-for-service into HMOs or other capitated health plans, premiums for the government-run plan would increase further since private plans would be weighted more heavily in calculating average cost. The analysis also points out that the high option plans may not be sustainable. Because they are likely to attract sicker and more costly beneficiaries, their premiums will rise over time. Each premium increase will lead the healthiest beneficiaries remaining in the high option to disenroll (Foster, 2000).

Although no estimates of how Breaux-Frist might ultimately affect Medicare expenditures were available to the study panel at the time it did its analysis, the staff of the Bipartisan National Commission had made

8 When the Breaux-Thomas proposals was first developed for the National Bipartisan Medicare Commission, the Part B premium was estimated to be 12 percent of total Medicare costs in 2003.

BOX 2-3: THE BREAUX-THOMAS AND BREAUX-FRIST PROPOSALS, KEY PROVISIONS

The final (March 16, 1999) plan put before the Bipartisan Commission for a vote proposed a government-chartered national board to change Medicare into a system in which privately-run health plans and the government-run FFS plan would compete for Medicare enrollees on the basis of costs, benefits offered, and quality of service. This proposal, referred to as Breaux-Thomas for the two chairmen of the Commission, received a majority of commissioners' votes (11 out of 17), but was one vote short of the minimum necessary to satisfy the commission's requirements to be an official recommendation. Among the proposal's key features were the following:

1. **A Premium Support System.**¹ All plans — including the federal FFS plan — would be required to provide the current Medicare benefits package, as well as a high-option package that included an outpatient prescription drug benefit (to be defined) and an out-of-pocket spending cap. Plans would be able to offer some variations from the required benefits package, but only with the approval of the oversight board. Beneficiary monthly payments would depend on the premium of the plan selected. Beneficiaries would be expected to pay 12 percent of the total cost of standard option plans that charged premiums equal to the national weighted (by enrollment) average premium. For plans with premiums at or less than 85 percent of the average plan price, beneficiaries would pay no premium; for plans with prices above the weighted national price, premiums would include all costs above the national weighted average, in addition to 12 percent of the average premium. Low-income beneficiaries (below 135

¹ The term "premium support" refers to the notion that beneficiaries pick a health plan in which the government pays part of the premium according to an established formula.

percent of the poverty line) would receive help to enroll in the high-option plan(s) available in their region. For such beneficiaries, the federal/ state Medicaid program would pay 100 percent of the high-option plan premiums that were at or below 85 percent of the national average premium of all high-option plans. In areas where there were no high-option plans at or below the 85 percent threshold, the federal government would pay the premium of the least expensive high-option plan for qualified low-income beneficiaries.

2. **Additional reforms.** The federal government would provide funding for prescription drug coverage for beneficiaries up to 135 percent of poverty, and would expand available subsidies for premiums and cost-sharing for low-income beneficiaries. In addition, all supplemental Medigap policies would be required to include basic coverage for prescription drugs, based on model legislation to be developed by the National Association of Insurance Commissioners. The proposal also included provisions to merge Parts A and B into a single Medicare Trust Fund. The current system, in which there are separate cost-sharing provisions for the two parts, with a relatively high (\$768 in 1999) deductible for Part A, and a separate \$100 deductible for Part B, would be replaced with a single deductible of \$400, indexed to Medicare costs over time. Current service-specific coinsurance would be replaced by a uniform 10 percent coinsurance for all services not currently subject to a 20 percent coinsurance. The plan also called for changing the eligibility age for Medicare to conform to scheduled increases in the age at which unreduced Social Security retirement benefits will be paid, i.e. phasing in over the 2000 to 2022 period an increase to age 67.
3. **Program Solvency.** The definition of solvency for Medicare would be changed to conform to the Commission's recommendation that Parts A and B be merged. Under current law, Part A is funded primarily through earmarked

payroll taxes which are deposited in the Medicare HI (Part A) trust fund from which expenditures must be paid. The program becomes insolvent when the balances available in the Part A Trust Fund are depleted. Part B cannot become insolvent because it is funded by general revenues and beneficiary premiums. Under this reform plan, the Trustees would publish annual projections of the ratio of general revenues to total funding for Medicare and notify Congress that the Medicare program is in danger of insolvency for any year in which general revenues constituted more than 40 percent of total projected Medicare outlays. Upon receiving such notification, Congress would be required to address Medicare funding under an expedited process. Congress would have to vote on any tax increases or spending cuts designed to strengthen the Medicare Trust Fund.

In November 9, 1999, Senators John Breaux (D-LA) and Bill Frist (R-TN), introduced legislation to adopt this Medicare restructuring. The Breaux-Frist legislation (S. 106-1895) mirrored the Breaux-Thomas proposal, but had several significant differences:

1. The legislation provides a subsidy for drug coverage to all beneficiaries who enroll in a high option plan. (Breaux-Thomas provided discounts to low-income beneficiaries only.) Beneficiaries below 135 percent of poverty still would pay no premium for the lowest cost plan. Beneficiaries between 135 and 150 percent of poverty receive a sliding scale subsidy of between 50 and 25 percent of the part of the premium associated with the drug benefit. Beneficiaries above 150 percent of poverty receive a 25 percent discount off the drug premium. In order to income-relate the discount, it is treated as taxable income for beneficiaries above 150 percent of poverty.
2. Breaux-Frist drops provisions contained in Breaux-Thomas that would raise the age of Medicare eligibility to conform with Social Security, combine Medicare's various deductibles into one for the year, establish

cost-sharing for clinical laboratory and home health services, change the structure of Medigap policies including an elimination of first-dollar coverage, and separate graduate medical education payments from hospital reimbursements.

3. Breaux-Frist specified in greater detail than Breaux-Thomas the roles of HCFA and the to-be-created Medicare Board that would oversee the participation of both private and HCFA-administered health plans in Medicare as well as the calculation of premiums and government subsidies of those premiums.
4. Breaux-Frist contains additional changes to traditional Medicare, including a provision that would reduce provider payments and/or increase beneficiary cost sharing if funds available to traditional Medicare were not sufficient to provide services according to the legislation's definition of solvency.

In spring 2000, Breaux and Frist revised their proposal by introducing S. 106-2807 (referred to as Breaux-Frist 2000). The major differences between this proposal and their earlier legislation were that:

1. The new bill would not establish an independent board to oversee Medicare. Instead, it would create the Competitive Medicare Agency outside of the Department of Health and Human Services to administer the prescription drug benefit and oversee the system of private health plans that would offer Medicare benefits.
2. Prescription drug coverage would no longer be offered through "high option" plans. Beneficiaries could purchase an optional prescription drug benefit offered by private insurers with a federal subsidy of at least 25 percent.
3. Removes requirements that traditional Medicare reduce provider payments and/or increase beneficiary cost sharing if funds available to traditional Medicare were not sufficient to provide services according to a definition of solvency in the legislation.

projections in March, 1999 for the earlier Breaux-Thomas proposal.⁹ Over the long-term, they estimated that this proposal would reduce long-term growth by about 1 percent per year with expenditures in 2030 \$500 to \$700 billion less than they would be under current law. Using the intermediate projections from the 1998 Medicare Trustees as the baseline for spending in 2030, they estimated that Breaux-Thomas would reduce Medicare spending from 6.3 to 4.5 percent of GDP (Lemieux, 1999).

The analysis by the Commission staff assumes minimal problems with risk selection or other factors that might diminish cost savings. Moreover, there is little documentation to support their one percentage point assumption for savings. However, because the purpose of this NASI study panel's analysis is to develop a range for Medicare's likely revenue needs, the panel decided to adopt the Commission's optimistic analysis of cost savings as a reasonable lower bound on Medicare spending under a premium support system. The study panel does not draw any conclusions about the validity of the assumptions used by the Bipartisan Commission's staff analysis. Once implemented, the actual system might work as well or less well in producing cost savings than their analysis suggests.

The Clinton Proposal

The plan put forward by President Clinton, described in Box 2-4, combines a variety of

proposed changes in Medicare. Like the Breaux-Frist legislation, it includes provisions to allow Medicare to take advantage of some structured competition among health plans. Unlike Breaux-Frist, the government's subsidy would not be tied to the costs of private health plans and beneficiaries who stay in the traditional fee-for-service program would pay no more in premiums or cost-sharing than they do under current law. Private health plans would compete with one another to provide beneficiaries with one of two minimum benefits packages (one of which includes drug coverage). Such plans would receive a little less than the average fee-for-service cost in their area adjusted for their enrollees' underlying medical risks. Efficient plans could choose to attract new enrollees by enhancing benefits or by discounting their prices with 75 percent of those savings returned to the beneficiary in the form of a lower Part B premium. Unlike Breaux-Frist, beneficiaries remaining in the traditional plan would be "held harmless" if the average cost of private health plans offering Medicare benefits falls.

The plan also includes provisions for outpatient prescription drug coverage, opportunities for individuals between ages 55 and 64 without health insurance to "buy into" Medicare, and a package of changes to traditional fee-for-service Medicare. As a package, the Clinton proposal adds to Medicare costs and is therefore considered as such in this chapter. However, when broken down, only

9 The Commission staff produced estimates on an "interim proposal" on February 17, 1999 as well as on a "final" version presented to the commissioners on March 14, 1999. In this report, the study panel draws on the analysis of the interim proposal which contained a provision for an income-related premium for Medicare subsequently dropped from the final version. Because this provision affects how Medicare is financed, the reductions in Medicare expenditures estimates in the two analyses were identical. However, the revenue needs from taxpayers (i.e. amounts raised in all forms except beneficiary premiums) would be greater than that presented later in this chapter.

the prescription drug benefit and buy-in options would add to program costs. The competitive defined benefit proposal described above and the changes to traditional Medicare are projected to save money, at least in the short term.

No estimates exist for the fiscal implications of the Clinton plan over the entire period of interest to this study panel (i.e. through 2030). However, using its March 2000 baseline, the Congressional Budget Office (CBO) has estimated that the competitive defined benefit part of the plan would save \$13.7 billion between 2001 and 2010. They also estimate that taking the Clinton plan as a whole would raise Medicare spending by \$13.8 billion in 2010 (less than 0.1 percent of GDP). For the period 2001-2010, CBO estimates the Clinton plan as a whole will add \$68.6 billion to program expenditures (U.S. Congress, January 2000; U.S. Congress, March 2000).¹⁰ Although no long-term estimates of the cost of the overall Clinton plan are available, the study panel did consider separately consider the implications of a drug benefit and buy-in for Medicare's longer run spending; we present these estimates later in this chapter.

Defined Contribution

The most dramatic and effective way to reduce Medicare's financing needs is to transform it from a "defined benefit" program (as it has existed since its creation in 1965) to a "defined contribution" program. Under "defined benefit," the government guarantees beneficiaries access to a specific set of

BOX 2-4: THE CLINTON MEDICARE PROPOSAL: KEY PROVISIONS

The President's July 1999 Medicare reform plan centered on improving the efficiency of the traditional FFS program, expanding competition on price and quality among managed care plans; modernizing the benefits package; and strengthening Medicare financing through program savings and use of projected budget surplus (*President's Plan*, 1999).

1. Competitive Defined Benefit Proposal.

Medicare+Choice (M+C) plans would be paid based on competitive prices rather than on fixed prices determined by a formula established in law. M+C payments would be based on what plans would bid for either of two standardized Medicare packages (one with a new drug benefit). Payments to plans would be adjusted to reflect beneficiaries' medical risk and geographic cost variations. For plans that offer prices higher than 96 percent of costs of the traditional program costs, beneficiaries would pay the additional cost; for plans charging less than 96 percent, a beneficiary would pay less than the regular Part B premium; three-fourths of the savings from choosing a lower-cost plan would go to the beneficiary and one-fourth to Medicare.

2. **Efficiency in Traditional Medicare.** For the traditional program, provisions would give Medicare greater authority and flexibility to adopt private-sector practices. These would include a Medicare Preferred Provider Option (PPO); and expansion of the current Centers of Excellence program; payments and care systems such as primary care case management and disease management; emphasis on generating information on coverage and services for Medicare benefi-

continued on page 44

10 According to the CBO, during the period 2001 and 2010, the buy-in would add \$0.2 billion to Medicare, prescription drug coverage would add \$130.6 billion, and the changes to traditional Medicare proposed by the Clinton administration would save \$48.6 billion. Combining these estimates with the projected \$13.7 in savings from the combined defined benefit proposal yields a net increase in Medicare costs of \$68.6 billion during this period (U.S. Congress, March 2000).

ciaries also eligible for Medicaid and authorization of a coordinated care demonstration program for this population; innovative purchasing tools and contracting reforms, e.g., competitive pricing, and bundled payments for services provided at a site of care; and a demonstration of bonus payments for physician group practices based on efficiency and quality of care.

3. **Adjustment of Statutory Spending, Payment and Administrative Provisions.** The proposal would moderate the cost-containment provisions of the 1997 BBA by postponing or adjusting certain scheduled changes in payments to hospitals, home health agencies, or skilled nursing facilities, and remove the portion of managed care plan payments for indirect medical education and direct these funds to qualifying hospitals. (In his June, 2000 revision of his proposal, President Clinton dropped any extension of the 1997 BBA cuts and committed an additional \$21 billion to provider reimbursements.) Reform of Medicare management would include increasing Medicare's flexibility to hire experts from the private sector, and fostering accountability through the creation of public/private advisory boards to identify and recommend best management practices, advise on coverage policy, and monitor and evaluate consumer education activities.
4. **New Medicare Benefits.** The proposal would add a new Medicare prescription drug benefit that would pay one-half of all prescription drug costs, up to \$5,000 per year (\$2,500 in Medicare benefits), adjusted by inflation, with full implementation in 2008. Beneficiaries electing the optional drug benefit would pay a monthly premium of \$53 per month by 2008 (CBO estimates). The federal govern-

ment would pay the drug premium and cost-sharing for drugs for beneficiaries with incomes from 100 to 135 percent of poverty, and people with incomes from 135 to 150 percent of poverty would pay a portion of the premium (on a sliding scale tied to income). Those enrolling in M+C plans would be covered through their plans; for the traditional plan, Medicare would contract with private pharmacy benefits management organizations to administer the benefit. Medicare would pay a reduced premium subsidy for beneficiaries who receive coverage through employers' health plans. (In June 2000, President Clinton supplemented his proposal by adding a "stop loss" benefit to his drug proposal; the government would pay all outpatient pharmaceutical costs each year after a beneficiary had paid \$4,000 in drug costs out-of-pocket.) Cost-sharing for a number of preventive services would be eliminated. Reforms to private supplemental insurance (Medigap) plans would include the creation of a new lower-cost option with nominal cost sharing, and provisions to improve access to Medigap for beneficiaries whose private plans withdraw from Medicare. A Medicare buy-in for certain people aged 55-65 without access to health insurance would be created, to be paid for entirely by premiums (\$300-\$400 per month); people electing coverage would have to pay a risk-adjusted payment when they reach age 65.

5. **Revenues.** Fifteen percent of the projected non-Social Security budget surplus would be dedicated to Medicare. (The implications of using the surplus to help finance Medicare are considered in Chapter 3.) The plan would also add a 20 percent copayment for clinical laboratory services and index Part B deductibles to inflation.

benefits. Under "defined contribution," the government guarantees beneficiaries up to a certain dollar value of health services. As mentioned above, there currently is no serious proposal to enact such a change. It is

presented here for illustrative purposes only. One form of this proposal is to freeze *per capita* Medicare spending at a point in time and allow it to increase at the rate of overall inflation in the economy.¹¹ As shown in

11 The vetoed Balanced Budget Act of 1995 would have restructured Medicare in this way.

Chapter 1, per beneficiary Medicare spending has traditionally risen faster than inflation.¹² If the government voucher under such a proposal were less than actual Medicare costs in any given year, beneficiaries would presumably be responsible for paying the difference. This proposal has the effect of significantly diminishing Medicare's ability to spread risk. Over time, this would significantly increase financial burden for an increasing number of beneficiaries whose medical costs would be above the government voucher. Furthermore, because limits in spending growth in one year result in a lower base upon which future year increases in spending are calculated, the increased financial burden on beneficiaries is compounded over time. However, the proposal would limit Medicare's growth. Restructuring Medicare as a pure voucher tied to general inflation would make the government contribution to the program 4.22 percent of GDP compared to 5.85 percent under current law as estimated in 1998.¹³ The share of health care costs that beneficiaries would have to pay (in terms of Medicare premiums plus uncovered services) would likely grow at a rapid rate.

Raising the Age of Eligibility

Between 2003 and 2025, the age at which individuals can receive full Social Security benefits will gradually go up from 65 to 67. This has led some to propose that Medicare

make the same change. Proponents note that life expectancy has increased, and many people are capable of working longer. They argue that such a change would help control costs and focus Medicare's resources on the oldest and sickest. Opponents suggest that this change would only add to the large number of uninsured Americans because many beneficiaries who are not working would not be able to purchase health insurance in the private market at ages 65 and 66. Those who do remain insured may not receive health benefits through their jobs, and the cost of coverage at this age would likely consume a significant portion of their incomes. The Breaux-Thomas proposal to the National Bipartisan Medicare Commission contained a provision to raise the age of eligibility. The Breaux-Frist legislation introduced in the Senate in November 1999 did not raise the eligibility age above 65.

In order to assess the impact that this and other potential changes could have on Medicare spending over time, the study panel contracted with Actuarial Research Corporation (ARC) to estimate their costs or cost savings.¹⁴ A summary of relevant findings from ARC's analysis is presented at appropriate places in this chapter. In examining the cost savings associated with raising the age of eligibility, ARC examined two options: (1) raising the eligibility age to 67

12 In 1998 and 1999, this was not the case. It is not clear whether this recent experience is the start of a new trend. However, the recent slowdown in Medicare spending is the result of cost containment measures in the Balanced Budget Act of 1997 many of which sunset in 2003.

13 Even if growth in the per capita cost of Medicare is restrained, overall costs will go up as the Baby Boom generation becomes eligible for the program.

14 The underlying data source used by ARC for its estimates are the Cost and Use files of the 1995 Medicare Current Beneficiary Survey with Medicare spending projected forward by type of service according to national health expenditure data and projections in 1998. Data about projected numbers of beneficiaries come from 1998 Medicare trustees' intermediate estimates (Mays, 1999).

using the same rules that will apply to Social Security; and (2) gradually raising the eligibility age to 70 between 2000 and 2029.¹⁵ Individuals who are already eligible for Medicare prior to age 65 because of disability would remain eligible. In addition, some individuals would continue to qualify for Medicare through disability during the period between their 65th birthdays and the date when they would have aged into the program anyway. ARC's estimates appropriately account for these possibilities (Brenner and Mays, 1999).¹⁶

ARC estimates that raising the age of eligibility to 67 or 70 would decrease Medicare spending in 2030 2.7 and 8.5 percent respectively relative to current law. As a percentage of GDP, these changes would bring Medicare spending from its projected level of 5.85 percent in 2030 to 5.69 and 5.35 percent respectively.

One option for mitigating some of the difficulty sicker individuals might have in obtaining private health insurance would be to waive the two-year waiting period that disabled individuals face before becoming eligible for Medicare. To examine the impact that this approach would have on costs, ARC estimated how elimination of the waiting period for persons over age 60 would affect the cost savings gained by increasing the regular

Medicare eligibility age to 70. They project that adding this feature would reduce the savings to Medicare in 2030 by more than half (from 8.5 percent to 4.1 percent).¹⁷

Options That Increase Financing Needs

Policy makers and advocates have suggested several changes to address perceived inadequacies in Medicare's benefit package. Chief among these are an outpatient prescription drug benefit and a limit on beneficiaries' out-of-pocket expenses. In addition to the provisions designed to produce savings, the proposal put forward by President Clinton (described in Box 2-4) includes a new Medicare drug benefit. The plan includes an earlier proposal by the Clinton administration to allow uninsured individuals under the age of 65 to buy into the Medicare program. This section considers the costs of such expansions in Medicare benefits and eligibility.

A Prescription Drug Benefit

Medicare currently does not cover drugs administered on an outpatient basis. As drugs have become a more significant part of health care and spending on pharmaceuticals has risen more than 10 percent annually in recent years, their costs have become a significant burden for some Medicare beneficiaries. Like other health care spending, a large fraction of beneficiaries spend relatively modest amounts

15 Under the law that now applies to Social Security, the age of full eligibility begins at 65 and 2 months in 2003, increasing by two months a year until it reaches age 66 in 2008. The age will remain at 66 through 2019, in 2020 the age increases by two months a year until it reaches at 67 in 2025. The second proposal examined by ARC would begin raising the age of eligibility in 2000 to 65 and 2 months, increasing by two months a year until age 70 is reached in 2029.

16 To estimate the number of individuals who would have become eligible for Medicare because of disability after their 65th birthdays but before aging into the program, ARC extrapolated from rates of disability for ages 55 to 64 using the March 1998 Current Population Survey (CPS). They estimate that new and continuing disabled Medicare beneficiaries would constitute 17.7 percent of the 65 year olds, increasing to 22.6 percent of the 69 year olds (Brenner and Mays, 1999).

17 According to the ARC estimates, Medicare spending as a percentage of GDP would be 5.61 percent in 2030 under this proposal.

on drugs, although a minority spend a great deal. According to estimates done by ARC for 1999, 14 percent of beneficiaries had no drug expenses, while 13 percent had drug costs (paid by insurers and/or out-of-pocket) of \$2000 or more. Although two-thirds have supplemental insurance that provides some coverage of prescription drugs, the insurance value of that coverage varies significantly, its costs are rising, and its prevalence may be waning. A separate NASI publication commissioned by this study panel examines issues related to a Medicare prescription drug benefit in greater detail (Gluck, 1999).

Although there are several potential policy approaches to addressing the prescription drug issue for Medicare beneficiaries, this report only considers the addition of a prescription drug benefit to Medicare itself.¹⁸ Designing such a benefit raises a number of fundamental questions: Should the benefit be mandatory (like Part A) or voluntary (like Part B)? Should it provide assistance to most beneficiaries, catastrophic coverage for beneficiaries with extraordinarily high drug costs, or both? How should the costs of a benefit be constrained? Answers to each of these questions will affect the costs of a benefit. The drug benefit contained in the Clinton proposal would provide assistance to most beneficiaries. When fully implemented in

2008, it would pay half of all drug costs up to \$5,000 (\$2,500 in Medicare payments) for a premium of \$53 per month. It would be voluntary with a one-time option to enroll and subsidies to pay the premiums for low-income beneficiaries. As amended in June 2000, the proposal would also pay all drug expenses each year after beneficiaries had paid \$4,000 out-of-pocket once it was fully implemented in 2008.¹⁹ It would control costs by relying on pharmaceutical benefit managers (PBMs) to administer the benefit.²⁰

The drug benefit in the high option plans of the November 1999 Breaux-Frist legislation could take any form as long as it had an actuarial value of \$800 in 2003²¹ (annually “adjusted for any increase in the reasonable cost of outpatient prescription drugs”²²). In the June 2000 version of their legislation, optional, subsidized prescription drug coverage would be offered to beneficiaries. It would carry a \$250 deductible, 50 percent coinsurance, a \$2,100 cap on benefits (\$1,050 paid by the insurer and beneficiary each), and a stop loss after \$7,050 in total drug expenditures. Each of these amounts would be indexed in future years to increases in total Medicare outpatient prescription drug spending. Instead of offering this package, insurers could offer an actuarially equivalent package. They could also offer additional

18 Among other approaches that have been the subject of recent congressional legislation are: (1) grants to states to expand financial access to drugs for low-income and other beneficiaries through Medicaid or some other program, (2) market reforms to make it easier for beneficiaries to obtain private health insurance with drug coverage, (3) mandated access for all beneficiaries to discounts obtained by insurers and other large purchasers of pharmaceuticals, and (4) tax credits and tax deductions for drug expenses.

19 The annual cap and stop loss would be indexed to the rate of general inflation after 2008.

20 For significant detail of major Medicare prescription drug legislation as of August, 2000, see Gluck, 2000, <http://www.kff.org/content/2000/20000725a/sidebyside.pdf>.

21 ARC estimated that in 1999, the average outpatient prescription drug bill for a Medicare beneficiary was \$941 (Mays, 1999). But a \$800 benefit would also have to allow for some increase in use of prescription drugs by those newly covered.

22 The legislation does not specify how reasonable drug cost inflation would be determined.

coverage without government subsidization (Gluck, 2000).

It is interesting to note that unlike the specific drug benefit included in the Clinton proposal, the Breaux-Frist legislation, which allows actuarially equivalent coverage, is consistent with a large number of very different benefit designs. For example, among the hypothetical benefits analyzed for this report and discussed in greater detail below, a benefit with a \$200 deductible, 20 percent copayment, and \$2000 maximum benefit as well as a benefit with a \$500 deductible, 20 percent copayment, and \$2000 limit on out-of-pocket expenses both have actuarial values of \$830 in 2003 (Mays, 1999), only \$30 more than the actuarial value of coverage in the November, 1999 version of Breaux-Frist. However, the implications of these two designs have very different implications for beneficiaries and the structure of the market for high-option plans in the Breaux-Thomas plan.

To gain some insight into the general level of costs with Medicare drug coverage and to understand better what drives those costs, ARC analyzed five illustrative pharmaceutical benefits. One of the illustrative options has a maximum benefit of \$2,000 per year, while the other four have a stop loss (i.e. a maximum out-of-pocket liability for beneficiaries) that ranges from \$1,000 to \$3,000.

The estimates assume that the federal government will realize a 10 percent discount from amounts currently paid by beneficiaries for their drugs.²³ They also assume that expanded coverage will lead to increased utilization. The deductibles, coinsurance rates, maximum benefits, and stop loss levels are assumed to rise at the same rate as the consumer price index (CPI).²⁴ Extrapolating from historical data, ARC assumed an average annual increase in drug spending of 8.9 percent through 2008 and 8.3 percent thereafter.²⁵

Table 2-3 presents the results of this analysis. In 2030, these benefits would add between 12 and 34 percent to Medicare costs. As a percentage of GDP in that year, total Medicare spending would be between 6.55 and 7.83 percent depending on the benefit. As expected, those benefits with a stop loss become much more expensive over time than do those with a maximum benefit. This occurs because drug costs are projected to rise faster than other Medicare costs over the 30 year period of the projections (and despite the fact that the estimates assume that deductibles, stop losses, and maximum benefits increase each year at the rate of the consumer price index).

The results are extremely sensitive to assumptions about how fast per capita prescription drug spending will grow over time. If nominal prescription drug spending after 2008

23 This number, suggested by the HCFA Office of the Actuary, is based on historical experience with other government experience in purchasing pharmaceuticals (Mays, 1999).

24 The data for the estimates come from the 1995 MCBS trended forward to 1999 (Mays, 1999).

25 These assumptions are based on HCFA projections of real per capita growth in prescription drug expenditures and projected increases in the gross national product price deflator. Through 2008, these estimates assume on a 5.6 percent real annual per capita increase in drug expenditures plus a 3.1 percent GDP annual price deflator which compound to a nominal rate of 8.9 percent per year. After 2008, the estimates assume 5.0 percent real annual per capita rate of increase plus the 3.1 percent annual GDP price deflator which compound to 8.3 percent.

Table 2-3

Projected Impact of Illustrative Medicare Prescription Drug Benefits on Program Costs, 2030

Benefit	Scenario #1 Assumes Drug Spending Grows at 8.3% Per Year After 2008		Scenario #2 Assumes Drug Spending Grows at 6.1% Per Year After 2008	
	Medicare Spending as a Percentage of GDP	Change in Medicare as a Percentage of GDP	Medicare Spending as a Percentage of GDP	Change in Medicare Spending as a Percentage of GDP
Current Law	5.85	N/A	5.85	N/A
\$200 deductible, 20% co-insurance, \$2000 maximum benefit	6.55	0.70	6.44	0.59
\$200 deductible, 50% co-insurance, \$2000 stop loss.	7.52	1.67	6.76	0.91
\$200 deductible, 50% co-insurance, \$3000 stop loss	7.33	1.48	6.66	0.81
\$500 deductible, 20% co-insurance, \$2000 stop loss	7.67	1.82	6.89	1.04
\$200 deductible, 50% co-insurance, \$1000 stop loss	7.83	1.98	6.97	1.12

Key: N/A – Not applicable.

Source: National Academy of Social Insurance, 2000; based on analysis performed by Actuarial Research Corporation, Springfield, Virginia, 1999.

were to grow at 6.2 percent per year rather than the 8.3 percent rate that was assumed in Table 2-3, projected total Medicare costs in 2030 would drop to a range from 6.44 percent of GDP for the benefit with the \$2000 maximum to 6.97 percent of GDP for the benefit with a \$1,000 stop loss.²⁶

No one knows how fast drug costs will increase over the next three decades.

Sustained growth in drug expenditures may increase pressure for public policies to slow such growth, as happened when other medical costs exploded during the 1980s and policy makers responded by introducing prospective payment systems for Medicare hospital and physician services.²⁷ Regardless, these estimates illustrate that any prescription drug benefit that provided coverage against catastrophic expense could add significantly

26 This second set of estimates assume a 2.94 percent real annual per capita increase in drug expenditures plus a 3.1 percent GDP price deflator (6.1 percent compounded) after 2008. All other assumptions for this set of estimates are the same as those shown in Table 2-2.

27 Other caveats to the ARC drug estimates: (1) The underlying data come from the Medicare Current Beneficiary Survey (MCBS). Because respondents to this survey self-report their use of prescription drugs, there may be some underreporting as is discussed in Davis, 1999. Such underreporting would understate prescription

to Medicare's financing needs. At the same time, however, in the absence of insurance coverage, beneficiaries would face the full risk of such expenses. These estimates and related issues are discussed in greater detail in Gluck, 1999.

Catastrophic Coverage

Another benefit often suggested for Medicare is a limit on beneficiaries' out-of-pocket expenditures for Medicare services. Congress added such a benefit in 1988 (P.L. 100-360), but repealed it the following year (P.L. 101-234) in response to beneficiary complaints about its financing mechanism.²⁸ Under Breaux-Frist, high option plans would offer catastrophic coverage. The costs of such coverage in any given year depend on the stop loss amount (i.e. the threshold beyond which Medicare pays 100 percent of expenses) and the total Medicare costs of those beneficiaries who exceed the stop loss.

ARC projected the costs of three catastrophic benefits: one with a stop loss of \$3,000 per year, one with a stop loss of \$5,000, and one with a stop loss of \$7,500. The estimates assume that the stop loss amounts increase each year according to the CPI. According to ARC's analysis, these catastrophic benefits would add 6.0 percent, 3.7 percent, and 2.3 percent to Medicare costs respectively in 2030. With these benefits, total Medicare costs as a percentage of GDP in that year

would be 6.20 percent, 6.07 percent, and 5.98 percent respectively. Hence, adding a stop loss benefit is significantly less costly than an outpatient drug benefit, and these costs appear relatively sensitive to level of the stop loss. These results reflect the fact that most beneficiaries in any given year have relatively modest Medicare costs.

Buy-in Options

The Clinton Medicare proposal contains a provision to allow individuals age 55-64 without other health insurance to "buy-into" Medicare. Participants would pay a premium somewhat below the actuarially fair rate for their age during the years in which they purchase Medicare coverage. Because of the price break they receive and likely risk selection among those who exercise the buy-in option, these beneficiaries would pay a somewhat higher than normal Part B premium for each year of early coverage after they turn 65. Individuals between the ages of 55 and 64 who involuntarily lose their jobs and health coverage could also buy into Medicare, but would pay the full actuarially fair premium during the time they received the coverage. These buy-in options are designed to be budget neutral, and recent estimates by the Congressional Budget Office suggest that they would almost achieve this goal. For the years 2001-2010 the proposal would add \$0.2 billion cumulatively to Medicare costs (U.S. Congress, March 2000).

drug spending and make the cost estimates presented here too low. (2) The estimates do not include administrative costs of setting up a prescription drug benefit and maintaining it. (3) The estimates may not accurately reflect the role that pharmaceuticals will play in 2030. The estimates implicitly assume that new medical technologies will continue to add to health care costs. It is possible, however, that new pharmaceuticals may substitute for spending for other Medicare services such as hospitalization, surgery, or outpatient treatments. (4) The estimates assume that the federal government would realize a 10 percent discount off of prices currently paid by Medicare beneficiaries and their insurers, but do not specify a method for achieving that discount.

28 The Medicare Catastrophic Coverage Act would have also provided coverage for catastrophic prescription drug coverage. This part of the legislation would have set an annual deductible so that 16.7 percent of total drug expenditures on behalf of Medicare beneficiaries would be covered.

These proposals are designed to help alleviate the growing difficulties some individuals are having in obtaining health insurance during the years before they become eligible for Medicare. As individuals age, their risk for chronic illness increases at the same time they face a higher risk of losing employer based health insurance (Budetti, 2000). Those who retire before age 65 must increasingly deal with former employers who are cutting back on health insurance benefits for their retirees (McArdle, et al., 1999). Because their increased risk of needing health care, individuals in their 50s and early 60s may be unable to afford private health insurance. According to a recent survey, one in eight adults (12 percent) between 45 and 64 were uninsured in 1999, although the rate was almost one in four (23 percent) among those with family incomes under \$35,000. Of those without health insurance, 70 percent went without needed health care or had difficulty paying their medical bills (Budetti, 2000).

The Clinton proposal is designed to have minimal impact on overall medical costs by expecting those who enroll in Medicare early to pay the bulk of the costs associated with this coverage. Premiums would be based on the average cost for all Medicare beneficiaries. Because these premiums would not be adjusted for the enrollee's underlying health status, the cost would likely be less than that of a comparable private health insurance package. Nevertheless, many eligible individuals may still find it unaffordable or choose not to exercise the buy-in option. One would

expect the enrollees to be those individuals with the greatest health need — i.e. those with chronic illnesses or other health problems (but not otherwise on Medicare due to permanent disability). Because their costs would likely be greater than the cost for the average Medicare beneficiary, the premiums collected would not be sufficient to cover the costs of adding the buy-in option.

To illustrate the costs associated with a buy-in for people under age 65, the study panel asked ARC to analyze two such proposals — one that would allow individuals between ages 62 and 64 to buy into Medicare and a broader proposal that would allow individuals as young as 60 to buy into the program. In making their cost estimates, ARC assumed that anyone in these age groups could choose to buy into Medicare.²⁹ These cost estimates depend on four factors: (1) the number of persons who are 60 to 64 each year (2) the percentage of this population who choose to buy into Medicare, (3) the premiums paid by each enrollee (i.e. the cost of Medicare per beneficiary in each year), (4) the expected costs of providing Medicare services to those who exercise the buy-in.

They estimated the number of people eligible from HCFA and Current Population Survey (CPS) data. They assumed that 25 percent of people age 62-64 and 20 percent of those age 60-64 would participate in the buy-in if offered.³⁰ They also assume that enrollees would pay premiums equal to the average cost for all Medicare beneficiaries.³¹ Their

29 This is different from the Clinton plan which would limit the option to individuals without access to employer-sponsored health insurance.

30 ARC chose these participation rates for illustrative purposes. They speculated that participation rates would go up with age because health needs increase with age (Brenner and Mays, 1999).

31 This assumption is probably too high since expected health care costs for this younger population should be less than those of Medicare beneficiaries over age 65.

estimates also account for the fact that sicker individuals are more likely than healthier ones to buy into Medicare (Brenner and Mays, 1999).³²

As expected, this option increases costs to Medicare, although significantly less than adding a drug benefit or a stop loss. ARC estimates that allowing 60-64 year olds and 62-64 year olds to buy into Medicare would add 2.6 percent and 2.2 percent respectively to Medicare costs in 2030. These numbers translate into 0.15 and 0.13 percent of GDP respectively.³³ As noted in the sections above, the Medicare trustees projected in 1998 that total Medicare costs under current law to constitute 5.85 percent of GDP in 2030 (Medicare Board of Trustees, 1998). Although some of ARC's underlying assumptions (e.g. the participation rates and the impact of selection bias) are speculative, it is reasonable to expect that costs associated with this option would be no higher than ARC estimates.³⁴

Changing Cost Sharing

Medicare currently has a complicated set of cost-sharing rules with different deductibles and coinsurance rates for different services (Table 2-4). Some services, such as home health care, have no cost sharing requirements. In some cases, deductibles rise with inflation (e.g. Part A hospitalization); in other cases, their absolute level remains fixed from year to year (Part B). Because this system can be confusing for beneficiaries, there have been proposals to rationalize Medicare's cost sharing. The Breaux-Thomas (but not Breaux-Frist) plan included such a provision (see Box 2-3). The Clinton plan would have begun to adjust the Part B deductible for inflation and would have added coinsurance requirements for laboratory services.

The study panel asked ARC to estimate the costs of a few combinations of changes. The panel wanted to know whether it is possible to rationalize Medicare's cost sharing requirements in a manner that does not add

32 The formula for the estimated annual costs for an individual of a given age who has bought into Medicare is: $AC * R * S$ where AC is the per capita cost of Medicare, R is the ratio of per capita costs for all persons of that age to the per capita costs for all beneficiaries, and S is the ratio of costs for those who exercise the buy-in to costs for all persons of that age. Using data from the 1995 Medicare Current Beneficiary Survey (MCBS), ARC first calculated the ratio of average costs for ages 65, 66, 67, 68, and 69 each to the average cost for all Medicare beneficiaries. They then extrapolated to ages 60 to 64. For ages 60-64, they estimate the ratio to be 0.525; for ages 60-64, they estimate it to be 0.545. They then assumed a selection bias factor of 3.0. Although somewhat arbitrary, ARC argues that this assumption makes sense for their illustrative cost estimates. Because of the significant cost of premiums, they argue it is reasonable to expect the group as a whole to be much more costly than would be the average person of that age (Brenner and Mays, 1999).

33 Because of the Baby Boom, the number of individuals eligible for the buy-in is higher in the 2015-2020 period than in 2030. Indeed costs for the two options are higher in 2015 than 2030. The buy in for 60-64 year olds would raise Medicare costs by 3.9 percent in 2015. The 62-64 year old option would raise costs by 3.1 percent (Brenner, 1999). However, using the Trustees' projections of GDP, this still would only raise Medicare's share of GDP by 0.12 percent and 0.10 percent respectively.

34 The assumption that enrollees would cost 3 times as much as others of the same age probably leads to an upper-bound estimate. The participation rate affects costs much less than the selection bias factor. This is because as higher percentages of the eligible population participate, the impact of selection bias falls. In the extreme, 100 percent participate and the selection bias factor is 1.0. Under these circumstances, the buy-in actually saves Medicare money since the average reimbursement for 60-64 year olds is less than for all Medicare beneficiaries, but the premiums paid by enrollees are based on per capita costs for all beneficiaries.

Table 2-4

Beneficiary Costs in the Traditional Medicare Fee-For-Service Program	
Benefit	2000 Payment
Part A:	
Inpatient	
Deductible	\$776 per illness spell
Co-payments days 61-90	\$194 per day
Co-payments for lifetime reserve days 91-150	\$388 per day
Beyond day 150	All costs
Skilled Nursing Facility Care	
Days 21-100	\$97 per day
Beyond 100 days	All costs
Home Health Care	
Durable medical equipment	20% of approved amount
Other home health care services	No costs
Hospice Care	
Outpatient drugs	\$5 co-payment
Inpatient respite care	5% of Medicare payment amount
Other hospice care services	No costs
Blood	
First 3 pints	All costs
Part B:	
Medical expenses	\$100 annual deductible
Physician costs	20% of approved charges
Physician not-accepting assignment	100% allowable excess charges
Premium	\$45.50 per month

to Medicare’s financing needs. We report here the results of ARC’s analysis of four packages of potential changes in cost sharing. The first two adjust deductibles and coinsurance rates. The second two combine such changes with a catastrophic benefit³⁵ as discussed earlier in this chapter:

- **Package #1** – Raise the annual Part B deductible to \$200; adjust it in future years for increases in the CPI; limit the Part A deductible for hospitalization to one per year; eliminate hospital coinsur-

ance; impose 5 percent coinsurance for home health services.

- **Package #2** – Raise the annual Part B deductible to \$300; adjust it in future years for increases in the CPI; limit the Part A deductible for hospitalization to one per year; eliminate hospital coinsurance; impose 10 percent coinsurance for home health services.
- **Package #3** – Same as Package #2 with a \$3000 annual stop loss.
- **Package #4** – Same as Package #2 with a \$5000 annual stop loss.

35 These changes in cost sharing do not assume any change in the program other than those laid out here. Because no outpatient prescription drug benefit is assumed in these estimates, the catastrophic coverage would not cover include outpatient prescription drug expenses.

Proposals to raise the Part B deductible reflect the fact that it has been \$100 since 1991 when Congress raised it from \$75. Congress has increased the deductible only twice since 1966. Proposed changes to the deductibles and coinsurance requirements for hospitalization reflect the fact that patients have little control over the use of such services, thus minimizing the impact of such cost-sharing on the efficiency of health care. Home health care currently has no cost sharing requirements.³⁶ Until recent legislation that changed reimbursement rules and

cracked down on waste, fraud, and abuse, it was the fastest growing part of Medicare.

All four of these options have small impacts on the portion of future GDP that would be devoted to Medicare. The first two packages actually save money, the third would add somewhat to costs, and the fourth is essentially revenue neutral. Table 2-5 presents these results for the year 2030. As this analysis illustrates, it is indeed possible to simplify or in other ways change Medicare's cost sharing requirements without adding to the challenge of financing the program over time.³⁷

Table 2-5

Projected Impact of Illustrative Changes in Medicare Cost Sharing on Program Costs, 2030

Cost Sharing Changes	Medicare Spending as a Percent of GDP	Change in Medicare Spending as a Percent of GDP
Current Law	5.85	N/A
Package #1 – Raise the annual Part B deductible to \$200; adjust it in future years for increases in the consumer price index (CPI); limit the Part A deductible for hospitalization to one per year; eliminate hospital coinsurance; impose 5 percent co-insurance for home health services.	5.72	-0.13
Package #2 – Raise the annual Part B deductible to \$300; adjust it in future years for increases in the CPI; limit the Part A deductible for hospitalization to one per year; eliminate hospital coinsurance; impose 10 percent co-insurance for home health services.	5.63	-0.22
Package #3 – Same as Package #2 with a \$3000 annual stop loss.	6.02	+0.17
Package #4 – Same as Package #2 with a \$5000 annual stop loss.	5.86	+0.01

Key: GDP – gross domestic product; N/A – Not applicable.

Source: National Academy of Social Insurance, 2000; based on analysis performed by Actuarial Research Corporation, Springfield, Virginia, 1999.

36 In addition to sharing the cost of Medicare services with beneficiaries, the purpose of cost-sharing is to encourage beneficiaries to become more efficient users of health care services.

37 Such changes could have important implications on out-of-pocket expenses borne by different parts of the Medicare beneficiary population. Our analysis did not examine these distributional impacts.

IMPLICATIONS FOR TAXPAYERS

The preceding section presented cost estimates for a number of changes in Medicare that policy makers have considered in recent years. Because the next chapter will develop several illustrative mechanisms to finance Medicare, it is useful to consider the implications of these proposals for Medicare's revenue needs. In particular, what do these estimates imply for the portion of Medicare financed by taxpayers? The earlier section of this chapter on the current Medicare system introduced the concept of the "taxpayers' contribution" — i.e. all of Medicare's projected expenditures except the 25 percent of Part B financed through beneficiaries' premiums. In other words, the taxpayers' contribution includes revenues from payroll taxes, general tax revenues and a few other minor revenue sources.

Table 2-6 summarizes the results of the various cost estimates reviewed in this chapter.³⁸ Again using the Medicare Trustees' 1998 projections for Medicare costs, column A shows how high taxpayers' contributions to Medicare as a percentage of GDP would need to be in 2030 if no changes were made in the program. To place the impacts of these changes in context, column B shows how much each of these scenarios would cause the taxpayer share of GDP devoted to Medicare in 2030 to increase over its 1998 level. Thus, while the "current law" projection results in an 111 percent increase (i.e. 2.11 times the 1998 level) in the taxpayer share, the interim Breaux-Thomas proposal yields an 86 percent increase by 2030. Because revenues grow at about the same rate as GDP, column

B is roughly a measure of increases in revenues that would be necessary to finance Medicare after accounting for growth in the economy and inflation. Any percentage value greater than zero in column B implies a financing gap that could be met through additional revenues, by making beneficiaries pay more than envisioned in the particular proposal, or by other policies. These estimates assume that no matter what change is adopted, beneficiaries would pay premiums equal to 25 percent of what projected Part B expenditures would be in 2030 if no changes were made in Medicare (i.e. current law). Thus, beneficiary contributions are also assumed to rise.

This chart illustrates that all of the proposals examined in this chapter (as well as Medicare under current law) will require additional revenues even after accounting for growth in the overall economy. Using the Medicare trustees' 1998 intermediate projections, if there are no policy changes, twice as much in revenue will be required in 2030 as in 1998. The most restrictive change examined, switching to a defined contribution approach in which increases in Medicare spending per beneficiary are held to increases in the CPI, would still require additional revenues (52 percent more revenues in 2030 than was required in 1998). To achieve such a low rate of growth in spending would be a feat never achieved in Medicare for a period of more than two years. In most years, Medicare spending has grown at a much faster pace than the CPI. Consequently, the defined contribution requirement could substantially

38 In September, 1999, the study panel released an interim report, *The Financing Needs of a Restructured Medicare Program, Medicare Brief No. 5*, which reported slightly different numbers in its Table 1 than are reported here in Tables 2-2 and 2-6. The numbers differ because of minor technical adjustments in the analysis made since the printing of the interim report.

Table 2-6

Projected Impact of Illustrative Medicare Changes on Taxpayer Contributions to Medicare^a in 2030

	A Taxpayer Contribution to Medicare as a Percent of GDP	B Approximate Increase in Revenues Needed in 2030 Compared to 1998 ^b
Current law, 1998 spending	2.41%	N/A
Current law, projected spending in 2030 ^c	5.09%	111%
Changes in Medicare Designed to Produce Savings:		
Interim Breaux-Thomas proposal to the Medicare Commission ^d	4.49%	86%
Defined contribution: Hold per beneficiary increases in Medicare spending to growth in the consumer price index (CPI)	3.67%	52%
Raise age of eligibility to 67 ^e	4.95%	105%
Raise age of eligibility to 70	4.65%	93%
Expansions in Medicare:^f		
Outpatient prescription drug coverage (\$200 deductible, 20% coinsurance, \$2,000 maximum benefit).	5.69%	136%
Outpatient prescription drug coverage (\$200 deductible, 20% coinsurance, \$2,000 stop loss)	6.53%	171%
Stop loss of \$3,000 per year	5.39%	123%
Stop loss of \$5,000 per year	5.27%	119%
Allow buy-in at ages 62-64	5.22%	116%
Allow buy-in at ages 60-64	5.20%	115%
Changes in Cost Sharing		
\$300 Part B deductible tied to CPI, 1 annual hospital deductible, no hospital coinsurance, 10% home health coinsurance	4.90%	103%
\$300 Part B deductible tied to CPI, 1 annual hospital deductible, no hospital coinsurance, 10% home health coinsurance, \$3,000 stop loss	5.23%	117%
\$300 Part B deductible tied to CPI, 1 annual hospital deductible, no hospital coinsurance, 10% home health coinsurance, \$5,000 stop loss	5.09%	111%

Key: N/A – not applicable

Source: National Academy of Social Insurance, 1999.

a Taxpayer contributions are defined as all Medicare expenditures except for the 25 percent of Part B costs paid by beneficiaries themselves in premiums. Payroll taxes and general tax revenues make up the bulk of the taxpayer contributions.

b This column presents the percent increase over 1998 in taxpayer contributions to Medicare as a percentage of GDP.

c 1998 baseline projection by the Social Security and Medicare Trustees of Medicare costs in 2030.

d The “interim” Breaux-Thomas proposal contained a provision for an income-related premium for Medicare subsequently dropped from the final version voted on (but not adopted) by the Bipartisan Commission. Hence, the revenue needs of the final version would have been larger than those shown here for the interim proposal. The subsequent Breaux-Frist legislation (S. 106-1895) also differs from the version of Breaux-Thomas analyzed here. Box 2-3 discusses those differences.

e All analysis from this row down to the end of the table based on cost estimates developed for the National Academy of Social Insurance by Actuarial Research Corporation, Springfield, Virginia.

f The estimates assume all features of the Medicare program other than the specific expansions noted remain as under current law.

increase the financial burden of health care for beneficiaries.³⁹

Proposals to raise the age of eligibility would reduce the revenues needed in 2030 somewhat compared to current law. Raising the age to 70 is roughly comparable to the generous estimate of savings attributed to the Breaux-Thomas proposal using the optimistic assumptions of the National Bipartisan Commission on the Future of Medicare. As one would expect, the addition of a prescription drug benefit, catastrophic coverage, and a buy-in option for individuals under age-65 would all add to Medicare's revenue needs relative to current law. Of these benefit expansions, however, prescription drug coverage with a stop loss would require substantially more revenues than the other options by 2030. This is because the level of the stop loss is assumed to increase at the same rate as the CPI, but prescription drug spending is projected to increase substantially more as science yields new pharmaceutical therapies. Adding a benefit with a \$200 deductible, 20 percent coinsurance requirement, and a \$2,000 stop loss would require 171 percent more in taxpayer revenues for Medicare in 2030 than were required in 1998 as a share of GDP. As pointed out earlier, Medicare's complicated system of cost sharing could be simplified in a manner that led to only modest cost increases. Adding catastrophic coverage to this package could be done in a manner that would require no more revenues than would be required under current law.⁴⁰

CONCLUSIONS

Policy makers at the turn of century continue to debate a variety of proposals intended to slow the rate of growth of Medicare spending, to make its benefit package more appropriate to the current practice of medicine, or to simplify the program for beneficiaries. Some proposals would restructure Medicare and ask some beneficiaries to contribute more over time through higher cost sharing for the basic program. These changes would seek some cost savings by making Medicare more efficient (either directly by eliminating unnecessary expenditures or indirectly by providing incentives for beneficiaries to seek care more efficiently). Even if such approaches are successful in achieving such cost savings, additional resources would be necessary to meet projected spending — a fact acknowledged by Senators Breaux and Frist, proponents of seeking savings through more efficient use of health care services (News from Senator John Breaux, 1999).

Another approach to restructuring the program (which is not necessarily incompatible with attempts to achieve greater efficiency) include adding prescription drug coverage and other benefits would add to Medicare's future revenue needs. Provisions to rationalize Medicare's cost-sharing, to make administrative changes in the way the traditional FFS program is run (referred to as modernization in the Clinton and Breaux-Frist proposals), or to allow individuals under age-65 without health insurance to "buy into" Medicare can be designed to be more or less cost-neutral.

39 As mentioned earlier in the text, policy makers in 2000 are not considering any proposal to restrict Medicare spending growth in this manner. It is discussed here for illustrative purposes only — to show how even an extremely restrictive policy will require new Medicare revenues in the future.

40 As shown in Table 2-5, requiring no more revenues than would be needed under current law means that Medicare revenues would still have to be about 100 percent more in 2030 than they were in 1998.

Although such changes would not add to Medicare's projected financing needs, the study panel's analysis underscores that there will be a gap between projected Medicare spending and revenues over the next 30 years.

Any estimates that look thirty years out into the future carry substantial uncertainty. It is very unlikely that Medicare's revenue needs in 2030 will be just as projected in this chapter. However, the consistency of the analysis

(no matter what set of benefits and structure Medicare is assumed to take on) is striking. There is no scenario that can avoid the need for new revenues. In addition, analysis like that presented here allows one to compare the magnitude of revenue needs implied by different proposals for reform. Even if the actual numbers are speculative, understanding the relative costs of new benefits and what drives them is useful for policy makers considering options for future Medicare financing.

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Chapter 3

Financing Options for Medicare

The previous chapter sketched out the size of potential shortfalls in Medicare’s financing over the next generation. The purpose of this chapter is to show how changes in public policy might fill these gaps. The bulk of the analysis deals with potential new tax revenues. How might revenues from different sources be raised to meet the projected shortfalls? In addition to illustrating the revenue potential of alternative tax instruments, it examines their impact on several hypothetical families and lays out other pros and cons of each approach. Because new taxes are not the only option for meeting some or all of Medicare’s projected needs, the analysis begins by considering the other alternatives as well.

The chapter considers each tax or other option individually, including an analysis of whether it could, by itself, meet all of the projected shortfalls in Medicare’s financing. In the end, the solution chosen by policy makers may involve more than one of the options described here. By examining each option separately, however, the pluses and minuses of each approach appear in starker contrast.

The study panel also does not make any recommendations about how best to meet Medicare’s financing needs. The diversity of philosophical perspectives among members of the group would likely make such a consensus difficult to achieve. However, the panel does agree there is great value in laying out the tradeoffs and difficult choices facing policymakers in a clear, accurate, and unbiased manner. It is the panel’s hope that this analy-

sis will make it easier for policy makers and the American public to choose among options to construct a workable, acceptable financing solution.

FINANCING OPTIONS OTHER THAN TAXES

The most common way to finance government programs is through taxes. Because taxes tend to be politically unpopular and create undesirable economic distortions, policy makers usually seek other financing mechanisms before deciding to raise taxes. In the case of Medicare, there are three potential strategies that could help alleviate the need for new revenues. At the same time, each strategy has its own uncertainties or drawbacks.

Reducing Program Costs Through Efficiencies

This report already examined the potential to reduce Medicare’s financing needs (i.e. its costs) by creating incentives for beneficiaries and providers to make more efficient use of health care services. Because insurance insulates patients and providers from the true cost of care, they consume more of it than they would if they had to bear all the cost. For individuals who could not otherwise afford needed health care, insurance is fulfilling its primary purpose — to assure financial access. However, insurance also results in the use of health care services whose costs exceed their value to the patient.

So-called incremental options such as those contained in the Balanced Budget Act of

1997 (P.L. 105-33) have reduced spending substantially and could continue to be used in the future. These approaches largely rely on reducing or modifying payments to providers of care. A different approach underlies the Breaux-Thomas “premium support” proposal, the more recent version introduced into the 106th Congress by Senators Breaux and Frist, and the proposal from the Clinton administration. Proponents of these latter plans argue that they create incentives for health plans to compete for beneficiaries by providing health care more efficiently and hence at less cost. Under premium support, government subsidies would be structured to encourage beneficiaries to choose lower cost plans, everything else being equal. Others have suggested variations on the Breaux-Thomas proposal (e.g. Aaron and Reischauer, 1995). If such a plan were to work as intended, Medicare’s actual financing needs could be lower than under current law as analysis in Chapter 2 illustrates. The analysis of revenue options that follows in this chapter considers several alternative scenarios of Medicare’s financing needs. One of these alternatives assumes the Breaux-Thomas or Breaux-Frist plan is adopted and achieves the efficiencies its proponents expect.¹

Asking Beneficiaries To Pay More

Another alternative to increasing tax revenues to meet Medicare’s needs is to ask beneficiaries to pay for a larger share of their health care costs. This could be done in two ways: increasing Medicare’s premiums and/or cost-

sharing requirements or reducing the benefits covered by Medicare. Recent estimates indicate that in 1998 the average beneficiary in traditional Medicare faced \$563 in premiums and \$909 in cost-sharing for a total liability of \$1,472. This represented 21 percent of all Medicare spending. When other, non-covered services are taken into account, the average beneficiary paid about 19 percent of her income out-of-pocket for health care. With no changes, beneficiary liability² is projected to more than double to \$3,074 by 2025. This will represent 26 percent of Medicare spending, and with the average beneficiary will spend about 29 percent of her income out-of-pocket (Moon, 1999). Beneficiaries’ contributions rise with overall Medicare spending because Part B is growing faster than Part A and premiums are 25 percent of Part B expenditures.

At the same time that policy makers are considering options for taxpayer financing of Medicare, beneficiaries could be asked to make additional contributions towards their own health care. This could be done directly by raising Medicare premiums or cost-sharing, for example, or indirectly through tax options that fall heavily on this group. Given the limited incomes of most beneficiaries (as discussed in Chapter 1) and the fact that under current law beneficiaries are already expected to pay for a growing proportion of their Medicare and other health care costs, beneficiaries may be limited in their ability to make up the gap between projected program spending and revenues. Many low income

1 Unless this option does nothing to raise costs to beneficiaries, it should also be viewed as a combination of efficiency and asking beneficiaries to pay more.

2 Beneficiary liability includes Part B premiums and all cost sharing requirements paid by or on behalf of beneficiaries. The costs of uncovered services are not included. Furthermore, beneficiary liability represents the maximum that a beneficiary could owe in premiums and cost sharing; they would not actually incur any of these expenses if they did not use Medicare services.

beneficiaries already depend on Medicaid subsidies to help them pay for the portion of their health care costs not paid by Medicare. Increasing beneficiary liability would require a concomitant rise in low-income subsidies to assure affordable health care for these (and probably additional) beneficiaries.

Using the Budget Surplus

At the end of the 1990s, a combination of fiscal discipline and sustained economic growth eliminated the federal budget deficit and created a surplus. At the beginning of 2000, estimates of this surplus over the 2001 to 2010 period ranged from a estimate of \$746 billion by the Office of Management and Budget (Lew, 2000) to a high estimate of \$1.8 trillion by the Congressional Budget Office (U.S. Congress, January 2000).³ By July, 2000, the CBO estimate of the surplus for the 2001-2010 period had risen to \$2.2 trillion (U.S. Congress, July 2000).⁴ For the first time since the 1960s, the federal government is taking in more money than it is spending.

A number of policy makers on both sides of the political aisle have proposed financing Medicare's future costs with the current non-Social Security budget surplus — the so-called on-budget surpluses. Most prominent are the plans put forth by President Clinton in his 2001 budget submission and by Vice President Gore as part of his presidential campaign. The basic proposal is to allocate some of the budget surplus to the Part A trust fund to extend its solvency.

Projections of the Medicare Part A trust fund indicate that it will maintain a positive balance through 2025. The trust fund reserves are expected to grow from its level of \$141 billion at the end of 1999 to a peak of \$524 billion in 2015 after which the reserves will begin to decline as payroll tax, interest, and other receipts will be insufficient to cover expenditures. If dollars from the on-budget, non-Medicare surplus are added over the next few years to the trust fund's balance, those dollars will increase the balance and earn additional interest so that the fund would remain solvent longer. The budget submission of President Clinton in early 2000, proposed to add nearly \$300 billion from the surplus, extending the life of the trust fund by about 10 years.

Proposals to use part of the federal budget surplus to extend the life of the Part A Medicare trust fund are relatively new because the non-Social Security surplus itself is unprecedented in the post 1960 period. Critics of this strategy argue that augmenting the trust fund in this manner is merely an accounting change that will not help pay for more Medicare spending in the future. This is because revenues will eventually have to be raised to pay off the federal securities issued for money that is posted to the trust funds. Proponents counter that this is a way to fund some of Medicare's future needs in advance.

One way to think about this issue is to consider the nature of a surplus and what policy makers can do with it. In a period of budget surplus, more dollars are coming into the Treasury each year than are needed to cover

3 These estimates are for the on-budget surplus — i.e. they do not include balances or projected revenues and expenditures of the Social Security and Medicare Trust Funds.

4 On-budget surplus (i.e. without balances or projected revenues and expenditures of the Social Security and Medicare Trust Funds). Estimates also assume discretionary spending grows at the rate of inflation after 2000.

current spending commitments. These surplus resources can be devoted to one of three uses: (1) increased spending; (2) reducing taxes; or (3) retiring existing debt held by the public. Under the third of these options, surplus dollars are used to pay the holders of Treasury securities as they come due and the outstanding debt balance falls. If there were no surplus, the Treasury would roll over the securities coming due; in other words, the Treasury would issue new securities and use the proceeds of that borrowing to pay off holders of securities that mature.

The proposal to use the surplus to extend the life of the Medicare trust fund, however, does not fall as neatly into one of the three categories described above. Rather, this proposal involves a three-step process:

- First, the on-budget surplus dollars would be given to the Medicare HI trust fund.
- Second, since the trust fund does not need these resources to pay for current Medicare expenditures it would “loan” the sum to the Treasury to be invested in special Treasury securities.
- The Treasury now has the surplus dollars to use for one of the three things cited above. If the surplus funds are used to buy current goods and services or reduce taxes, the long term ability of the trust fund to meet its obligations would be improved. However, the ability of the government to pay the trust fund when Medicare seeks to redeem its Treasury securities would *not* be improved. Alternatively, if the dollars are used to retire debt held by the public, the government’s ability to pay Medicare costs in the future for its securities would be enhanced. Government spending on debt service costs will be lower because the amount of debt held

by the public will be lowered by the amount of the Medicare surplus that has been used to retire debt held by the public. In addition, a portion of the additional national saving represented by this debt retirement will augment investment, modestly boosting the size of the economy and tax revenues.

Whether the surpluses are used to pay down national debt or used to finance tax cuts and spending increases, Medicare has received “promises to pay” from the rest of government. As long as the trust fund has ample reserves, it will be politically difficult to cut Medicare benefits or raise HI payroll taxes.

In either scenario, when Medicare begins to redeem its securities because Medicare expenditures each year begin to exceed annual receipts into the trust fund, the burdens of meeting these obligations will fall on citizens at that time. At that point, in order to meet its Medicare obligations, the government will either have to raise general revenue taxes, reduce spending on other services, or redeem Medicare’s securities by issuing new debt to the public — that is, to state local and foreign governments, individuals, or businesses and institutions outside of government. If the Medicare’s surpluses have been used to reduce the public debt earlier, then it will be less of a problem to increase the public debt at a later point in time; in that sense, reducing current debt does help with financing Medicare’s future burdens. However, when people buy Treasury bills or bonds (and even though they treat them as assets), this means that other current spending or investment will be lower. Regardless of how the obligations to Medicare are financed, the burdens will be felt at that time.

A related, but somewhat different concept is the creation of a “lock box” to protect whatever balances are in the Part A trust fund. The concept of a “lock box” is probably best thought of as another way in which policy makers are seeking to reassure that public about the commitment to the future of Medicare. The concept essentially means keeping Medicare “off budget” so that any savings generated for the program are kept in Medicare and cannot be used to balance the rest of the budget.

TAX OPTIONS

The analysis in the last chapter indicated that use of the budget surplus, savings through efficiency, or additional beneficiary contributions will not in themselves be sufficient to meet Medicare’s financing needs. Hence, policy makers will need to consider asking taxpayers for the additional revenues. The remainder of this chapter analyzes several strategies for doing just that. In particular, it considers five types of revenue sources:

- **Payroll taxes** – Payroll taxes currently finance Part A of Medicare — 2.9 percent of payroll split evenly between employers and employees. This analysis examines increasing the tax rate in order to meet Medicare’s projected needs.
- **Income taxes** – Income taxes are the major source of general federal revenue which helps fund Part B of Medicare. Tax rates are progressive (i.e. the rates go up with income) and the income tax base excludes income used for many types of expenditures. The analysis examines adding a surcharge to income taxes to shore up Medicare’s needs.
- **Consumption taxes** – There is currently no federal consumption tax. Consumption taxes require that taxpayers pay a certain percentage of their

annual spending to the government. The analysis examines two types of consumption taxes: a “broad” consumption tax in which only a few types of expenditures are excluded from the tax base, and a “narrow” consumption tax in which a larger number of expenditures are excluded.

- **Excise taxes** – Excise taxes are levied on particular types of expenditures. Current federal excise taxes exist for gasoline, tobacco, alcohol, telephone usage, airline travel, and a few other types of consumption. The analysis examines two proposals for using excise taxes to help finance Medicare.
- **Taxation of Medicare benefits for some beneficiaries** – Currently, upper income Social Security beneficiaries pay income taxes on a portion of their Social Security benefits, but not on Medicare. The analysis considers extending this tax to the actuarial value of Medicare for upper-income beneficiaries.
- **Taxation of workers’ health insurance benefits** – Employers who provide health insurance to their employees receive a tax deduction for their expenses, but workers do not currently pay income tax on this form of compensation. The analysis examines the implications of making such health insurance benefits taxable as income to workers.

Some of the proposals examined in this chapter could finance all of the projected shortfall in Medicare by themselves. Others would fill only part of the gap between expected Medicare spending and expected revenues. Because each option has its own set of pluses and minuses, policy makers will have to make trade-offs in solving Medicare’s financing problem. Hence, any piece of financing legislation is likely to draw upon several sources

of new revenues. The goal of the NASI Study Panel on Medicare Financing is to lay out the implications of alternative revenue sources for policy makers in a useful form. By examining each revenue source one at a time, the implications of each revenue strategy become clearer than if several were combined in a package.

Criteria for Analyzing Revenue Options

Chapter 1 suggested some criteria for distinguishing among revenue options for Medicare:

- Ability to raise revenue
- Distribution of burden
- Impacts or distortions on the broader economy
- Administrative efficiency
- Impacts on access to care
- Impacts on incentives for efficient use of health care services
- Effects on other programs
- Connection to Medicare as social insurance
- Other necessary changes

The ability to raise revenue, tells us the extent to which the tax could, by itself, meet Medicare’s financing needs. If it could finance Medicare, what tax rate would be necessary to do it?

The distribution of burden has to do with the portion of the population that actually pays the taxes. Different taxes raise revenues from different segments of the population. Hence, another key consideration for policy makers is the burden each potential revenue source places on different types of taxpayers. For example, what are the relative impacts on low income versus high income taxpayers? working age versus retired taxpayers? Is it

affordable for each of these groups? Do we believe the distribution of burden is fair? Although the study panel does not try to determine normative questions such as the fairness of each revenue option, it does illustrate the financial burden each would place on a variety of different types of families. Such analysis is designed to help policy makers weigh the burdens placed by each tax against the revenue raised and the other relevant considerations outlined in this chapter.

The third criteria refers to **the impact of the tax on the larger economy**. All taxes introduce a certain amount of “inefficiency” into the economy. They either compel taxpayers to spend their money in a way they would not otherwise, or they encourage taxpayers not to engage in the activity that is taxed. In the latter case, the taxpayer does not pay the tax, but is still worse off because she decided not to do something she would have otherwise chosen to do. By distorting economic activities, taxation brings about an additional burden of “welfare loss” beyond the tax revenues collected. Because different taxes introduce different types of distortions and impose different degrees of welfare loss, policy makers will likely want to consider the efficiency of alternative Medicare revenue sources. However, efficiency may conflict with other desired characteristics of a tax. For example, a lump sum tax in which each taxpayer pays a set amount no matter what their circumstances is relatively efficient. Because it is independent of the taxpayer’s behavior, it poses less welfare loss than taxes tied to economic behavior such as work or consumption. However, requiring a set amount from each taxpayer may prove particularly burdensome on individuals with lower financial resources, and policy makers may judge it to be unfair (Rosen, 1985).

Administrative efficiency refers to the costs associated with collecting taxes. For some revenue sources such as payroll or income taxes, we already have an infrastructure in place to collect the money and assure compliance. Increasing the tax rates or the base of income that is taxable would be relatively straightforward. Other revenue sources, such as a federal consumption tax, would be new and would require a significant upfront investment in order to be implemented. They would require a new infrastructure to collect the revenues.

Some potential revenue options may have other impacts that policy makers may also wish to consider. To what extent are the options related to health or program eligibility (as is the payroll tax) and hence, consistent with Medicare as social insurance? Do they adversely affect access to health care? Do taxes that affect the health care system change incentives for the efficient delivery of health? Is the tax likely to increase reliance on other public programs including Medicaid, Supplemental Security Income (SSI), Social Security or locally-administered income support programs? Will they require other coordinating changes in law or public policy in order to be implemented? The analysis that follows identifies such potential impacts to the extent they apply to any particular revenue source.

To help apply the first two of these criteria — the ability of each revenue strategy to meet Medicare’s financing needs and who bears the burden of the increased taxes — the study panel contracted with Andrew Lyon to produce analysis of each revenue option.⁵ The panel draws from other sources in applying the other criteria to each option.

Revenue Estimates

What is the revenue raising ability of each of the six types of taxes identified above? For three of these tax strategies (payroll, income, consumption), Lyon’s analysis for the study panel turns this question around and asks what tax rates would be required to finance the gap between projected Medicare expenditures and revenues. For the remaining tax strategies, he estimated the percentage of this gap that specific, illustrative tax policies would fill.⁶ In total, he examined eight potential changes in federal tax policy:

1. increasing the Medicare payroll tax rate.
2. imposing a surcharge defined as a percentage of income tax liability otherwise owed.
3. a broad-based consumption tax that excludes housing costs, financial services, and the portion of government and not-for-profit organizations attributable to labor.
4. a narrow-based consumption tax that excludes everything excluded in the broad-based tax as well as food eaten at

5 Andrew B. Lyon is Associate Professor of Economics, University of Maryland and a former staff economist at both the Council of Economic Advisers (1992-1993) and at the Congressional Joint Committee on Taxation (1985-1987).

6 Lyon used these two approaches because of differences in the specificity of the tax options he was asked to examine. In the case of payroll, income, and consumption taxes, the study panel specified no particular tax rate. He calculated the rate under each type of tax that would be necessary to meet Medicare’s financing needs. The other tax options specified a tax rate. They might or might not be sufficient to meet Medicare’s financing needs. For these taxes, he estimated the percentage of the gap in Medicare financing that the option would raise.

- home, medical care, banking services, new housing construction, and purchases by non-profit organizations.
5. a doubling of all federal excise tax rates.
 6. a doubling of the excise tax rates on alcohol and tobacco.
 7. taxation of 85 percent of the actuarial value of Part A and 75 percent of the actuarial value of Part B according to the same rules for taxation of Social Security benefits.
 8. inclusion of employer contributions for employees' health care, health insurance premiums and long-term care insurance premiums in the taxable income of employees.

Revenue Targets

Lyon produced estimates for the period 2000-2030 during which the Baby Boom generation will retire — a period consistent with the rest of the study panel's work. This analysis also assumes all revenues raised according to current (1998) law would continue. In particular, it uses the Medicare trustees' intermediate projections of payroll tax revenues for Part A through 2030. For Part B, it assumes that general revenue contributions would remain the same through 2030 as a percentage of GDP as they were in 1999 (0.71 percent). Hence, in each year, the deficit for Parts A and B are the differences between projected expenditures and projected revenues as a percentage of GDP. Beneficiaries are assumed to continue paying premiums equal to 25 percent of Part B costs.

As chapter 2 illustrated, Medicare expenditures over the next three decades are dependent, in part, on the types of benefits

provided and the incentives for health care consumption inherent in the program's structure. Given this uncertainty, the study panel chose to examine three different scenarios for the amount of money that would be needed to finance Medicare.

As an "intermediate" scenario, the study panel used the 1998 "intermediate" spending projections of the Medicare trustees.⁷ Under this scenario, the average annual gap between projected expenditures and revenues between 2000 and 2030 is 0.838 percent of GDP.

As an upper bound on projected spending, the study panel assumed Congress would add one of the drug benefits whose costs were estimated by Actuarial Research Corporation and discussed in the previous chapter. The panel chose a benefit with a \$200 deductible, 50 percent copayment, and full coverage of expenses after the beneficiary has paid \$3,000 out-of-pocket in any given year. Under this "enhanced benefits" scenario, the drug coverage would be included in Part B with beneficiaries paying 25 percent of its costs in premiums. The study panel chose this particular benefit structure because it is similar in its financial protection to other proposals brought before Congress in recent years. However, as discussed in chapter 2, the cost of the \$3,000 "stop loss" for out-of-pocket drug expenses becomes particularly expensive with time. Under this "enhanced benefits" scenario, the annual average gap between projected Medicare expenditures and revenues rise to 1.34 percent of GDP.

As a proxy for the lower bound on projected spending, the study panel assumed adoption

7 Chapter 2 contains an extensive discussion about the study panel's decision to use the 1998 projections of the Medicare trustees as a baseline and the implications of that decision given the marked improvement in Medicare's financial outlook in the subsequent two trustees' reports.

of the final Breaux-Thomas proposal to the National Bipartisan Commission on Medicare. It further assumed that Medicare would realize all savings estimated by the Commission staff under this premium support proposal (Lemieux, 1999). Proponents of the Breaux-Thomas proposal (and its subsequent Breaux-Frist proposal to Congress) argue that they would create savings by encouraging health plans to lower costs by being more efficient in order to attract more beneficiaries to enroll. Because of the optimistic assumptions in the Commission staff's analysis, they represent a reasonable lower bound on projected Medicare spending over

the next three decades. Under this "assumed savings" scenario, the annual average gap between projected expenditures and revenues is 0.147 percent of GDP.

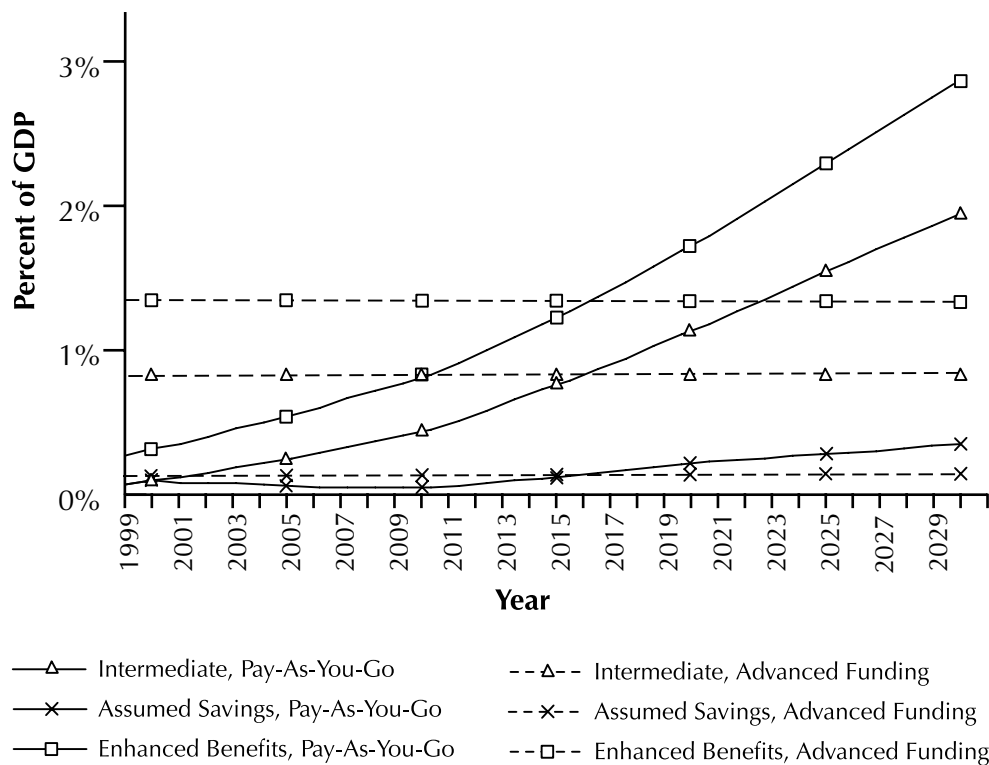
Figure 3-1 shows the gap between projected expenditures and revenues in each year under the three scenarios outlined. These gaps represent the amount of money Lyon sought to raise in his tax analysis for the study panel.

Pay-As-You-Go Versus Advance Funding

As discussed in chapter 1, policy makers will have to decide to what degree they want to advance fund the projected deficits in

Figure 3-1

Projected Deficits in Medicare Taxpayer Contributions as a Percent of Gross Domestic Product (GDP), 1999-2030^a



a Analysis uses Medicare Trustees' 1998 intermediate cost projections as baseline for estimating Medicare's future financing needs.

Source: National Academy of Social Insurance, 2000.

Medicare revenues. The study panel's analysis considers two scenarios for the timing of the revenues raised. Under the "pay-as-you-go" scenario, the analysis assumes Medicare raises only the amount of money needed to pay that year's projected deficit in Medicare funding. By the years closest to 2030, the amount would get to be quite large. Under the "advance funding" scenario⁸, the analysis estimates the *uniform* share of GDP that would be raised each year between 2000 and 2030 and placed in a trust fund such that the trust fund would be solvent through 2030, but exhausted in 2031.⁹ Because Medicare's financing gap increases over time (figure 3-1), the advance funding scenario means that taxpayers would pay more in the earlier years and accumulate promises to make funds available later to finance the program. As with current Medicare and Social Security trust funds, balances in the early years would earn interest that also adds to the trust fund.

It is hard to imagine that policy makers would allow such a trust fund to be exhausted in 2031 (and hence, unable to pay bills in the subsequent year). Policy makers would presumably change program financing to prevent such an outcome. However, given the uncertainty already inherent in projections 30 years into the future, this stylized

scenario is a reasonable way to illustrate how advance funding affects the amount of money that needs to be raised and how different types of taxpayers are affected.

Results

Tables 3-1 and 3-2 present the results of the analysis of tax options conducted for the study panel by Lyon. Table 3-1 shows the tax rates necessary to close Medicare's funding gap by increasing the payroll tax or income tax or imposing a consumption tax. Table 3-2 shows the results of increasing federal excise taxes, adding taxation of some beneficiaries' Medicare benefits, and adding taxation of employer-provided health insurance benefits. Because each of the options in this table have an implicit tax rate included in the proposal itself, the table displays the percentage of the revenue gap in a given year met by the proposal.

For each option, there are estimates for the three different revenue targets described above ("enhanced benefit," "assumed savings," and "Trustees' intermediate"). In addition, each result is presented under a pay-as-you-go scenario as well as an advance funding scenario. However, to simplify comparison and discussion of the alternatives, this section of the report focuses only on the advance funding results. One way to think

8 Chapter 1 contains a more extensive discussion of the concept of "advance funding" and uses proposals by Gramm, Saving and Rettenmeier and others to transform Medicare into a private, individualized system of financing as examples of "total advance funding." Such proposals differ from the advance funding scenarios analyzed here in that the analysis in this chapter assumes that all revenues raised under current Medicare law would continue. Because a large portion of current revenues are financed on a "pay as you go basis," none of the financing scenarios here would involve complete advance funding. In addition, none of the options in this chapter include any form of private accounts like those advocated by Gramm et al.

9 For the "advance funding" scenarios, Lyon's model held Medicare's financing needs to be a constant percentage of GDP over the 30 year period. Because the model allows the tax base underlying the payroll and income tax options to increase over time, and because GDP is projected to increase faster than the wage base, the tax rates resulting from his model are actually not "uniform" over the whole period; they rise somewhat with time. Because the goal would be to have a uniform tax rate under the advance funding scenario, the results presented in this report are the tax rates averaged over the whole period.

BOX 3-1: HOW TO READ TABLES 3-1 AND 3-2

For each policy option presented in Table 3-1 and 3-2, several different estimates are presented reflecting uncertainty about program costs, changes over time, and decisions about whether to raise money before it is needed by Medicare. To use Table 3-1 to compare the magnitudes of alternative policies to meet Medicare's financing needs, you must first make an assumption about the program's likely spending for benefits in the future. If you believe that the program will achieve savings through greater efficiency as assumed by the staff of the National Bipartisan Commission on the Future of Medicare, then you should compare the lines in the table labeled, "efficiency savings." If you believe the program is likely to add a relatively generous outpatient prescription drug benefit, then you should compare the lines labeled, "enhanced benefits." The study panel considered these two scenarios to represent the likely lower and upper bounds respectively for future Medicare spending. If you believe the Medicare Trustees' intermediate projections represent the best estimate of future Medicare spending, then you should compare the lines labeled "intermediate."

Table 3-1 indicates the increase in tax rates that would be necessary under each revenue option to fill the projected gap in Medicare financing through 2030. Existing tax contributions are assumed to continue. The footnotes to the table provide more precise information about how to interpret these numbers for each policy. The "advance funding" column indicates an average tax rate that, if imposed for the entire thirty-year period, would fill in the gap. The "pay as you go" columns indicate tax rates necessary to fill the projected gap in spe-

cific years. Because Medicare's revenue needs increase over time, these tax rates start out lower than the "advance funding" rate, but rise each year and eventually surpass the "advance funding" rate by the end of the 30 year period. (This can be seen graphically in Figure 3-1, which shows the gap over time.)

Consider the "intermediate" and "advance funding" scenarios. Table 3-1 shows that increasing the payroll tax by 1.95 percentage points (i.e. for a total payroll tax of $2.90 + 1.95 = 4.85$ percent of payroll), imposing an 8.43 percent income tax surcharge on all income taxes otherwise owed, imposing a 2.02 percent broad-based or a 3.29 percent narrow-based consumption tax would all meet Medicare's average revenue needs.

Table 3-2 is similar except that all of the options are presented with a specific tax rate implicit in them. Hence, the information displayed in the table is the percentage of the gap in Medicare's projected revenues filled by the option in each of the selected years presented. Because these options generally do not raise enough to fully fill the gaps, in all cases, we use this alternative way of presenting our results. Under the "advance funding" scenario, the amount of money needed is the same each year (as a percentage of GDP), but the amount of money raised by these policies changes each year. Hence, the table presents results for selected years for both the "advance funding" and "pay as you go" scenarios.

The results in Table 3-2 show that whether or not any of these options by themselves is sufficient to meet Medicare's needs (i.e. whether or not the numbers in the table are above 100 percent) depends on the year examined and one's assumptions about future Medicare spending.

about the advance funding results is as the average increase in tax rates needed to fund Medicare for the years 1999 through 2030 (for Table 3-1) or as the average annual percentage of Medicare's revenue needs met by

particular revenue option for the years 1999 through 2030 (for Table 3-2). Box 3-1 provides greater detail about how to read these tables.

Table 3-1

Tax Rates Necessary to Meet Medicare’s Projected Revenue Needs Through 2030 Under Alternative Scenarios, In Percent

	<u>Advanced Funding</u>	<u>Pay-As-You Go Selected Years</u>		
		<u>2001</u>	<u>2015</u>	<u>2030</u>
Payroll Tax Increase^a				
Assumed Savings	0.34%	0.18%	0.31%	0.82%
Intermediate	1.95	0.27	1.84	4.77
Enhanced Benefits	3.11	0.79	2.95	7.06
Income Tax Surcharge^b				
Assumed Savings	1.48	0.82	1.33	3.47
Intermediate	8.43	1.20	8.00	20.16
Enhanced Benefits	13.49	3.50	12.80	29.85
Broad Based Consumption Tax^c				
Assumed Savings	0.40	0.24	0.36	0.86
Intermediate	2.02	0.33	1.91	4.74
Enhanced Benefits	3.19	0.87	3.03	7.00
Narrow Based Consumption Tax^d				
Assumed Savings	0.62	0.37	0.57	1.39
Intermediate	3.29	0.52	3.12	7.78
Enhanced Benefits	5.22	1.40	4.96	11.49

- a Analysis assumes current 2.9 percent HI payroll tax continue. Tax rates estimated here would be added to that 2.9 percent.
- b Surcharge rate is percentage of income tax liability under current law. Analysis assumes current HI payroll tax, current shares of GDP in general revenues and beneficiary premiums allocated to Medicare continue.
- c Analysis assumes current HI payroll tax, current shares of GDP in general revenues and beneficiary premiums allocated to Medicare continue. Imputed rent on owner occupied housing, tenant-paid rent, imputed value of financial services, and labor for government and nonprofit output excluded from tax base. Base in 1994 would have been 67 percent of the economy.
- d Analysis assumes current HI payroll tax, current shares of GDP in general revenues and beneficiary premiums allocated to Medicare continue. Excludes from tax base everything excluded from broad-based consumption tax plus food, medical care, brokerage and banking services, purchases by nonprofit organizations, and new housing construction. Base in 1994 would have been 41 percent of the economy.

Source: National Academy of Social Insurance, 2000.

Taxes To Fully Close the Financing Gap. The results show that it could be possible to finance the entire gap in projected Medicare revenues with increases in the payroll tax or income tax, or imposition of a consumption tax (even if a single revenue source might be undesirable or unlikely for other reasons).

Payroll Tax. The results indicate that an added payroll tax increase of between 0.34 and 3.11 percent of payroll (depending on which set of Medicare spending projections one chooses) put in place for the full 30 years examined (i.e. advance funding) would close the gap.¹⁰ These payroll taxes would be on

¹⁰ These added tax rates represent a combination of the portions paid by employees and employers.

Table 3-2

Percent of Medicare's Revenues Needs Met Under Alternative Policies In Selected Years

	Advanced Funding Selected Years			Pay-As-You Go Selected Years		
	2001	2015	2030	2001	2015	2030
Double All Federal Excise Taxes^a						
Efficiency Savings	362%	310%	310%	655%	345%	132%
Intermediate	63	54	54	446	57	23
Enhanced Benefits	40	34	34	153	36	15
Double Federal Taxes on Alcohol and Tobacco^a						
Efficiency Savings	77	66	66	139	73	28
Intermediate	13	12	12	95	12	5
Enhanced Benefits	8	7	7	32	8	3
Tax Some Beneficiaries for Value of Medicare^b						
Efficiency Savings	89	136	178	161	151	76
Intermediate	16	30	49	111	31	20
Enhanced Benefits	11	21	37	42	23	17
Include Value of Employer-Sponsored Health Insurance Benefits as Taxable Income^c						
Efficiency Savings	470	536	617	852	597	263
Intermediate	82	94	108	199	99	45
Enhanced Benefits	52	59	68	82	62	31

- a Analysis assumes current HI payroll tax, current shares of GDP in general revenues and beneficiary premiums allocated to Medicare continue.
- b Analysis assumes current HI payroll tax, current shares of GDP in general revenues and beneficiary premiums allocated to Medicare continue. Tax would be structured parallel to current taxes on social security. Beneficiaries with adjusted gross income of \$44,000 or more would include 85% of the actuarial value of HI and 75% of the value of SMI as taxable income. Beneficiaries with adjusted gross income between \$25,000 and \$44,000 would include 50% of the actuarial value of HI and SMI as taxable income. The actuarial value of HI and SMI in a given year is the total benefits paid divided by the number of beneficiaries. In 1999, the actuarial value was estimated to be \$ 4,079 for HI and \$2,441 for SMI (U.S. Congress, Committee on Ways and Means, 1998).
- c Analysis assumes current HI payroll tax, current shares of GDP in general revenues and beneficiary premiums allocated to Medicare continue. Analysis also assumes employer contributions for health care, health insurance, and long term care insurance would be included in employee's taxable income.

Source: National Academy of Social Insurance, 2000.

top of the 2.9 percent of payroll already levied.

Income Tax. An income tax surcharge of between 1.48 and 13.49 percent for the full 30 year period would also close the gap. This

surcharge represents a percentage of income taxes otherwise owed by a taxpayer. Hence, for a person who otherwise owes \$1000 in taxes, a 1.48 percent surcharge would require them to pay an additional \$14.80 in income

taxes. A 13.49 percent surcharge would require them to pay an additional \$134.90.

Consumption Taxes. The broad-based consumption tax, which would tax 67 percent of the economy (GDP),¹¹ would require a tax rate of between 0.40 and 3.19 percent under the advance funding scenario to close the gap in Medicare financing. The narrow-based consumption tax, whose base includes 40.7 percent of GDP, would require somewhat higher tax rates to cover Medicare's revenue shortfall — between 0.62 and 5.22 percent under the advance funding scenario.

Taxes That Would Contribute To Closing The Gap. For the other tax proposals examined, whether they could finance all or only a portion of the gap depends on Medicare's spending. In each case, the magnitude of changes necessary to finance Medicare are particularly sensitive to assumptions about the program's future costs.

Excise Taxes. Excise taxes are taxes on the consumption of specific items. For FY 2000, federal excise taxes are estimated to total \$68.4 billion with slightly over half of those revenues coming from a gasoline tax to support highways (Figure 3-2). The analysis presented in Table 3-2 does not account for behavioral changes that would occur as a result of increasing excise taxes — i.e. when the taxes go up, consumption of the taxed

goods will go down, thus cutting into the actual revenue raised. Hence, these estimates somewhat overstate the proportion of Medicare's financing needs these options would meet.

Under the “assumed savings” scenario (i.e. lower bound on Medicare cost projections), a doubling of all federal excise taxes would more than cover Medicare's needs. If spending turns out to be more than assumed under this scenario, this tax option would likely cover only a portion of the financing gap. Policy makers may prefer to raise only those excise taxes on alcohol and tobacco since these commodities negatively affect health. However, raising only alcohol and tobacco taxes reduces the amount of revenue raised for Medicare. For example, in 2015¹², under the intermediate scenario, doubling all excise taxes would cover 54 percent of the projected gap in Medicare funding under advance funding. If only alcohol and tobacco taxes were doubled, revenues would cover only 12 percent of the projected gap.

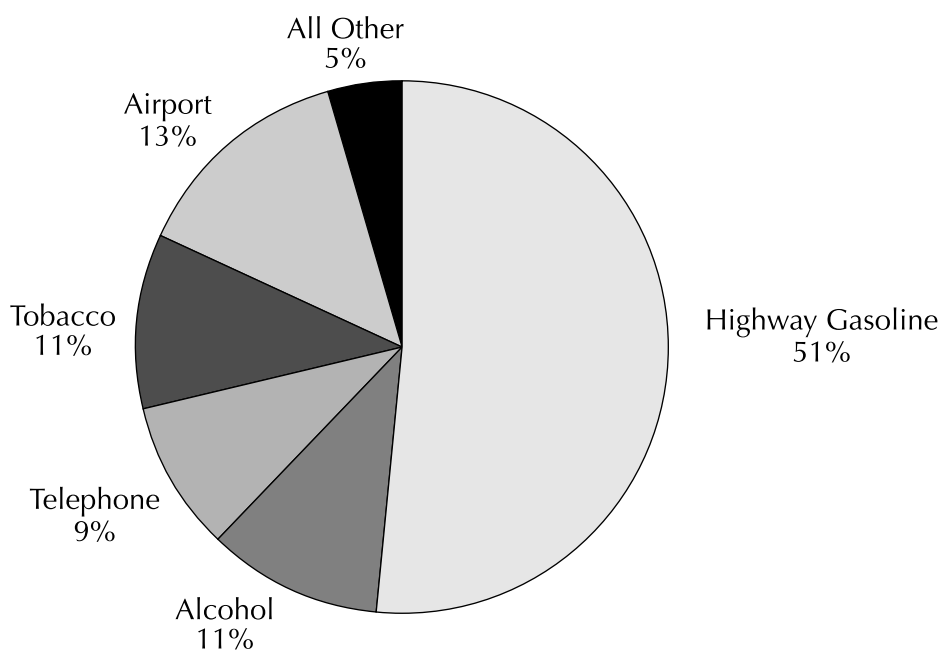
Taxing Medicare Benefits. The proposal examined here to tax upper-income beneficiaries for the actuarial value of part of Medicare parallels the way in which upper-income Social Security recipients already pay taxes on their Social Security checks. For married beneficiaries with modified adjusted gross income (AGI) in excess of \$44,000

11 The broad-based consumption tax base come from a proposal developed by the Congressional Budget Office (U.S. Congress, 1997). The base exclude consumption in the form of (a) imputed rent on owner-occupied housing, (b) tenant-paid rent, (c) the imputed value of financial services, and (d) the portion of output of governmental and non-profit entities attributable to labor services. In 1994, the resulting tax based was 67 percent of GDP. This analysis holds this percentage constant over the entire 2000-2030 period.

12 The amount of the shortfall in Medicare financing covered by the excise options goes down over time under both the advance funding and pay-as-you go scenarios. Under advance funding, the decrease occurs in the initial years and is a result of projections in excise tax revenue under current law. Under pay-as-you-go, it is a result of increases in Medicare's financing shortfall over time. The year 2015 is chosen as an illustrative year in the middle of the 30-year period examined by the study panel.

Figure 3-2

Estimated Federal Excise Tax Receipts by Source, Fiscal Year 2000



Total Estimated Tax Receipts, Fiscal Year 2000 = \$68.4 Billion

Source: National Academy of Social Insurance, 2000; data from the Office of Management and Budget and the Congressional Budget Office.

(\$34,000 single individuals), 85 percent of the insurance value of Part A and 75 percent of the value of Part B is counted as income. These proportions are roughly equivalent to the proportions of Medicare spending paid for by non-beneficiaries through payroll taxes and general revenue subsidies. For married beneficiaries with incomes less than \$44,000 but above \$32,000 (\$25,000 for single individuals), 50 percent of the value of Parts A

and B would count as income. These thresholds are not indexed each year for inflation. Because revenues from this tax increase over time as a larger percentage of Medicare benefits are subject to it each year,¹³ this option covers a larger percentage of the “advance funding” annual revenue targets over time (an increase from 16 percent in 2000 to 49 percent in 2030 under the “intermediate” scenario).

¹³ The income thresholds are not indexed over time. Because the income thresholds are not indexed over time, an increasing percentage of benefits are subject to the tax over time. For the “intermediate” scenario for 2010-2030, the estimates assume taxes as a percent of benefits increase by one percent annually. For the years before 2010, the estimates assume increases in taxes used by the Congressional Budget Office in its ten-year projections of revenues that would be raised by this proposal (U.S. Congress, 1999). Tax estimates under the “expanded benefits” and “assumed savings” scenarios are proportionately adjusted from those presented for the “intermediate” scenario based on the differences in Part A and Part B expenditures under those projections.

Taxing Employer Health Benefits. Table 3-2 also shows the impact of taxing the value of employer contributions to health care and health insurance as part of employees' income. Because revenues from this tax increase also increase over time,¹⁴ they cover a greater portion of Medicare's needs each year under "advance funding" (82 percent in 2001, 108 percent in 2030 under the "intermediate" scenario). However, under "pay-as-you-go," Medicare's needs grow at a faster rate than do revenues from this tax (199 percent in 2001, 45 percent in 2030 under the "intermediate" scenario). Hence, with time, this option covers less of Medicare's annual financing gap.

Further Analysis Of Options

Looking only at tax rates gives little insight into how various options affect families. How much would different types of taxpayers pay under each of the Medicare tax options described above? Would better-off families have to pay a larger proportion of their incomes than would families of more modest means? To examine these questions, Lyon estimated how six of the eight tax options would affect several illustrative households. The two options for increasing excise taxes are not included in the analysis. Because the impact of excise taxes depends on individual consumption of specific commodities, addi-

tional data would have been needed to analyze these taxes.¹⁵

One way to describe the burden of a tax is in terms of progressivity and regressivity. A progressive tax is one in which the average tax rate rises with income. A regressive tax is one in which it falls. A proportional tax is one in which the ratio of taxes paid to income is the same for all incomes. Lyon's analysis for the study panel is suggestive of the relative regressivity or progressivity of the various tax options for the representative families. However, more conclusive results would require extending the analysis to a greater variety of representative families, with different characteristics and income levels. It should be noted that for a given revenue objective, *all* taxes have the same *average* burden across households. To the extent that the analysis seems to portray one tax uniformly lower than another, it is an artifact of the representative families chosen, and is not representative for the population as a whole.

The analysis examines seven illustrative households chosen by the study panel:

- Household #1 is a high-wage, single individual. Wages, before employee deductions for pension and health care, are \$64,800. Interest and dividends are \$7,200.
- Household #2 is a high-wage family with two children. Wages, before

14 Estimated tax revenues for FY 1999-2003 are from the Joint Tax Committee (U.S. Congress, 1998). The estimates assume that employer contributions (and contributions through a cafeteria plan) for health care, health insurance premiums, and long-term care insurance premiums would be included in the taxable income of the employee. The revenue projection also eliminates the deduction for health insurance premiums by the self-employed. The estimates include only additional income tax receipts and do not consider payroll tax receipts. Estimates for 2004-2008 assume tax revenues increase at the rate of projected private health insurance expenditures (U.S. Department of Health and Human Services, 1998). Estimates for 2009-2030 assume a constant annual increase in income tax receipts of 5.6 percent.

15 Studies generally find that excise taxes on goods such as alcohol and tobacco are regressive, while taxes on gasoline may be proportional to total consumption (U.S. Congress, 1990; Lyon and Schwab, 1995; Poterba, 1991).

employee deductions for pension and health care, are \$100,000. Interest and dividends are \$20,000.

- Household #3 is a low-wage, single individual. Wages, before employee deductions for pension and health care, are \$16,000. The individual has no other sources of income.
- Household #4 is a single mother with two children. Wages, before employee deductions for pension and health care, are \$37,500. Interest and dividends are \$500.
- Household #5 is an older couple, with one spouse working and one retired, on Medicare. Wages, before employee deductions for pension and health care, are \$35,000. Pension and investment income total \$13,000. Social Security benefits are \$12,000.
- Household #6 is a low-income widow on Medicare. Social Security benefits are \$8,000. Pension and investment income total \$5,000.
- Household #7 is a retired couple on Medicare. Social Security benefits are \$14,000. Pension and investment income total \$6,000.

Based on the designated income levels and household composition, other characteristics were chosen to be representative for the designated household. These characteristics are based in part on data from the 1997 Consumer Expenditure Survey (Lyon, 2000). Appendix B provides a more detailed list of relevant characteristics of the households.

Although these households were chosen to be illustrative rather than representative, it is useful to look at how the three hypothetical elderly households fare since they are beneficiaries of the program whose financing this

report analyzes and because their lower incomes might make them economically vulnerable. Households #5 and #7 are married couples assumed to have total money income of \$57,625 and \$20,000 respectively. In 1998, married couples made up 41 percent of all elderly households. In that same year, 63 percent of married couples over age 65 had incomes below \$60,000, and 23 percent had incomes below \$20,000. Household #6 is an unmarried woman assumed to have total money income of \$13,000. In 1998, single women constituted 44 percent of all households over age 65. Forty-two percent of this group had incomes below \$13,000 (Social Security Administration, 2000).

Tables 3-3 through 3-5 show the effects of the selected taxes on the representative households, for the tax rates under the “intermediate,” “enhanced benefit,” and “assumed savings” assumptions. For the payroll, income, and consumption taxes, the analysis assumes the “advance funding” tax rates. If policy makers chose to finance the gap in Medicare funding on a pure “pay-as-you-go” basis, the tax burden on each of the households (in actual dollars and percent of income) would start out significantly lower than the “advance funding” rates and end up in 2030 significantly higher. The “advance funding” scenario has the advantage of evening out the financing burden over time.

The analysis that follows discusses the results of Lyon’s calculations of the burden on taxpayers posed by each Medicare financing option. In addition, it discusses how these particular proposals fare when held up to the other criteria laid out in Chapter 1 and above. A full technical analysis of all implications of each tax strategy is outside the realm of this report. Although NASI’s Study Panel

Table 3-3

Distributional Analysis for Representative Families^a – Intermediate Assumptions

	Household #1: High wage, single	Household #2: High wage, family	Household #3: Low wage, single	Household #4: Single mother	Household #5: Couple, one retired	Household #6: Widow, low income	Household #7: Couple, retired
Wage tax (combined rate)	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%
Change in tax	\$1,032	\$1,593	\$289	\$643	\$600	\$0	\$0
Tax as % of economic income	1.28%	1.19%	1.80%	1.42%	0.78%	0.00%	0.00%
Income tax surcharge	8.43%	8.43%	8.43%	8.43%	8.43%	8.43%	8.43%
Change in tax	\$1,151	\$1,183	\$111	\$170	\$531	\$0	\$0
Tax as % of economic income	1.43%	0.89%	0.70%	0.38%	0.69%	0.00%	0.00%
Broad base consumption tax	2.02%	2.02%	2.02%	2.02%	2.02%	2.02%	2.02%
Change in tax	\$646	\$1,141	\$198	\$527	\$965	\$166	\$362
Tax as % of economic income	0.80%	0.86%	1.24%	1.17%	1.25%	1.40%	1.65%
Narrow base consumption tax	3.29%	3.29%	3.29%	3.29%	3.29%	3.29%	3.29%
Change in tax	\$872	\$1,542	\$269	\$571	\$1,273	\$170	\$366
Tax as % of economic income	1.08%	1.16%	1.68%	1.26%	1.65%	1.44%	1.67%
Inclusion of 100% of employer-provided health insurance							
Change in tax	\$700	\$1,260	\$0	\$675	\$600	\$0	\$0
Tax as % of economic income	0.87%	0.94%	0.00%	1.50%	0.78%	0.00%	0.00%
Inclusion of 85% of HI and 75% of SMI for beneficiaries							
Change in tax	\$0	\$0	\$0	\$0	\$1,513	\$0	\$0
Tax as % of economic income	0.00%	0.00%	0.00%	0.00%	1.96%	0.00%	0.00%

^a See Appendix B for details of illustrative families' financial circumstances

Source: National Academy of Social Insurance, 2000.

Table 3-4

Distributional Analysis for Representative Families^a – Assumed Savings (Low Cost) Assumptions

	Household #1: High wage, single	Household #2: High wage, family	Household #3: Low wage, single	Household #4: Single mother	Household #5: Couple, one retired	Household #6: Widow, low income	Household #7: Couple, retired
Wage tax (combined rate)	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
Change in tax	\$180	\$278	\$50	\$112	\$105	\$0	\$0
Tax as % of economic income	0.22%	0.21%	0.31%	0.25%	0.14%	0.00%	0.00%
Income tax surcharge	1.48%	1.48%	1.48%	1.48%	1.48%	1.48%	1.48%
Change in tax	\$202	\$208	\$20	\$30	\$93	\$0	\$0
Tax as % of economic income	0.25%	0.16%	0.12%	0.07%	0.12%	0.00%	0.00%
Broad base consumption tax	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%
Change in tax	\$128	\$226	\$39	\$104	\$191	\$33	\$72
Tax as % of economic income	0.16%	0.17%	0.25%	0.23%	0.25%	0.28%	0.33%
Narrow base consumption tax	0.62%	0.62%	0.62%	0.62%	0.62%	0.62%	0.62%
Change in tax	\$164	\$291	\$51	\$108	\$240	\$32	\$69
Tax as % of economic income	0.20%	0.22%	0.32%	0.24%	0.31%	0.27%	0.32%
Inclusion of 100% of employer-provided health insurance							
Change in tax	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tax as % of economic income	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inclusion of 85% of HI and 75% of SMI for beneficiaries							
Change in tax	\$0	\$0	\$0	\$0	\$1,167	\$0	\$0
Tax as % of economic income	0.00%	0.00%	0.00%	0.00%	1.51%	0.00%	0.00%

Key: N/A – not applicable.

^a See Appendix B for details of illustrative families' financial circumstances
Source: National Academy of Social Insurance, 2000.

Table 3-5

Distributional Analysis for Representative Families^a – Enhanced Benefit (High Cost) Assumptions

	Household #1: High wage, single	Household #2: High wage, family	Household #3: Low wage, single	Household #4: Single mother	Household #5: Couple, one retired	Household #6: Widow, low income	Household #7: Couple, retired
Wage tax (combined rate)	3.11%	3.11%	3.11%	3.11%	3.11%	3.11%	3.11%
Change in tax	\$1,646	\$2,541	\$460	\$1,025	\$957	\$0	\$0
Tax as % of economic income	2.05%	1.91%	2.88%	2.27%	1.24%	0.00%	0.00%
Income tax surcharge	13.49%	13.49%	13.49%	13.49%	13.49%	13.49%	13.49%
Change in tax	\$1,841	\$1,893	\$178	\$273	\$850	\$0	\$0
Tax as % of economic income	2.29%	1.42%	1.11%	0.60%	1.10%	0.00%	0.00%
Broad base consumption tax	3.19%	3.19%	3.19%	3.19%	3.19%	3.19%	3.19%
Change in tax	\$1,020	\$1,802	\$313	\$832	\$1,525	\$262	\$571
Tax as % of economic income	1.27%	1.35%	1.96%	1.84%	1.98%	2.22%	2.61%
Narrow base consumption tax	5.22%	5.22%	5.22%	5.22%	5.22%	5.22%	5.22%
Change in tax	\$1,383	\$2,447	\$426	\$906	\$2,020	\$269	\$581
Tax as % of economic income	1.72%	1.83%	2.66%	2.01%	2.62%	2.28%	2.66%
Inclusion of 100% of employer-provided health insurance							
Change in tax	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tax as % of economic income	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inclusion of 85% of HI and 75% of SMI for beneficiaries							
Change in tax	\$0	\$0	\$0	\$0	\$1,762	\$0	\$0
Tax as % of economic income	0.00%	0.00%	0.00%	0.00%	2.29%	0.00%	0.00%

Key: N/A – not applicable.

a See Appendix B for details of illustrative families' financial circumstances

Source: National Academy of Social Insurance, 2000.

on Medicare Financing has been fortunate to have members with significant experience in the area of public finance and taxes, this study panel's main expertise is in the area of health policy. In this report, it chose to examine the general feasibility of alternative strategies for meeting Medicare's financing needs and the major issues each would raise. The panel chose to pay particular attention in this analysis to major considerations of progressivity versus regressivity, the administrative burden posed by each option, and the potential unintended consequences of each option for the larger economy and the health care system.

Payroll Tax Increase

Taxpayer Burden. Wages represent a higher portion of economic income for low-income working households than for higher income working households. This makes the wage tax appear slightly regressive across working households in Tables 3-3 to 3-5. The greatest differential in tax burdens is obviously between working and non-working households.

This tax change would increase the share of taxes paid by current workers relative to other taxpayers. This is because the increased expense of Medicare is assumed to be met only through higher payroll taxes and increased SMI (Part B) premiums. There is no assumed increase in the use of general revenues (as a percentage of GDP) to finance Part B. This shift results in a slight increase in the proportion of the tax burden borne by younger people relative to older people (since younger people pay a greater share of their taxes through payroll taxes than through income tax).¹⁷

Administrative Burden. Increasing the payroll tax would create minimal new administrative burden because a mechanism is already in place to collect such revenues and place them into the Medicare (and Social Security) trust funds. Implementation would involve changing the rate at which the taxes are withheld from paychecks, sending the appropriate amount to the federal government and accounting for them appropriately at the U.S. Treasury.

Other Economic Considerations. This particular proposal does not specify how the increased payroll taxes are split between employers and employees. Employers pay half of the current 2.9 percent HI payroll tax with employees paying the other half. However, economic literature suggests that employees pay for all or most of the tax no matter what portion of the tax is imposed on employers (Rosen, 1985). Economists suggest that employers view the tax as a portion of employee compensation. Increasing the payroll tax results in lower outright wages to employees. One possible outcome of lower wages is that fewer workers would decide to seek jobs. However, research suggests few workers other than married women alter their decision to work because of a change in tax rates (Eissa, 1996). Because workers' decisions to work generally are not affected by such changes, employers can pass the cost of increased taxes onto workers without losing them. Minimum wage workers are one exception. In response to the increase in payroll taxes, one would expect a drop in the number of minimum wage jobs relative to the number of such jobs with current payroll tax rates because employers cannot lower their wages. Another potential impact would be to move more employee compensation to

17 Most of the federal government's general revenues are attributable to individual income tax receipts.

forms that are not subject to the payroll tax — i.e. fewer work hours or enhanced health or pension benefits. One would particularly expect to find this effect when employers are trying to attract employees.

Finally, since eligibility for Medicare is directly related to payment of the current payroll tax, increasing the role of this financing mechanism may implicitly reinforce the status of Medicare as social insurance, in particular its universality and the notion of contributory finance (see Box I-1).

Income Tax Surcharge

Taxpayer Burden. The income tax surcharge is modeled as an increase of the given percentage of net income tax payments. The tax change is generally progressive — the most progressive of the changes examined in this report — following the progressivity of the current income tax system. The results in Tables 3-3 to 3-5 bear this out.

This tax change could be viewed as increasing the share of Medicare financed through general revenues relative to payroll taxes. The shift results in a slight increase in the proportion of the tax burden borne by older people relative to younger people (since retired people do not pay payroll taxes). It is also a way of somewhat increasing the burden on beneficiaries in a progressive manner.

Administrative Burden. Like the payroll tax, an income tax surcharge would involve minimal administrative burden.

Implementation would require that the Internal Revenue Service revise its “tax tables” and withholding formulas to include the surcharge. If the new revenue were to be held in a trust fund rather than general revenues, the IRS and Treasury would need to post the money to the proper accounts.

Other Economic Considerations. Like the payroll tax, an income tax surcharge could affect an individual’s willingness to be in the workforce and may cause some shift into forms of compensation that are not taxed such as health insurance (unless policy makers decide to tax this benefit as is separately examined in this report). In addition, it would also affect spending and savings by providing incentives for taxpayers to move their money into activities that are not taxed. For example, because home mortgage interest is deductible, increasing income taxes would encourage more and larger home purchases. One would similarly expect an increase in charitable giving and savings in the form of tax-deferred 401 (k) plans and tax-exempt bonds. The size of these distortions and their associated “efficiency losses” (i.e. reduced GDP)¹⁸ is difficult to measure (Rosen, 1985; Weiss, 1999).

Imposition of a Consumption Tax

Taxpayer Burden. The broad-based measure of consumption excludes rent and imputed rent from consumption. The results in Tables 3-3 to 3-5 suggest that this option is relatively regressive.¹⁹ Economists generally agree

18 As mentioned earlier in the text, because all taxes lead people to spend (or save) money differently than they would if they were maximizing their personal welfare, they can result in lower overall satisfaction and lower economic growth.

19 One way in which policy makers could affect the progressivity of a consumption tax would be to establish brackets of consumption that are taxed at different rates as is done for the income tax. For example, the first \$10,000 of consumption might be taxed at 2 percent, the next \$20,000 at 4 percent, etc. As is discussed later, this would be administratively possible because taxpayers would likely be required to file an annual “return” for their consumption tax.

that consumption taxes are generally regressive (Rosen, 1985).

The analysis also suggests that retired taxpayers would devote larger portions of their incomes toward the tax than would working taxpayers. This option would also have the effect of increasing the relative burden for Medicare financing borne by Medicare beneficiaries compared to the current mechanism for funding Medicare.

For the particular households chosen, the narrow-based consumption tax appears to exact a higher overall burden than the broad-based consumption tax.²⁰ Because the base for this tax option excludes all expenditures for health, food consumed at home and a few other goods, the appearance of higher tax for these households means that their consumption of these items is a smaller share of their total consumption than for the population as a whole.

The narrow-based consumption tax is generally thought to be less regressive than the broad-based consumption tax (Rosen, 1985). However, for the particular taxpayers examined here, this is not true.²¹ As for the broad-based consumption tax and the income tax surcharge, this revenue option would increase the burden borne by older taxpayers (including Medicare beneficiaries) relative to younger taxpayers.

Administrative Burden. Of all of the options for Medicare revenues examined in this report, the imposition of a consumption tax (whether with a broad or narrow base) would carry the greatest administrative burden. The United States does not currently have any type of consumption tax and would need to establish the infrastructure to administer it. Since the proposal is designed to raise revenues needed on top of current Medicare revenues, it would not replace the current income or other tax system.²² However, it might dovetail with the current income tax system. One way to administer a consumption tax might be to require that taxpayers file an annual return in which they report all income, changes in assets, and spending on items excluded from the taxable base. From this information, taxable consumption could be inferred. These calculations could be made part of the current income tax returns process. Employers could withhold estimated consumption taxes from paychecks as they already do for income taxes. The IRS would also have to provide practical guidance in determining what consumption is exempt from the taxable base much as they do now for income tax deductions. Furthermore, the IRS would have to establish a mechanism for auditing or otherwise verifying information provided by taxpayers much as they do now for income tax returns. The IRS and Treasury would also direct collected revenues into the appropriate accounts for Medicare.

20 The narrow-based consumption tax is more regressive for the particular households examined because the upper income taxpayers happen to have had a smaller proportion of their total consumption devoted to items excluded from the narrow-based tax than did the upper-income households. However, this is just an artifact of the particular households examined. For the population as a whole, the average burden of these two taxes is identical.

21 Appendix B presents detailed economic profiles of the taxpayers examined in this analysis, including assumptions about income, savings, and consumption.

22 One could design a consumption tax system to replace the current income, payroll or other tax system. However, this report did not examine such options.

Other Economic Considerations. Like payroll and income taxes, consumption taxes can distort individuals' decisions. Imposition of a consumption tax makes it more "expensive" for an individual to consume taxed goods. Because these particular proposals exclude certain types of consumption from taxation, individuals would have an incentive to increase their consumption of non-taxed goods and services. To the extent that consumption is not what individuals would have done in the absence of the tax, there would be some efficiency loss. This loss would be greater under the narrow-based proposal since it would exclude over half of GDP from taxation. Because the consumption tax proposals presumably exclude certain types of consumption out of a sense of equity because they are seen as more necessary (e.g. housing, food, and health care), this type of tax demonstrates a trade-off between equity and efficiency. Another characteristic of a consumption tax is that, unlike an income tax, it does not tax money earned on savings (i.e. interest and dividend income). Hence, it is possible that a consumption tax would result in greater saving than would an income tax. Estimating the size of these potential effects is difficult and highly sensitive to assumptions made in the analysis, and beyond the scope of this analysis. However, some research suggests that the efficiency losses associated with consumption taxes are generally less than those associated with income taxes (Rosen, 1985).

Raising Excise Taxes

Taxpayer Burden and Equity. Excise taxes are consumption taxes that affect only those

who buy particular goods and services.

Because of the large number of uncertain (and potentially) arbitrary assumptions that would have to be made, Lyon did not include these financing options in his analysis of the burden on illustrative households presented in Tables 3-3 to 3-5.²³ The two options examined here would affect very different numbers of individuals. The first option, which would double all current federal excise taxes would affect most taxpayers because it would include the motor fuels tax. Virtually all taxpayers pay this tax through gasoline purchased for their own automobiles or through fares for public transportation. Doubling only the taxes on alcohol and tobacco would be paid only people who consume these products.

In general, excise taxes are relatively regressive. Tax rates do not go up with income. In terms of consumption of the taxed goods and total amount paid, lower income individuals theoretically could avoid some taxed items such as alcohol and tobacco. However, spending on these items generally represents a larger share of income for lower income than for higher income individuals. To the extent that lower income individuals must rely on motor vehicles to get to work or conduct other necessary activities, an increase in the gasoline tax would be more of a burden on these taxpayers than on higher income taxpayers. In addition, the burden would fall unequally around the country since greater distances in the west and in rural areas necessitate greater use of motor vehicles.

23 For each household, he would have had to know how much, on average, others of similar circumstances consume each of the goods taxed in a given year. Even within households with the particular characteristics chosen, the amount of variation in such consumption may be great enough to make average consumption of little illustrative value.

Other Considerations. Although the excise tax options are probably not sufficient by themselves to meet Medicare’s financing needs, policy makers may wish to consider them as part of a package of new revenue sources. Doubling all federal excise taxes raises more money than would increasing only those taxes on alcohol and tobacco. However, many of the goods and services that carry federal excise taxes have no direct relationship to Medicare or health care. By contrast, focusing on alcohol and tobacco may carry an inherent rationale since these goods do indeed impose costs on the health care system, including Medicare. In addition, a high level of excise tax on a particular industry may depress employment in that industry.

Inclusion Of Medicare In Beneficiary Income

Taxpayer Burden and Equity. In the analysis presented in Tables 3-3 to 3-5, this tax would potentially affect households #5, #6, and #7. However, the other taxpayers could be affected once they became Medicare beneficiaries. Under current law, household #5 is the only beneficiary household with income tax liability and would remain so under the proposal. Other income of household #6 is too low to cause any Medicare benefits to be included in adjusted gross income. Household #7 would include a small portion of the value of Medicare benefits in adjusted gross income, but still have no positive taxable income after deductions.

This proposal is the equivalent of income-relating Medicare benefits. Proponents argue that at a time when Medicare’s financing is facing challenges, it makes sense for individuals of greater means to absorb more of the burden. In addition to taxing only higher income beneficiaries, this option does so in a

particularly progressive manner by using the income tax. Although the amount raised by this proposal alone likely is not sufficient to fund Medicare through 2030, it would make a significant contribution to program revenues. Detractors point out that Medicare financing is already income-related. Because the payroll tax that finances Part A is not “capped” at a given income level (i.e. the way the Social Security payroll tax is capped), higher income individuals pay 2.9 percent (employer and employee contributions combined) on every dollar earned. In addition, three-quarters of Part B is financed through general revenues, most of which comes from income tax receipts, (and some of these receipts are paid by beneficiaries). As already noted, the income tax is progressive (Bernstein and Rice, 1999).

Another potential argument against this option is that it relies on the actuarial value of Medicare for all beneficiaries when, in fact, the value of the program varies significantly according to age, health status, and geographic location. This means that the taxable amount is not likely to reflect an individual’s actual use of Medicare services. Proponents would argue that this is just a reflection of Medicare’s nature as social insurance — i.e. its ability to spread risk broadly. The same national actuarial averages are used in calculating the Part B premium each year; they are not risk adjusted.

Administrative Burden. Taxing Medicare benefits is not particularly burdensome administratively, although the details are potentially difficult to explain to beneficiaries. It would be easier than other methods proposed to income-relate Medicare through the Part B premium, but would require more effort to implement than proposals for pay-

roll or income tax increases. HCFA would notify beneficiaries each year about the taxable value of their Medicare benefits. HCFA would send the same information to the IRS. The Social Security Administration already sends such information to Social Security beneficiaries about the value of benefits they receive each year. Those beneficiaries who file a tax return would include the information from HCFA in the calculations of taxes they owe. The IRS and Treasury would post these funds to the proper account if they are not to be held as part of general federal revenues.

This option could become more complicated if Medicare were to adopt a premium support system like that proposed by Senators Breaux and Frist in which the government's contribution to an individual's Medicare costs would depend on what health plan they chose. Would the taxable amount continue to be based on national averages or upon an individual's actual contribution?

Other Economic Considerations. One argument against this tax is that it would affect only a narrow segment of the population, thus moving Medicare farther away from the notion of a universal social insurance program based on contributory finance (see Box 1-1). Because this option would have the effect of lowering some beneficiaries' after-tax income, they may decide to make up that income by delaying retirement or seeking part-time work. Alternatively, it could be argued that this option may discourage activities that yield income in retirement (to avoid reaching the threshold for paying this tax). For example, it could dis-

courage working longer or savings that provide income in retirement.

Taxation Of Employer-Provided Health Insurance

Taxation of employer-provided health insurance subsidies is a potentially rich source of revenue. In 1996, employers contributed \$316 billion towards their employees health insurance (Levit, 1998). Consequently, a tax on such contributions has been identified as a means of financing other governmental efforts, including provision of health insurance to those who currently lack it. It is sometimes proposed as a companion to taxing the actuarial value of Medicare benefits as examined in the previous section. Policy makers would face philosophical and political judgments in deciding whether such a tax, if levied, should go towards Medicare, the uninsured, some other use, or some combination. Some who advocate taxing employer-provided health insurance would use it explicitly for the uninsured, rather than Medicare.

Taxpayer Burden and Equity. Taxing employer-provided health insurance as income is generally a progressive revenue source because lower paid workers are more likely to be employed by firms that to work for employers that provide health insurance benefits as do firms receive no or fewer health insurance benefits than are higher paid employees. In addition, the income tax itself is progressive since marginal tax rates rise with income. However, for the illustrative households examined in our analysis, this option appears slightly more regressive than raising the payroll tax.²⁴ This appearance of

24 The one exception is the working household with the lowest income (household #3), which is assumed to not receive any health benefits.

regressivity in Table 3-3 arises from the assumption that the value of employer-provided benefit is essentially a fixed dollar amount for households, rather than rising with income. Tables 3-4 and 3-5 contain no results for this option because the analysis would be identical to those shown in Table 3-3.

The tax here is assumed to also apply to employer-provided health benefits in retirement. Relative to the payroll tax option, this would result in higher tax collections from beneficiaries. Overall, however, this tax would likely slightly increase the tax burden paid by younger people relative to older generations.

One argument in favor of taxing employer-provided health insurance is that it provides for more uniform treatment of all forms of employee compensation. Under current law, wages are taxed, but non-cash forms of compensation, including health insurance, are not.²⁵ On the other hand, the amount that employers spend on a given health insurance policy varies significantly. Different parts of the country face dramatically different health care costs. In addition, the cost of coverage also reflects the size and health status of the insured group. A small firm with one or two employees with existing health conditions can have much higher premiums than a firm of similar size without such health problems or a firm of much larger size where risk can be spread more broadly. This proposal would impose a greater tax on employees in firms with higher premiums even though their health insurance might be otherwise identical to that offered by a firm with lower premiums.

Administrative Burden. In order to implement this option, employers would need to provide their employees and the IRS with the value of their health insurance subsidies. The easiest way to do this would be to include such subsidies on employees' annual W-2 statements. Employers would also have to calculate, withhold, and pay appropriate estimated taxes. These calculations would need to reflect the fact that this proposal would include health insurance subsidies in taxable income, but not in the wage base used to determine payroll tax contributions. This option could represent a significant administrative burden for employers.

Presumably, the taxable amount would be the portion of group health and long-term care insurance premiums and any health services paid by the employer.²⁶ The IRS would need to develop guidelines that define each of these values. For self-insured firms, the guidelines would have to include a method to determine the equivalent of the group premium.

Other Economic Considerations. This option will have the effect of making health insurance more expensive to employees. Employers may likely pass on their additional costs (taxes and administrative expenses) to employees in the form of lower compensation or fewer jobs. Recent estimates of a similar proposal suggest that employer contributions to health insurance could be in the range of 10 to 32 percent of employee compensation (Gruber and Poterba, 1996). Faced with higher costs for their health insurance, some employees may drop coverage altogether. In other cases, employers may

25 Employer contributions towards life insurance policies worth more than \$50,000 are currently taxed.

26 A more complicated alternative would be to determine a risk-adjusted subsidy for each employee. In other words, employees would pay taxes on an amount that reflects their actual or projected use of health care services rather than on the average premium for the whole group.

reduce the comprehensiveness of their policies rather than pay higher taxes. By scaling back their coverage, employers would achieve lower premiums and would avoid having to drop their health insurance. tend to restructure their policies so they carry lower premiums rather than allowing employees facing higher taxes to drop their health insurance. They might do this by offering fewer benefits, increasing cost-sharing, or adopting more strict management of care. Given that employers are already cutting back on employee health benefits in the ways outlined above, this mechanism could exacerbate increases in the numbers of people without health insurance.

Cutbacks in health insurance will lead to lower spending on health care. Because health insurance leads people to consume health care beyond the point where its value to them is less than its price, this option could result in more efficient use of health care for some individuals. However, for those employees who are unable to afford needed health care without insurance, the effect could be just the opposite. Individuals who forgo needed health care may ultimately impose costs on society in terms of lost productivity or treatments for avoidable complications of their health conditions. Just as this option raises the philosophical question of the best use of this potential revenue source, policy makers would also have to consider whether it wants to increase uninsurance among working-age individuals in order to help finance health care for Medicare beneficiaries. To avoid some of these potential negative effects, the proposal could be altered to exempt an initial amount of employer health benefits from taxation.

Implications for Medicare Policy

Understanding the tradeoffs across of alternative tax proposals is complicated because of uncertainty and the technical nature of the issues. Table 3-6 attempts to summarize the analysis presented in this chapter. Even if some of the information is overly simplified, it does highlight the tradeoffs that policy makers will face in deciding how to fund health care services for Medicare beneficiaries. Furthermore, this analysis suggests several other significant conclusions.

Although securing additional financing for Medicare will be necessary, it is possible. The estimates by Lyon show that we could alter Medicare financing policy to account for projected shortfalls. The specific options examined by the panel may be undesirable in one or more ways, but the burdens they would place on families are generally manageable. In establishing Medicare, like Social Security before it, the program's founders anticipated that periodic changes in financing would be necessary. The payroll tax rate has been changed nine times since the program's beginning (all increases except one) to stabilize Part A financing. Similarly, lawmakers have periodically adjusted the proportion of Part B costs to be paid by beneficiaries. Consideration of a change now to reflect changes in demography and health care have precedent.

The study panel recognizes that raising taxes is neither popular nor without drawbacks, and that as a society we will have to decide whether new revenues are preferable to eroding the financial protection that Medicare offers its beneficiaries. Choosing the appropriate financing will involve balancing the drawbacks in each approach. As table 3-6 indicates

Table 3-6

Summary of Illustrative Medicare Revenue Options

Revenue Option	Tax Rate Needed to Fund Through 2030 (Percent)	Percent of Projected Financing Shortfall Covered ^a	Populations Affected	Progressivity and Equity Considerations	Economic Considerations	Administrative Burden	Other Considerations
Increase Payroll Tax Rate	0.34 - 1.95 - 3.11 ^b	—	Workers	Somewhat regressive. Slight increase in burden for younger generations relative to older generations.	Lower wages could lead to some drop in labor force participation and jobs.	Minimal	
Impose an Income Tax Surcharge	1.48 - 8.43 - 13.49 ^c	—	Comprehensive ^d	High progressivity. Slight increase in burden for older generations relative to younger generations.	Some potential drop in labor force participation. Increase in non-taxable compensation and deductible uses of income.	Minimal	
Institute Broad-Based Consumption Tax	0.40 - 2.02 - 3.19	—	Comprehensive	Regressive. Increase in burden for older generations relative to younger generations	Increase in non-taxable consumption.	Substantial	
Institute Narrow-Based Consumption Tax	0.62 - 3.29 - 5.22	—	Comprehensive	More progressive than broad-based option.	Increase in non-taxable consumption.	Substantial	
Double All Federal Excise Taxes	—	310 - 54 - 34	Comprehensive	Regressive	Less consumption of taxed items.	Minimal	Little connection between most taxed items and Medicare.
Double Federal Alcohol and Tobacco Taxes	—	66 - 12 - 7	Users	Regressive	Less consumption of taxed items.	Minimal	
Tax 85 Percent of HI and 75 Percent of SMI Above Income Thresholds	—	2010: 123 - 24 - 18 ^e 2020: 151 - 36 - 26 2030: 178 - 49 - 37	Beneficiaries	Progressive. Increases burden on older generations relative to younger generations.	Potential increase in delayed retirement and part-time work by beneficiaries.	Low to Moderate	Detractors cite “double taxation” potential since upper income beneficiaries already pay more in Medicare taxes.
Tax Health Insurance Subsidies Received From Employers	—	2010: 519 - 91 - 57 ^e 2020: 560 - 98 - 61 2030: 617 - 108 - 68	Workers, Beneficiaries	Progressive. Increases burden on younger generations relative to older generations. Substantial variations in premiums/employer subsidies for the same insurance.	Some decrease in compensation and jobs. Significant decrease in spending on health insurance.	Moderate to Substantial	Would finance Medicare while increasing uninsurance among working taxpayers. Policy makers are considering this revenue source to address lack of health insurance.

a Amount to be raised is the difference between projected revenues under current law and projected expenditures as a percent of GDP through 2030. Projected revenues under current law are assumed to be payroll tax revenues, beneficiary premiums equal to 25 percent of Part B costs and general revenue subsidies that equal 0.71 percent of GDP (the same percentage they were in 1999). For payroll, income, consumption, and excise tax options, three numbers in each cell refer to results for “assumed savings,” “intermediate,” and “enhanced benefits” scenarios for projected Medicare expenditures, respectively. For other options, the percent of Medicare’s financing shortfall that would be covered varies by year; this table presents results for 2010, 2020, and 2030. All analysis presented in this table assumes “advance funding”—i.e. that a set percent of GDP would be raised each year sufficient to pay bills through 2030 with excess amounts in any given year held in a trust fund.

b Employer and employee portions combined.

c Tax rate is defined a percentage of taxes that would otherwise be owed in every tax bracket.

d “Comprehensive” in this instance does not mean that everyone pays; rather, no single group is excluded by any characteristic other than income.

e For other options, the percent of Medicare’s financing shortfall that would be covered varies by year; this table presents results 2010, 2020, and 2030.

Source: National Academy of Social Insurance, 2000

there can be distinct tradeoffs among equity, efficiency, and the administrative burden that each approach carries. For example, imposing an income tax surcharge is progressive and carries minimal administrative burden, but may result in fewer workers and lower productivity. The payroll tax may be more predictable than income taxes given frequent changes in the latter, but it is also less progressive than an income tax. Consumption taxes may have less of a distortion on the overall economy than other revenue sources, but are not progressive and carry significant administrative costs. Each of the other strategies carries its own set of pros and cons.

In choosing among revenue options, policy makers may be able to mitigate or balance some of the drawbacks of any given approach. First, the particular options presented in this report are merely illustrative. In crafting legislation, policy makers may be able to tailor these options to diminish unwanted outcomes. For example, if policy makers decide to tax health insurance subsidies that employees receive through their jobs, they may decide to tax only that portion of such benefits that exceed a certain threshold. This would make the option more progressive and may minimize the number of workers who forgo health insurance altogether. This modification would also generate less revenue than the version presented in this report.

Policy makers could also balance some of the drawbacks of any given approach by combining them in an overall package. Rather than using one revenue source to finance the entire shortfall, they could use several. The revenue needed from any particular source (and its commensurate burdens on taxpayers and the economy) would be less than those described in this report. Medicare's original financing

represented such a blending of approaches, and this may be the most likely strategy eventually to be adopted since it would allow policy makers to better balance the “winners” and “losers” in a politically viable manner. One drawback to combining options is that some revenue sources, such as consumption taxes, have administrative costs that are substantial and fixed no matter how much money is raised. Combining a consumption tax with other taxes would likely incur the same administrative burden as if policy makers decided to pay Medicare's revenue shortfall through a consumption tax alone.

This analysis also shows the importance of timing. The most recent Medicare trustees' report indicates that a robust economy and the better-than-expected outcomes of recent cost-containment legislation has delayed the projected insolvency of the HI Trust Fund until 2025. This projection may make policy makers disinclined to adopt changes in Medicare that will involve pain. However, Medicare will still need new revenues if it is not to endure substantial cuts in the financial protection it provides its beneficiaries. The analysis presented in this chapter shows that the amount of revenue needed to pay for Medicare benefits on a year-to-year basis increases dramatically over time (Figure 3-1). Although in economic terms the total amount of money needed is the same no matter when we as a society begin to pay, the problem is easier to solve if we begin earlier with some advance funding. If we start sooner, tax rates (or benefit cuts) will be lower than if we wait, and the pain for beneficiaries and other taxpayers in future years will be less than if we wait.

Finally, the study panel believes it is important to point out that even if Medicare's

financing problems are addressed in the short term, there will almost certainly need to be additional changes before 2030. The analysis highlights the tremendous uncertainty in all estimates of Medicare's future. As changes in recent Medicare trustees' reports indicate, year-to-year changes in the current economy have substantial effects on future Medicare finances, and we can do virtually nothing to predict economic cycles for more than a few months in the future, much less for thirty years. The news over the last three years has been good. Medicare's projected financial health in the short-term and long-term has increased. However, unforeseen changes in future years could lead to an equally dramatic worsening of the financial forecast for Medicare. Furthermore, we know little about what technological changes will occur in medicine, how policy makers will change Medicare's benefits over the next three decades, and what changes will take place in the delivery of health care services. Even under the three simplified sets of assumptions for projected Medicare expenditures examined in this report (the "assumed savings," "intermediate," and "enhanced benefits" scenarios), the magnitude of revenues needed varies significantly. The chances that policy makers will "get it right" now for the next thirty years are very unlikely.

Some may view this uncertainty as evidence that analyses such as the ones undertaken by this study panel are useless. In fact, the panel believes it demonstrates just the opposite. Like the trustees report, they provide an "early warning" device indicating when additional changes are necessary and the potential magnitudes needed. We may not know exactly when the HI Trust Fund would run out of money without changes, but we do know that health care cost increases and the retire-

ment of the Baby Boom generation will necessitate changes. Although change in our political system is difficult except in a crisis, without analysis we would not likely have the opportunity to address Medicare's financing difficulties until we found ourselves in a crisis. And through analysis we have a much better idea of the range of changes that might be necessary to solve the problem. The problem is not intractable, and research of this type helps to understand some of the tradeoffs these changes will present.

CONCLUSION

No matter how Medicare is eventually restructured, policy makers will likely be forced to consider additional revenues to finance the program. Using the federal budget surplus to help finance Medicare may provide part of the solution. Such a strategy would involve redeeming current outstanding Federal securities and allocating the funds to the HI Trust Fund as special Treasury securities until they are needed to pay Medicare costs. At that time, policy makers will have to make financing choices to get the funds necessary to redeem the special securities. Attempting to achieve savings through greater efficiency in the provision of Medicare services, no matter how important a public policy objective, is not likely to eliminate the need for additional funds. Similarly, asking beneficiaries to contribute more towards their own health care may be an important part of Medicare's financing solution. However, Medicare's current financing will already bring about such an outcome. Given the modest means of most Medicare beneficiaries, this approach will not in itself be sufficient and will likely require additional protections for beneficiaries with the lowest incomes. Reducing protections in the face of

an increased financial burden on beneficiaries would simply shift the costs of their care to other payers in the health care system and detract from the quality of care for the most vulnerable elderly and disabled individuals.

Despite the limitations of these strategies, policy makers do have alternatives that would preserve Medicare's social insurance protections over the next three decades. A wide variety of taxes could generate sufficient revenues while imposing manageable burdens on America's families. Still other revenues would go a significant way to closing the projected financing gap. None of these taxes, however, are without their drawbacks. This report highlights some of the tradeoffs they

present. Increased taxes can be a drain on economic growth and can pose hardships for some families. Trying to minimize one of these outcomes can often exacerbate the other. Any new revenues would further complicate our already elaborate tax system. And raising taxes is unpopular. Politicians will weigh the consequences of new revenues against the consequences of not continuing financial protections Medicare offers Americans when they retire from the workforce. And they will consider the tradeoffs in designing an eventual financing solution highlighted by this report. In the end, policy makers will face difficult philosophical and political choices.

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Appendix A

NASI'S Study Panel on Medicare Financing

In 1995, the National Academy of Social Insurance (NASI)'s Medicare steering committee, a philosophically balanced group of experts, laid out an analytic agenda that has been taken up by four additional expert study panels. The steering committee charged each study panel with investigating a different aspect of the changes that Medicare will require over the long-term.¹ One panel examined options for modernizing Medicare's FFS program.² One analyzed proposals to transform Medicare into a system in which health plans compete in local markets to provide beneficiaries' care.³ A third examined the social contract underlying the Medicare program and its relevance for the next generations of beneficiaries.⁴ These panels have issued final reports and disseminated the results to members of Congress, executive branch officials, a national commission also considering Medicare reform, and the media.

This report represents the final product of the Study Panel on Medicare Financing, the fourth group convened by NASI's Medicare Steering Committee. Chaired by Marilyn Moon of the Urban Institute, this bipartisan study panel included members with expertise in law, economics, public policy, public health, political science, and actuarial science.

They were drawn from academia, private industry, organized labor, former executive and legislative branch personnel, and think-tanks. They are listed in the front matter of this report.

The NASI Medicare Steering Committee asked this group to consider:

- What options exist for increasing revenues to Medicare from either beneficiaries or workers, and what are their implications? In addition to changes in the current payroll tax contributions, what are the pros and cons of other types of revenue sources including taxes on certain federal benefits, and broad-based taxes?
- What options exist for changing beneficiaries' financial liability, and what are their implications?
- What are the implications of limiting payments to providers over the long run?
- How might the elimination of the distinctions between Part A and Part B benefits affect Medicare's financing?

The study panel met six times between November 1997 and January 2000. In addition to this report, they commissioned six additional papers or analyses. This report, in

1 Gluck, M.E., and Reischauer, R.D. (eds.), *Securing Medicare's Future: What are the Issues?* (Washington DC: National Academy of Social Insurance, March 1997).

2 Gluck, M.E., and Ginsburg, P.G. (eds.), *Final Report of the Study Panel on Fee-for-Service Medicare – From a Generation Behind to a Generation Ahead*, (Washington DC: National Academy of Social Insurance, January 1998).

3 Bernstein, J., and Reischauer, R.D. (eds.), *Report of the Study Panel on Capitation and Choice – Structuring Medicare Choices*, (Washington DC: National Academy of Social Insurance, April 1998).

4 Bernstein, J., and Stevens, R.A. (eds.), *Final Report of the Study Panel on Medicare's Larger Social Role – Medicare and the American Social Contract*, (Washington DC: National Academy of Social Insurance, February 1999).

part, draws on that work, some of which is published separately. The table at the end of this appendix contains a complete list of these papers and related publications. In September 1999, the panel published an interim report, *The Financing Needs of a Restructured Medicare* program. Chapter 2 of this report reiterates and expands upon the findings of the interim report. The steering committee asked the panel to consider these questions against the backdrop of restructuring proposals mentioned at the beginning of this chapter. How would these changes in Medicare benefits or structure affect projected financing needs and potential revenue sources?

In carrying out its charge, the study panel made several decisions at the outset. First, it decided to consider options for Medicare financing through 2030. Although Congress has mandated that the Medicare trustees consider program's financial viability for 75 years in their annual report, the panel deemed any analysis beyond 30 years to be too uncertain to be of significant value to policy makers in the near-term. In addition, the biggest known demographic that change Medicare will absorb, the retirement of the Baby Boom generation, will have fully occurred by this date.

The panel also chose to consider not only the financing of Medicare services paid through the government's Medicare trust funds, but also the broader category of all health spending on behalf of Medicare beneficiaries. Beneficiaries help finance their total health care needs through Medicare premiums and taxes they pay, through the amount they spend on private health insurance that supplements Medicare, through Medicare's cost-sharing requirements, and by purchasing services not covered by Medicare or other insurance. One means of assuring Medicare's

financial viability is to ask beneficiaries to pay more of the cost of their own health care. An examination of the impact of different financing options on the total amount that beneficiaries (and their insurers) pay for health care allow a more full analysis of the financing alternatives.

Third, in examining the implications of merging Parts A and B of Medicare, the study panel chose not undertake a full analysis of how the federal government would implement and administer such a merger. However, in estimating Medicare's financing needs, the panel considered projected spending from each of the programs' two trust funds in order to provide a complete view of the program's potential impact on beneficiaries and other taxpayers. In addition, the panel examined how options for combining and simplifying Medicare's current system of different deductibles and coinsurance requirements for Parts A and B might affect the amount of revenue required for the program.

Fourth, the panel chose to examine the impact of other potential changes in Medicare for its financing. On the one hand, it looked at how expanding the program's benefits might increase the program's costs. On the other hand, it looked at how proposals to restructure Medicare to foster competition among private and public health plans for beneficiaries might generate savings in future spending. And the panel also examined how other proposals ranging from changes in Medicare's system of beneficiary cost sharing to transformation of Medicare into a program in which workers save money for their own retirement health care needs affect the amount of revenue needs to be raised over the next generation. It should be noted, however, that the panel's analyses of these various proposals did not go beyond their implications for financing issues.

Analysis and Publications Commissioned by National Academy of Social Insurance Study Panel on Medicare Financing

Author(s)	Title of Analysis/Publication
Thomas Rice	<i>An Analysis of the Implications of the Supplemental Insurance System for Restructuring Medicare and its Financing</i> , contract analysis, November 1998.
Thomas Rice and Jill Bernstein	<i>Supplemental Health Insurance for Medicare Beneficiaries, Medicare Brief No. 6</i> , November 1999.
Deborah Chollet	<i>An Analysis of Proposals to Individualize the Financing of Health Care for Persons Over-65 or Disabled</i> , contract analysis, September 1998.
Deborah Chollet	<i>Individualizing Medicare. Medicare Brief No. 3</i> , May 1999.
Joseph F. Quinn and Robert L. Clark	<i>Interactions Between Medicare and Changes in Other Public and Private Programs Used by Medicare Beneficiaries</i> , contract analysis, January 1999.
Joseph F. Quinn and Robert L. Clark	<i>The Economic Status of the Elderly. Medicare Brief No. 4</i> , May 1999.
Michael E. Gluck	<i>A Medicare Prescription Drug Benefit. Medicare Brief No. 1</i> , April 1999.
James Mays, Monica Brenner, and Molly Schaefer	<i>Cost Estimates of Selected Changes in the Medicare Program. Contract Analysis</i> . June 1999.
National Academy of Social Insurance Study Panel on Medicare Financing	<i>The Financing Needs of a Restructured Medicare Program, Medicare Brief No. 5</i> , September 1999.
Andrew Lyon	<i>Revenue Options to Finance Medicare</i> , contract analysis, February 2000.

Appendix B:

Representative Household Characteristics

	Household #1: High wage, single	Household #2: High wage, family	Household #3: Low wage, single
Personal Income tax calculations:			
Gross wages	\$64,800	\$100,000	\$16,000
Pension contributions	\$3,240	\$5,000	
Cafeteria health plan	\$625	\$1,125	
Taxable Wages	\$60,935	\$93,875	\$16,000
Interest and dividends	7,200	20,000	
Pension income			
Gross Social Security benefits			
Includable Social Security			
Adjusted Gross Income	68,135	113,875	16,000
Standard Deduction (or Itemized Deductions) and Personal Exemptions	7,200	39,755	7,200
Taxable income	60,935	74,120	8,800
Marginal tax rate	28%	28%	15%
Income tax, before credits	13,649	15,033	1,320
Child credits		1,000	
Earned income tax credit			
Federal income tax			
Addendum: OASDHI payroll tax (employee's share)	13,649 4,909	14,033 6,158	1,320 1,224
State income tax	3,047	3,706	440
Other non-taxable income:	8,355	13,375	
Imputed rent		24,000	
Interest taxes paid on home		(24,000)	
Employer pension contributions	6,480	10,000	
Fringe benefits health	1,875	3,375	
Other savings	5,040	14,000	
Economic income (Wages+other income +non-taxable+deductions from gross wages +85% soc sec), excludes Medicare	80,355	133,375	16,000
Total after-tax economic income	58,750	109,478	13,016
Derivation of consumption tax bases:			
Rent (excluded from both)	12,000		3,200
Net imputed rent (excluded from both)		24,000	
Worker's and employer's pension contributions (excluded from both)	9,720	15,000	
Other savings (excluded from both)	5,040	14,000	
Health deductions (excluded from narrow)	2,500	4,500	
Other health care (excluded from narrow)	500	500	500
Food at home (excluded from narrow)	2,500	4,600	1,150
Broad consumption base	\$31,990	\$56,478	\$9,816
Narrow consumption base	26,490	46,878	8,166
Addendum: Narrow as % of broad	83%	83%	83%

Note: All blank entries in table are zero.

Source: National Academy of Social Insurance, 2000 from analysis by Andrew Lyon, University of Maryland.

Household #4: Single mother	Household #5: Couple, one retired	Household #6: Widow, low income	Household #7: Couple, retired
\$37,500	\$35,000		
\$1,875	\$1,750		
\$1,125	\$625		
\$34,500	\$32,625		
500	1,000	1,000	1,000
	12,000	4,000	5,000
	12,000	8,000	14,000
	10,200		
35,000	55,825	5,000	6,000
14,850	13,800	8,050	8,050
20,150	42,025	-3,050	-2,050
15%	15%		
3,023	6,304		
1,000			
2,023	6,304		
2,783	2,630		
1,008	2,101		
7,125	18,875		4,000
	12,000		4,000
3,750	3,500		
3,375	3,375		
	1,000		
45,125	77,075	11,800	21,900
39,312	66,040	11,800	21,900
7,600		3,600	
	12,000		4,000
5,625	5,250		
	1,000		
4,500	4,000		
1,000	1,546	1,546	4,000
3,240	3,541	1,500	2,761
\$26,087	\$47,790	\$8,200	\$17,900
17,347	38,703	5,154	11,139
66%	81%	63%	62%

Appendix C: Acknowledgements

The National Academy of Social Insurance and its Study Panel on Medicare Financing gratefully acknowledge the assistance of the following individuals in completing this report. Any errors within remain those of the authors.

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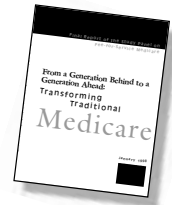
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