



Council for
Affordable Health
Insurance

MEDICARE'S FINANCIAL CHALLENGES

ACTUARIES SPEAK OUT
ON MEDICARE'S FUTURE

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INTRODUCTION

This publication was prepared by a group of concerned actuaries who believe the actuarial profession has a responsibility to provide the public with more unbiased information about Medicare. We expect to develop additional publications in coming months.

Our analysis of Medicare leads to the clear conclusion that the system in its current form is unsustainable. Without substantial and fundamental changes, Medicare's financial requirements will increasingly strain the U.S. economy to the point of consuming a substantial, if not staggering, percent of our federal budget: almost 20 percent in 2010, more than 30 percent in 2030 and about 55 percent by 2080. (It is approaching 14 percent today.)

If we simply cut provider reimbursements dramatically as a means of reducing the pattern of cost increases, it will substantially reduce the access to health care so that quality of life will suffer. The longer we wait to address Medicare, the more painful the remedy will be. Without changes to improve Medicare's long-term financial integrity, other areas of the economy, such as national funding for education, defense or public infrastructure and/or the quality of and access to health care, are likely to suffer.

Medicare Outreach Working Group

MEDICARE: WHERE WE ARE

Medicare was enacted in 1965 and has now passed its 40th birthday. While the program has experienced significant aches and pains over the years, perhaps with increased awareness and timely substantial action, adjustments can be made to extend its life.

Medicare Is Big. Medicare paid roughly \$340 billion in benefits to seniors and disabled individuals in 2005. In that year, 42 million beneficiaries, or about 1 out of 7 Americans, were enrolled to receive benefits.

Medicare Has Helped Seniors. During the first 40 years of the Medicare program, the United States has seen improvement in the quality of life of its seniors, which was one of Medicare's primary goals. During this time, the country has seen a surprising increase in life expectancy at age 65, and the proportion of the elderly who are living below the federal poverty line has declined.

Medicare Is Complicated. Medicare has several parts — Part A (HI or Hospital Insurance), Part B (SMI or Supplementary Medical Insurance), Part C (generally known as Medicare Advantage or Medicare Risk Contracts), and Part D (Prescription Drug Insurance). Both the benefits and financing of Medicare are complicated. The basic benefit structure is confusing since not all services and products are covered and payments are limited by deductibles, upper bounds on benefits and some coinsurance requirements (i.e., the sharing of the cost of benefits between the beneficiary and the program).

Recently there has been a great deal of media coverage about the difficulties and confusion that some beneficiaries have experienced with enrollment in the new prescription drug program. Some Part D insurers have attempted to provide simplified benefits that modify the basic Medicare program, but that has also created an abundance of hybrid offerings that some seniors have difficulty comparing.

The financing is also complicated. Part A is financed largely from payroll taxes paid by workers and their employers. Part B and Part D are financed partially by premiums paid by beneficiaries and partially by appropriations from the general revenues of the United States. Part C financing effectively is a blend of all of the mechanisms used by A, B and D, such that the money comes from Medicare in the form of a lump-sum payment.

Medicare Is Troubled. There are different views on the difficulties facing Medicare. Some beneficiaries believe the trouble is that some services and products are not covered. On the other hand, some providers have stated that the trouble is the low reimbursements they receive. These groups and all taxpayers and future beneficiaries share in the long-term financial issues faced by Medicare. The ramifications of the financing issues are the primary subject we discuss here.

Current projections by the Medicare trustees show just how dire the situation is.

- Currently, Medicare costs are about 3 percent of gross domestic product (GDP) and about 14 percent of federal expenditures.
- However, these amounts are projected to increase to more than 4 percent of GDP and 20 percent of the federal budget by 2020 and about 11 percent of GDP and 55 percent of federal expenditures in 2080, assuming the federal budget remains at its current level of about 20 percent of GDP.
- When combined with Social Security, the projections show that about 90 percent of GDP will be consumed by expenditures of these two programs in 75 years.

In discussing Medicare financing, we will often relate both income and expenditures to the GDP and federal budget, since it puts these very large numbers into perspective. Because GDP is the sum of the value of all goods and services produced in the United States in one year, the comparison of Medicare finances to GDP provides an idea of the share of total U.S. production devoted to Medicare. The relationship to the federal budget also clearly demonstrates the depth of the long-term financial challenges. Including Social Security with Medicare only further demonstrates the problems.

MEDICARE: WHERE THE NUMBERS ARE

Table 1 summarizes the recent financial history of Medicare. The entries are derived from the annual Medicare Trustees' Reports or federal budget projections where indicated. These reports are a major source of information about the operation of Medicare and projections of its future. The Medicare trustees include members of the cabinet, the Commissioner of Social Security and two individuals.

Year	(1) Medicare Benefits & Admin. Expenses	(2) Total Federal Expenditures*	(3) Gross Domestic Product (GDP)	(4) Percent of Federal Spending (1)/(2)	(5) Percent of GDP (1)/(3)
1998	\$213.6	\$1,653	\$8,626	12.9%	2.4%
1999	212.1	1,702	9,128	12.5	2.3
2000	219.1	1,779	9,708	12.2	2.2
2001	244.8	1,864	10,041	13.1	2.4
2002	270.5	2,011	10,373	13.5	2.6
2003	285.7	2,158	10,828	13.2	2.6
2004	315.3	2,319	11,466	13.6	2.7
2005	342.5	2,508	12,120	13.7	2.8

* From federal budget fiscal year information

The period from 1998 through 2005 produced an increase of Medicare expenditures, both as a fraction of total federal expenditures (Col. 4) and as a fraction of GDP (Col. 5). Yet this period reflects somewhat smaller increases compared to earlier periods. More significantly, in the next section we will explore reasons why the increase in these ratios might rapidly accelerate. This result shows that, unless Medicare financing is addressed, tough choices will be required between health care and other societal needs.

MEDICARE: WHERE WE ARE HEADING

If Medicare continues under current law, without changes in management and funding protocols, projected costs will rise to a very high level of federal expenditures and GDP over the next few decades, as illustrated in Table 2 below. This projection assumes that Medicare costs will show a trend rate roughly 1.7 percent higher than GDP. The observed differences in the past have tended to equal or exceed this level.

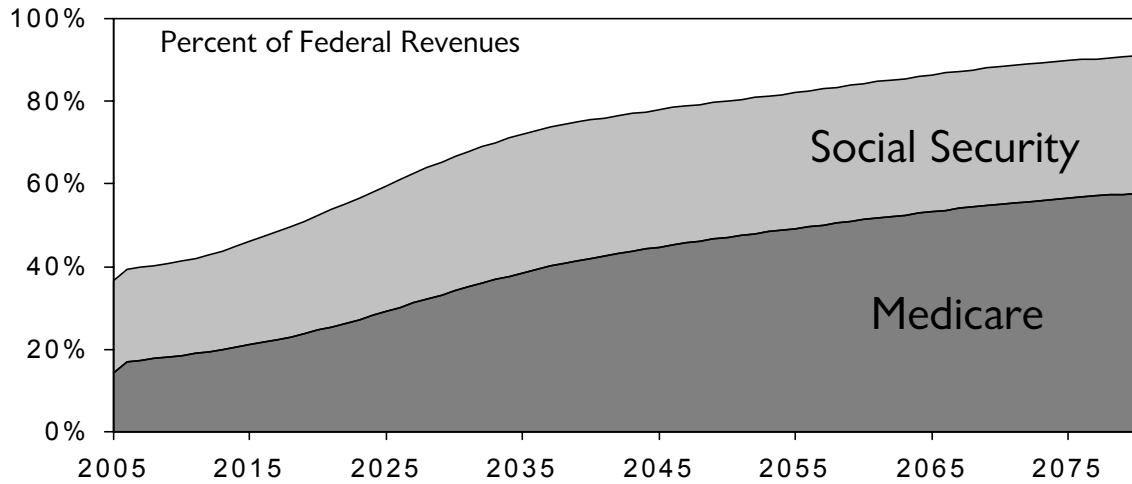
Year	(1) Medicare Benefits & Admin. Expenses	(2) Total Federal Expenditures*	(3) Gross Domestic Product (GDP)	(4) Percent of Federal	(5) Percent of GDP (1)/(3)
2010	\$573	\$3,249	\$16,243	18%	3.5%
2020	1,193	5,550	27,745	21	4.3
2030	2,938	9,480	47,393	31	6.2
2040	6,476	16,193	80,954	40	8.0
2050	12,445	27,660	138,282	45	9.0
2080	75,811	137,855	689,189	55	11.0

*Estimated from federal budget and other information

Under this projection, by 2080 Medicare costs are expected to consume ever-increasing shares of GDP and total federal expenditures. How will this affect national funding in other areas such as education, public infrastructure or defense? Government projections do not answer this question, but if Medicare consumes 7 percent more of the federal budget as projected in 2020 versus 2005, this will create a need for substantial reductions in the proportion of the federal budget for other services. Cutting provider reimbursements repeatedly would reduce Medicare expenditures, but could also cause seniors to experience substantial reductions in access to health care. Other solutions to reducing Medicare's costs should be considered to avoid these potential problems in the future.

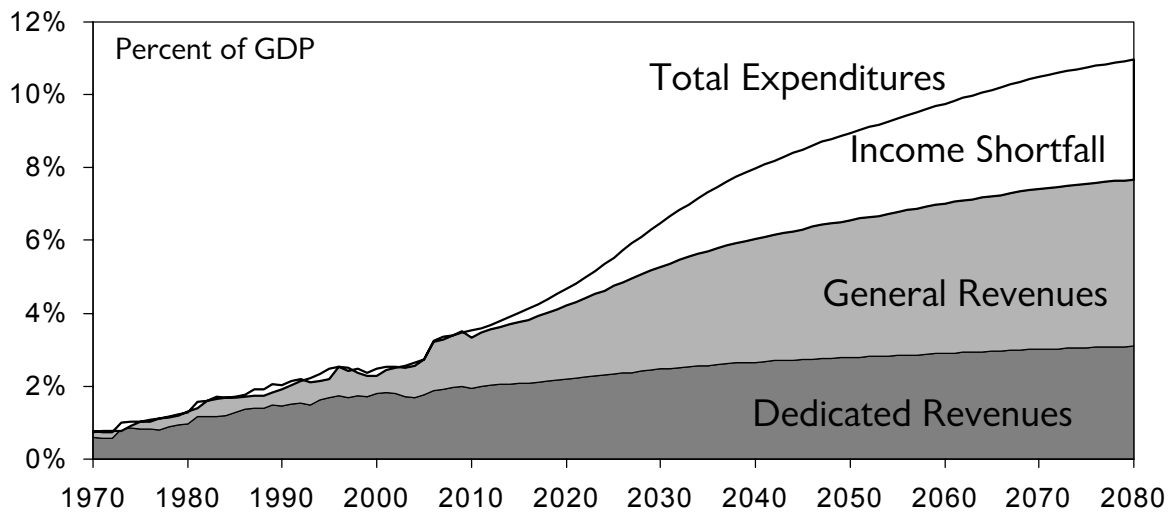
As can be seen in Figure 1, if we do not fundamentally change our direction, Medicare and Social Security together will consume virtually every dollar of the federal budget in a little more than 75 years. Further, note in Figure 2 the rapid increase in the amount of funding coming from general Treasury revenue versus dedicated revenues (i.e., Part A payroll taxes and Part B premiums) and the revenue shortfall within Medicare; this portends a rapid acceleration of stress on the federal budget.

Figure 1.
 Medicare and Social Security Expenditures as a Percent of Federal Revenues



Source: American Academy of Actuaries calculations based on the 2006 Medicare and Social Security Trustees' Reports. Calculations assume that federal revenues are 19% of GDP, the historical average.

Figure 2.
 Total Medicare Expenditures and Income as a Percent of GDP



Source: 2006 Medicare Trustees' Report

The history of Medicare and total national health expenditures shows that they both grow faster than GDP. Certainly, these estimates can vary significantly due to factors such as the growth of medical technology, changes in legislated reimbursement levels and growth in the economy, etc. But without fundamental restructuring of Medicare, the trends suggested above can be expected to unfold.

Medicare Population Growth, Eligibility and Design. When Medicare began paying benefits in 1966, the age of eligibility was 65 for seniors. Approximately 20 million people were immediately eligible for benefits. At that time, cost sharing by users was designed to represent a fairly significant part of costs. The program was estimated to have a controllable annual cost of under \$10 billion for a significant period. Furthermore, contributions from Part A payroll taxes and premiums for Part B were expected to create substantial extra funds to be held in trust funds for use in the future.

Instead, we have a much different picture with about 42 million beneficiaries receiving larger benefits and paying relatively less out-of-pocket. At the same time, the source of the fiscal support for the program has shifted. For example, 2005 contributions to the Part B Trust Fund from the General Revenues of the U.S. were over \$120 billion. Beginning in 2006, Part D will have an additional impact on this number; Medicare trustee estimates in the 2006 report put Part D at more than \$40 billion in 2006.

What happened in the intervening 40 years to change the picture so dramatically? A sequence of events created today's much different reality. These events include:

1. The Medicare population grew faster than expected due to significant improvements in life expectancy, while the age of eligibility for Medicare benefits has not changed. Life expectancy increased due in part to continuous development of new and more effective tools for prevention, diagnosis, treatment and education. In 1965, when Medicare was passed, life expectancy was about 70 years. Today it is about 78, or eight years more.
2. Medicare benefits were expanded to provide protection for new groups and benefits were added. For example, the disabled below normal retirement age became eligible in 1973 and prescription drug benefits (Part D) were added in 2006.
3. Medical costs, driven by general price inflation and new technology, grew at a rate faster than the rate of growth of wages and of GDP. In the past several years, we have witnessed the appearance of innovations such as virtual colonoscopies, new and improving regimens of chemotherapy drugs, and medical devices that enable paralyzed muscles to move for a period of time.
4. The initial level of cost sharing by Medicare consumers, as a percentage of total Medicare expenditures, has not been maintained. Rather, it has been allowed to shrink dramatically over the years so that government now pays a much higher percentage of total costs.

5. The working population grew at a much slower rate than the number of beneficiaries. At inception, there were more than five workers for each Medicare eligible; today there are around 3.5, and the ratio is expected to drop to 2.4 by 2030.
6. The entire health care system changed, and with it Medicare utilization rates and costs as they affected individual and employer behavior within the entire health care system. This entire system includes Medicare, Medicaid, other government programs, the uninsureds and the private market. Medicare changes have frequently influenced the U.S. health care system, whether positive or otherwise. Examples include changes in billing practices, types of coverage, care practices, etc. Likewise, changes outside of Medicare, such as the way health care is organized, financed and delivered, litigation and economic conditions, can influence Medicare and the entire health care system.

The total impact of all of these factors has been a rapid growth of Medicare costs with less growth in the payroll tax and cost-sharing contributions under the program. Medicare's annual cost grew from \$3 billion in 1967 to more than \$100 billion by 1990. (With inflation at 5 percent to 6 percent per year, the \$3 billion in 1967 would equal roughly \$10 billion in 1990.) Contributions to the system have also increased because of the increased amount of earnings subject to the payroll tax due to inflation and real economic growth and the growth of premiums paid by beneficiaries, but have significantly decreased as a percentage of cost. The difference in cost growth and revenue growth has placed the program in the difficult position we are in today.

The growth in costs, to a significant degree, reflects Medicare design and management. In particular, the program emphasizes the high value we attach to top quality health care and choice, and this in turn drives substantial demand for Medicare products and services. It has accommodated the heavy use of resources by continually shifting consequences to future generations, so that in general those receiving benefits closer to the beginning of the program have reaped the greatest rewards, and the farther one is from the beginning, the poorer will be the return. In general, the following can be stated about the program:

- The design and management of Medicare often falls outside of traditional risk management practices such as balancing of premiums and costs or substantial managing of care.
- The design and management of Medicare often encompass nontraditional accounting practices such as the lack of a functional cost assessment or analysis.
- Attempted control of Medicare expenditures typically focuses on limiting prices paid to providers, thereby putting pressure on providers to accelerate utilization of medical services and charges to private payers.

Serious consideration should be given to these design and management issues when reforms are considered.

Keeping Score. What gets measured gets managed. Medicare decision-making is affected by how the books are kept. Toward this end, accounting for Medicare should be able to

measure whether the proper balance of coverage, quality and intergenerational equity is being reasonably attained. The way in which health care providers are compensated influences how health care is provided. Incentives make a difference in the care provided and funding decisions can influence equity among and within generations of taxpayers.

So what can the public do? Funding the basic needs of food, clothing and shelter combined with health care for the senior population is a staggering task. With respect to the Medicare program, it is critical to get the facts straight, debate alternatives and keep score appropriately. The method of scoring should appropriately focus on future promises, not just on what is spent or will be spent in the next few months. A plan to keep score is needed quickly so that future generations are not left in an impossible position.

As actuaries, we often focus on what is called the present value of future benefits and contrast that with the present value of future revenues. The Medicare Trustees' Report indicates that the deficit today (i.e., the present value of future benefits less future revenues) is about \$32.5 trillion over 75 years. This \$32 trillion number reflects roughly \$17.5 trillion of anticipated revenue and \$50 trillion of anticipated expenditures, and the gap between revenue and deficit is rapidly increasing; it is almost three times the size of our current economy today. One can make various assumptions in this regard, but the critical point is that without changing the system substantially, whatever assumptions one uses produces significant deficits. We need to make sure that we keep score looking ahead (not backwards) if we are to do right by our children and grandchildren.

Congress did take the step of including an early warning system for Medicare in the Medicare Modernization Act of 2003. Basically, if general funding sources are projected to account for more than 45 percent of Medicare spending within the next seven years, the administration is required to recommend ways to reduce this percentage.¹ Options could include reducing spending (e.g., benefit cuts, delayed eligibility, reduced provider payments), increasing revenues (e.g., raising payroll taxes, raising beneficiary premiums), or some combination of these actions. Alternatively, Congress could look at some type of fundamental restructuring of the program that would depend less on future generational transfers. Congress could then implement the recommendations, but would not be required to do so.

The 2006 Medicare Trustees' Report projects that the 45 percent threshold will first be reached in 2012, within the seven years specified by the law. Therefore, the requirement could be triggered in 2007.

But this type of warning system is not sufficient as a scoring system. While there is already a wealth of information available from sources such as the Centers for Medicare and

1. More specifically, a determination of "excess general funding" is triggered if for two consecutive trustees' reports the difference between Medicare outlays and dedicated financing sources (HI payroll taxes, HI share of income taxes on Social Security benefits, Part D state transfers, and beneficiary premiums) exceeds 45 percent of Medicare outlays within seven years of the projection.

Medicaid Services and the Medicare Payment Advisory Commission, further analysis would help us move toward a system that does at least the following:

- Expand the current Medicare analysis by the trustees to address the projected impact of Medicare on the federal budget, not just the trust funds.
- Establish markers relative to 75-year or other long-term projection periods such that if pessimistic and optimistic projections fall outside of certain boundaries, changes must be made to the program to bring such projections within the markers. Testing would be required to create appropriate boundaries, and this should include displaying the impact of changes in the program on quality methods of providing health care and access to care. These tests should once again consider the potential for variation. Focusing only on financing issues without consideration of impacts on quality and access may produce results that would be inconsistent with the public's expectations.

MEDICARE: WHAT WE MUST ADDRESS

Medicare over the past 40 years has contributed to raising the quality of life for the elderly. Without changes to the program, however, Medicare will require resources that are likely to severely pressure the health care system and potentially other sectors such as education, public infrastructure or defense.

Important decisions will have to be made, and the sooner the better. Without timely action, strain on the federal budget is likely to grow substantially in the coming years, threatening funding of many programs outside of Medicare. Alternatively, or in combination with squeezing funding of other national programs, Congress may continue to increase payments to providers under Medicare by less than inflation would warrant, as is being discussed currently and as has been done in the past to some extent. But this approach will likely lead to diminished access to care for seniors over time. Hence we believe there is an urgent need for serious national debate.

There are many lessons that can be learned from the private sector, and we need to determine which ones might be of help. For instance, in seeking a sustainable long-term funding model for Medicare, how should we:

- Keep all stakeholders informed of the situation as it develops, considering the significant impact of Medicare on seniors, the federal budget, future generations and other stakeholders?
- Balance demand for health care delivery with the supply of health care to maintain acceptable access and quality in the future?
- Balance the role of government with that of the private sector?
- Provide appropriate incentives for providers and consumers?

- Balance Medicare issues with issues for the entire health care system? They are clearly dependent, and interactions should be considered when reforming Medicare and/or the entire system.

CONCLUSION

The authors' goal, as stated above, is to provide the public with unbiased information about Medicare. We hope this document enables its readers to participate in future discussions of Medicare. The paper can be provided to others and should be published only in its entirety to assure that the full context of the analysis is retained.

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