Chapter 17
How Should Congress Address the Medicare Crisis?

17.1 Introduction

The Medicare program was initiated in 1965 when the federal Social Security Act of 1965 was passed. Title 18 of this act established a two section provision for the Medicare program. Part A, which provides health benefits to its beneficiaries, protects them against hospital related costs. This provision is financed through a 2.9% Social Security payroll tax. Part B provides supplemental medical insurance benefits to protect enrollees against the costs of physician services, supplies, tests and some home health services. This provision is financed through voluntary premiums and matched by funds from general revenues.

Medicare has been, perhaps, the most successful of America's social programs. Almost all Americans sixty-five and older obtain health insurance through the Medicare program. In order to keep this program successful, it has been modified nine times through provisions such as the Social Security Act of 1972, which established Professional Standards Review Organizations to monitor necessity and quality of services, and the Omnibus Budget Reconciliation Act which removed co-payments for Part B services and limits on home health care visitations.

While Medicare has been a success to the approximately 47.7 million people to whom it directly provides service, it also has an impact on health care providers. In Pennsylvania, Medicare revenues account for about 57% of total hospital days. Additionally, some rural hospitals in Central Pennsylvania have an even greater dependence on Medicare funds. Lastly, Medicare provides almost all the revenue received by home health agencies, hospices and renal dialysis facilities. For these reasons, Medicare is far more important to the health care industry as a whole than to the elderly alone. Due to the number of people who are impacted by the Medicare program, Congress faces a difficult political and public issue. The reason that Congress must address this issue is because the Medicare trust fund, which reimburses providers for services delivered to Medicare recipients, is being depleted on a daily basis.

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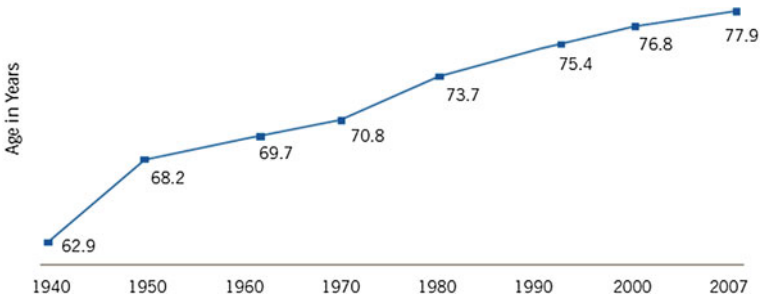

Fig. 17.1 U.S. life expectancy at birth 1940–2007. Source: National Center for Health Statistics (2010) Deaths: Final Data for 2007. Hyattsville MD. Access at http://www.cdc.gov/NCHS/data/nvsr/nvsr58/nvsr58_19.pdf

The ability of Medicare to remain successful is currently being tested. The main reason for this crisis is that Medicare expenses are expected to rise more rapidly than the revenue generated by payroll taxes. The reason for these increases is the combination of the high cost of health care and an increasingly aged population. In addition to the increase in age of our population, the elderly population has an increasing life expectancy (see Fig. 17.1).

Currently, the eighty five and over age group is the fastest growing aspect of the population in the United States. To make matters worse for Medicare financing, this group also consumes the most medical care per capita.

According to the "2010 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds" the Medicare Trustees are required to test annually whether general revenues will finance 45% or more of total Medicare spending in any of the next 7 years. In 2010, for the fifth year in a row, the Trustees projected that general revenues will exceed 45% of total spending within a 7 year timeframe (in 2010), prompting them to issue a "Medicare funding warning." However, general revenue is projected to fall below the 45% level in 2011 and not reach that level again until 2022 (see Fig. 17.2).

The number of Medicare beneficiaries is expected to increase. In addition, the baby boomers will begin to tremendously increase the number of Medicare enrollees in the year 2010. The problem of providing coverage for this increase in enrollees is compounded by legislative initiatives to reduce the federal financing of Medicare (see Fig. 17.3).

Given this increase in membership and reduction in funding, a crisis is on the horizon for the Medicare program. According to projections by the Kaiser Family Foundation based on data from the 2009 and 2010 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds, the Part A Trust Fund is projected to be depleted by 2029. This is largely due to reductions in the growth rate of Medicare spending as a result of provisions in the 2010 health care reform law, as well as a provision to increase the payroll tax paid by higher-income people. As a result, the Part A Trust Fund is projected to have a positive asset balance of $317 billion at the end of 2019 (see Fig. 17.4).

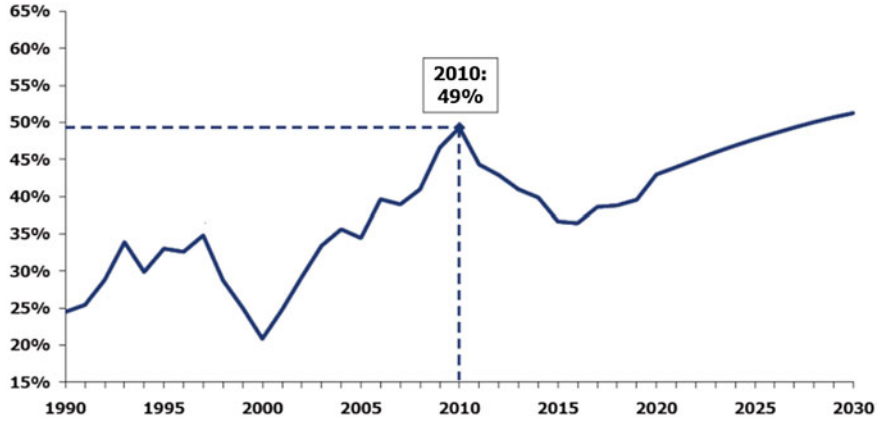

Fig. 17.2 General revenue as a percent of medicare spending 1990–2030

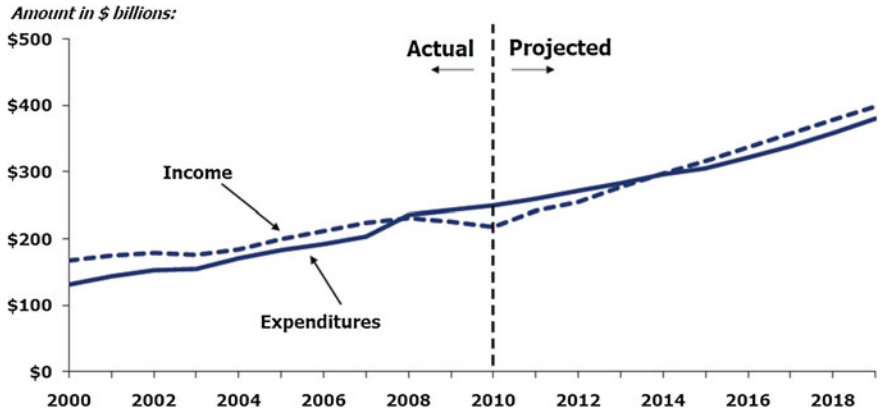

Fig. 17.3 Income and expenditures of the medicare part A trust fund

Because this issue continues to cause political uproars from the health care industry and political action committees such as the American Association of Retired People, legislative action will be required to resolve this issue.

17.2 The Analytic Hierarchy Model

Before we used the AHP decision making model we conducted research and utilized our own knowledge of the health care industry to generate potential alternatives which Congress could utilize in resolving the dilemma facing Medicare. During this process, we generated eight possible alternatives. They are:

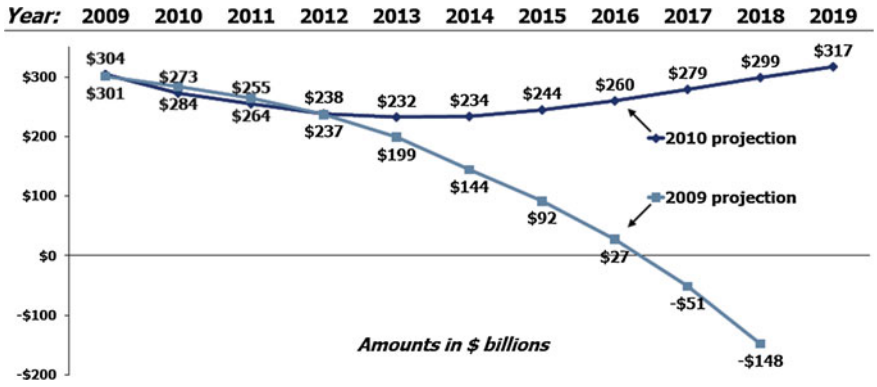

Fig. 17.4 2009 and 2010 projections of the medicare part A trust fund balance

1. Enact a Medicare means testing requirement as a way to reduce the number of beneficiaries eligible to receive Medicare coverage.
2. Deny the problem and do nothing.
3. Institute a National Health Insurance program in which all Americans are covered by one insurance plan.
4. Force families to provide insurance for their elderly family members.
5. Discontinue federal funding of the program, thus dissolving Medicare.
6. Mandate managed care enrollment of all Medicare beneficiaries thus reducing total expenditures.
7. Increase the age requirement to be eligible for Medicare.
8. Increase the Medicare payroll tax.

Although we utilized these eight alternatives in our AHP analysis, the purpose of our model is that it can be used to evaluate the potential success of any option that Congress may consider. Any potential solution to the Medicare program's financial problems obviously will contain costs, benefits, risks, and opportunities. Because Medicare is a social policy, we felt that any resolution must be weighted most heavily on its benefits to society. For this reason, and we assigned benefits a weighed value of 0.467 based on its overall significance.

As we stated earlier in this paper, the Medicare program affects not only those enrolled in the program but also a huge number of Americans through the wage tax. When addressing a program that has an effect on so many people, the risk of a wrong decision is a major concern. We assigned a weighted value of 0.217 to be applied to given alternatives based on their overall risks. The risks rated most favorably are those in which we assessed the consequences to be the least severe.

Costs are another consideration. Since high expenditures were the issue which brought the Medicare crisis into the spotlight, an alternative's cost must be a factor. Although the Costs of an alternative are a vital component in decision making, we feel that the benefits of a public program and the risks involved with changing it outweighed many of the costs associated with a given alternative. Because of this, we prioritized costs with a weighted average of 0.160.

Although it seems counterintuitive, the opportunities which arise from potential alternatives carry the least amount of significance in our model. Currently, the Medicare program is in a crisis situation with its survival in question. Consequently, we do believe that the opportunities presented by an alternative are of major significance in its potential success. We assigned a weighted value of 0.095 due to our reasoning and the help of AHP.

17.3 Analysis of Benefits, Risks, Costs and Opportunities Components

Benefits (0.467): We formulated six different benefits of any potential legislative alternative. These benefits and their rankings were:

1. Coverage (0.382): Since Medicare is a social policy initiative which was conceived and designed to provide medical care coverage for the elderly, we felt that the most significant indicator of an alternatives benefits is the coverage of as many eligible people as possible.
2. No change (0.250): Due to the fact that Medicare enrollees are satisfied with the plan, and since the health care sector's providers are so dependent on it, we placed a significant amount of weight into not changing the structure of the system.
3. Transfer of Risk (0.160): A common trend in health care is to control costs by transferring risk to other organizations operating within the industry. This has proven effective in controlling cost and improving health. For this reason, we gave this trend a notable amount of weight in our decision making model.

We will only elaborate on the top three factors in each category. The final three benefits whose contributions are less significant in the overall picture are:

4. Reducing the total amount of dollars spent (0.101).
5. Promoting the free market principles of capitalism (0.064).
6. Reducing the total number of people enrolled in Medicare (0.043).

Opportunities (0.095): We have identified five potential opportunities which are relevant to most proposed alternatives. These five opportunities and their weights are:

1. Financial savings (0.419): With Medicare facing bankruptcy, cost saving initiatives are a major concern. Clearly, the chance to save a considerable amount of money is the most significant opportunity. Cost savings can occur as the result actions such as disbanding the program, converting the delivery of Medicare to managed care, reducing the number of Medicare beneficiaries, and reducing the number of covered services.
2. Manage Care (0.263): Managed care methodologies can provide a significant opportunity for case managers to aggressively manage the delivery of medical care to Medicare enrollees. Through preventative measures, these methods

provide an opportunity for enrollees to remain healthy and consume fewer medical services. These are favorable outcomes, and are weighted as such.
3. Private insurance industry growth (0.160): Alternatives which limit the number of people who are covered under Medicare insurance could lead to an increased demand for private health insurance. As such, when people are excluded from Medicare, the opportunity exists that they would subscribe to private plans, and therefore, boost the economy and improve the risk pool in private plans.

The remaining two opportunities are:

4. Remaining "status quo" and attempting to find ways to improve it (0.097).
5. Elimination of insurance company selection biases (0.062).

For the next two components, costs and risks, the weights assigned represent the reserve of the weights assigned to benefits and opportunities. Thus the greater the cost/risk of an alternative the snaller the weight assigned.

Costs (0.160): We derived seven potential costs which affect most alternatives to solving the Medicare crisis. The seven costs and their weights are:

1. National Debt (0.031): Increases in the national debt, through increases in Medicare expenditures, are highly undesirable. Since Medicare is a very costly program, and we want to control expenses, we assigned a very low weight to it.
2. Political (0.045): Legislators have realized the political costs of making a wrong decision concerning Medicare for many years. Now that Medicare reform is urgent, legislators will want to minimize their potential costs of any decision.
3. Inflation (0.068): Congress must attempt to keep the growth of this program parallel to the inflation rate. Currently, the increase in Medicare expenditures not only exceeds the rate of inflation, but it is increasing at a rate greater than that of general inflation. For this reason, cost reduction efforts are desirable.

The final four costs and their weights are:

4. Health status changes in the elderly (0.104).
5. Administrative costs associated with administering the program (0.159)
6. Problems with the reduction in access to medical care (0.240).
7. Economic welfare losses associated with changes in individual and government expenditures (0.354).

Risks (0.227): We generated five different possible risks for potential alternatives. Once again, please note that the biggest risks possess the smallest weights. These risks and their weights are:

1. Bankruptcy (0.062): The largest and most significant risk to the program is bankruptcy. Due to obvious health and industry issues, no one wants this program to dissolve because of a lack of available funds. Since the current level of Medicare expenditures already exceeded income in 2010 (see Fig. 17.3), we gave this factor significant weight.

2. Political (0.097): Medicare has many political risks for legislators. Due to the immense lobbying power of the American Association of Retired People, the American Medical Association and other interest groups affected by Medicare, legislators have taken a "hands-off" approach whenever the Medicare debate develops. The fear of losing votes during their next election is very real, so this risk carries notable weight.
3. Rationing of Services (0.160): If Medicare reimbursements continue to be reduced, the services of providers may need to be rationed among enrollees. The reduction of health care services to the elderly is a significant risk, and is present in most options. Rationing is generally viewed as unacceptable.

The final two risks and their weights were:

4. Increasing the total number of uninsured (0.263).
5. The achievement of significant dollar savings (0.419).

17.4 Ethical Considerations

Although ethical behavior was not one of the four basic categories used in evaluation, the topic does deserve mention. Regardless of the results AHP helps to derive, it would not be right for people who paid Medicare payroll taxes throughout their working careers to not receive the benefit of insurance coverage. A potential resolution to this issue would be that the Medicare payroll tax be structured and viewed as a type of insurance for medical care if people do not have the means to buy it themselves when they are old.

Based on their decisions, members of Congress face the threat of losing campaign donations. Legislators must try to be ethical in their decision making and not let this threat sway their judgment. Additionally, hidden agendas and bureaucracy must not take precedence over such a major issue. Legislators must work together for the betterment of our country and not the betterment of their career and political party.

17.5 Results

To rate the alternatives according to their benefits, opportunities, costs and risks, we first constructed rating scales given in Table 17.1. The description of each of the intensities in the scales is given in Table 17.2.

In Table 17.3 each of the alternatives is rated according to their benefit, opportunity, cost and risk level. Each of the intensities has a numerical value in Table 17.1. The resulting values are transformed into an ideal scale, i.e., each

Table 17.1 Benefits, opportunities, costs and risks rating scales

		Ideal	Weighted
Benefits	**0.467**		
Coverage	0.382	1.000	0.467
No change	0.250	0.654	0.305
Risk	0.160	0.419	0.196
Reduce $	0.100	0.263	0.123
Free Mkt	0.064	0.168	0.078
Members	0.043	0.112	0.052
Opportunities	**0.095**		
$ Saving	0.421	1.000	0.095
Manage	0.263	0.625	0.059
INS grow	0.158	0.375	0.036
System ok	0.095	0.225	0.021
No bias	0.063	0.150	0.014
Costs	**0.160**		
Economic	0.030	0.088	0.014
Access	0.046	0.132	0.021
Admin $	0.069	0.200	0.032
Health	0.102	0.294	0.047
Inflation	0.158	0.455	0.073
Political	0.248	0.714	0.114
Debt	0.347	1.000	0.160
Risks	**0.277**		
$ Saving	0.061	0.147	0.041
Uninsured	0.097	0.233	0.065
Rationing	0.161	0.386	0.107
Political	0.263	0.630	0.174
Bankrupt	0.417	1.000	0.277

Note that the weights corresponding to the costs and risks intensities are the reciprocal values normalized to unity of those given in Sect. 17.2

entry is divided by the largest value of the corresponding scale. The result is given in Table 17.4.

Next we computed the short term (BO/CR) and the long term (bB + oO – cC − rR) value of the alternatives, where

$$\mathrm{BO/CR} \;=\; (\mathrm{Benefits} * \mathrm{Opportunities}/\mathrm{Costs} * \;\mathrm{Risks})$$

and

$$\mathrm{bB} + \mathrm{oO} - \mathrm{cC} - \mathrm{rR} \;=\; \mathrm{b} * \mathrm{Benefits} + \mathrm{o} * \mathrm{Opportunities} - \mathrm{c} * \mathrm{Costs} - \mathrm{r} * \mathrm{Risks},$$

where b, o, c and r are the weights of the benefits, opportunities, costs and risks, respectively.

Table 17.2 Description of the rating scales

	Description
Benefits	
Coverage	Universal health insurance coverage
No change	Maintain the program as is—status quo
Risk	Transfer risk from government to private firms
Reduce $	Decrease federal expenditures
Free Mkt	A market based, capitalistic scenario to health coverage
Members	Reduce the number of people covered in the program
Opportunities	
$ Saving	Achieve significant dollar savings
Manage	The health of subscribers would be aggresively managed
INS Grow	Private insurance would grow, enhancing the economy
System ok	Existing system gives good service and minimizes risk from change
No bias	Eliminates selection bias which results in poor risk pools
Costs	
Economic	Economic welfare loss
Access	Poor access and patient satisfaction
Admin $	Administrative costs of supporting the option
Health	Decrease in health status of the subscribers
Inflation	Continued inflation of Medicare expenses
Political	Political costs of selecting the option
Debt	Increase in national debt
Risks	
$ Saving	Achieve significant dollar savings
Uninsured	A higher number of uninsured people in the country
Rationing	Rationing of health care services
Political	Political costs of selecting the option
Bankrupt	The Medicare program can go bankrupt

Table 17.3 Rating the alternatives

	Benefits	Opportunities	Costs	Risks
Alternatives	0.467	0.095	0.16	0.277
Enact a Medicare means testing	Members	INS grow	Admin	Political
Deny the problem and do nothing	No change	System ok	Inflation	Bankrupt
Institute a national health insurance program	Coverage	No bias	Debt	Rationing
Force families to provide insurance	Reduce $	INS grow	Economic	Political
Discontinue federal funding	Free Mkt	$ Saving	Health	Uninsured
Mandate managed care	Risk	Manage	Access	$ Saving
Increase the age requirement	Members	$ Saving	Political	Uninsured
Increase the medical payroll tax	No change	System ok	Inflation	Political

Table 17.4 Numerical interpretation of the ratingsratings

	Benefits	Opportunities	Costs	Risks		
Alternatives	**0.467**	**0.095**	**0.160**	**0.277**	**BO/CR**	**bB + oO − cC − rR**
Enact a Medicare means testing	0.112	0.375	0.200	0.630	0.333	−0.119
Deny the problem and do nothing	0.654	0.225	0.455	1	0.324	−0.023
Institute a National Health Insurance program	**1**	**0.150**	**1**	**0.386**	0.388	**0.214**
Force families to provide insurance	0.263	0.375	0.088	0.630	1.783	−0.030
Discontinue federal funding	0.168	1	0.294	0.233	2.447	0.062
Mandate managed care	**0.419**	**0.625**	**0.132**	**0.147**	**13.580**	0.193
Increase the age requirement	0.112	1	0.714	0.233	0.672	−0.032
Increase the Medical payroll tax	0.654	0.225	0.455	0.630	0.514	0.079

17.6 Conclusions

We found the results to be very interesting. The AHP helped us to decide that in the short term Congress should mandate that all Medicare beneficiaries be enrolled into managed care health insurance plans. This result is favorable to us since the trend in health care is to change the financing and delivery of services from a treatment oriented system into a model of care management. This trend is especially evident in the Medicare market which is rapidly embracing the managed care methodology. Also, we are aware of the benefits of managed care and believe that this model can be effective.

Mandated Managed Care enrollment received very favorable weights in the AHP model due to the fact that this measure can transfer risks to other entities, achieve expenditure reductions, manage the care of beneficiaries and encounter only some of the problems with access. All of these components were very favorable in our analysis.

The surprise in our results was the long term alternative. We never imagined that the AHP would help us decide that instituting a National Health Insurance program would be a serious alternative. After reviewing our analysis, we realized the major reason this alternative came in second was that national health insurance provides universal health coverage to all individuals. The desire to have as many people covered as possible was the number one factor (carrying the most weight) of the number one component in our hierarchy. For this reason, this measure received a higher rating than we expected, although the negative aspects of national insurance, such as the high cost, kept it from being the top choice in the short term.

The costs, risks, benefits and opportunities were all ranked with the highest value being the most beneficial or detrimental. In analyzing the results on the attached spreadsheet, it is readily evident that mandating the use of Managed Care for all Medicare subscribers has the highest benefit to cost ratio (13.58 ratio). Although other alternatives had higher ratings of benefits and opportunities, the low cost and risk of managed care was the biggest factor in it being the recommended choice. Intuitively, this choice seems the most appropriate of the alternatives offered.

In the short term, there are two results which AHP presents that are surprising. First, AHP suggests that the second best option is for Congress to Discontinue Federal Funding of the Medicare program (2.45 ratio). This option is most undesirable because it would result in the end of the program (which we are trying to avoid) and millions of individuals having no health insurance coverage. The consequences of this, both from an economic and health standpoint, would be significant and disastrous. The second surprise was that an alternative we considered as potentially successful, Enacting Means Testing, was ranked as one of the least desirable options (0.33 ratio). This option was attractive to us because it would reduce the number of individuals on the Medicare program by removing those who have the means to obtain private insurance and continuing to serve those in the most need. Although we do not view this as the answer to the whole Medicare problem, it would be a step in the right direction. However, we saw the reduction of members and potential growth of private insurance as relatively small benefits and consequently assigned a low benefit and opportunity rating.

In the long term, Managed Care was second to a National Health Insurance Program. What make the National Health Insurance Program unattractive in the short term is the costs associated with it.

Clearly, the issue of the Medicare crisis has many factors which influence the course of action which Congress will take. Even if an exact answer to the problem is not obtained, the process of utilizing AHP will help clarify the issues and priorities pertinent to achieving resolution. With careful preparation, Congress would be well served through the use of the AHP in identifying and evaluating favorable options to consider.