The aging of the U.S. population continues to be a central concern of many economic forecasts. The combined impact of declining birth rates, increasing life expectancies, and the aging of the baby-boomers will result in a growing percent of the population over the age of 65. As this trend continues, our economy will likely be constrained by the fact that the share of the population engaged in the labor force is declining. In the private sector, this raises questions on how the declining labor force share will be able to provide an adequate level of production to maintain the overall standard of living.

This problem is mirrored in the public-sector social insurance programs, most notably Social Security and Medicare. As the labor force share declines, the growth in payroll taxes is not forecasted to keep pace with the growth in government expenditures under these programs. While there has been substantial political debate regarding the projected Social Security financial shortfalls, there has been relatively little attention paid to the growing financial problems of the Medicare program. To the contrary, the Medicare program was expanded in 2006 to provide prescription drug benefits. This change is clearly beneficial to seniors who previously lacked such coverage, though it comes at added expense to a program which is already facing financial difficulties.

The purpose of this report is to highlight: 1) the current and projected financial difficulties of the Medicare program, 2) the preliminary financial impact of adding prescription drug coverage, and 3) the proposals to address these financial issues. Because Medicare is a federal program, much of the analysis will be at the national level, though there will be some attention paid to the Wisconsin Medicare population.

MEDICARE PARTS A AND B

Coverage

Medicare was created in 1965, originally covering inpatient-related care through ‘part A’ and physician and outpatient-related care through ‘part B.’ All seniors and disabled individuals who qualify for social security benefits automatically qualify for coverage under part A with no premium; seniors who do not qualify for social security can purchase part A coverage. All seniors and qualifying disabled people have the option to purchase part B coverage as well.

Acute nursing home care following an inpatient admission is covered under part A, though there is no provision for long-term nursing home care. Part B has traditionally covered only medically necessary care, with no provision for preventative care or
prescription medications. Thus, while Medicare covers a fairly broad range of medical services, it has traditionally not covered some forms of care which are of particular importance to the beneficiaries. For a more complete description of Medicare coverage under parts A and B, see “Your Medicare Benefits” (CMS, 2006b).

Financing

Medicare part A is financed through a 2.90% payroll tax on total earnings. Employees pay half the payroll tax directly, with the remaining half paid by employers. Unlike social security, all earnings are subject to the payroll tax. For Medicare recipients who qualify for social security payments, there is no additional premium for part A coverage; for those who do not qualify for social security benefits, which accounts for only 1% of the Medicare population, there is a $410 monthly premium (CMS, 2006a). In addition, some social security benefits are taxable with part of the taxes raised contributing to Medicare part A. These taxes are paid by social security recipients whose gross income including half their social security benefits exceeds $34,000 for single filers, or $44,000 for married filers (Rejda, 1999, page 101).

Medicare part A is intended to be fully financed through these sources, with no general tax revenue used to supplement funding. Through 2005, the revenues collected for Medicare part A have exceeded program expenditures, with the net revenues flowing into a trust fund which is invested in government bonds, earning interest over time. However, the revenues for 2006 are expected to fall short of total expenditures marking the first year that the trust fund is used to supplement program expenditures (Social Security and Medicare Board of Trustees, 2006).

Medicare part B is financed in part through premiums equal to $93.50 per month for most beneficiaries in 2007. Beginning in 2007, part B participants with incomes above $80,000 (single) or $160,000 (married) will pay higher premium rates up to a maximum of $161.40. It is estimated that only 4% of the Medicare participants will pay more than the standard premium. The standard premiums are adjusted annually to cover 25% of the expected part B expenditures for the year. The remaining 75% of part B expenditures are financed through general tax revenues (CMS, 2006a).

For both parts A and B, the Medicare payment rates for services are set by the Medicare administration. The set rates are intended to cover the marginal costs of providing care to Medicare patients. In other words, given that a medical provider already exists and has a stock of medical equipment, what is the cost of providing care to an additional patient? These payments are thus not intended to fully cover the providers' overhead costs and are usually below the prices charged to other patients. By paying lower rates, this helps keep the total expenditures of the program lower than they otherwise if the rates were not controlled by the government.

The potential problem with paying lower government set rates is that medical care providers may choose not to participate in Medicare. ‘Participating providers’ are those who are willing to accept the Medicare payments rates as full payment for their services.
‘Non-participating providers’ are still able to serve Medicare participants, though the pertinent participant may be responsible for charges above the Medicare-approved rates. While there is no specific requirement for providers to be participating providers, there are a number of incentives for providers to participate. As a result, 98% of medical providers were in fact participating providers in 2000 (Santerre and Neun, 2004, page 280), and that ratio is likely to have stayed relatively constant.

**Patient Cost-Sharing**

Medicare part A coverage includes an annual deductible of $992 in 2007, which is equivalent to the Medicare approved payment for one day in the hospital. For additional hospital stays up to 60 days, there is no additional out-of-pocket expense. For patients requiring 61-90 days in the hospital during a year, there is a 25% coinsurance rate, meaning that the patient is responsible for $248 per day. For patients requiring 91-150 days in the hospital during the year, there is a 50% coinsurance rate, meaning that the patient is responsible for $496 per day. For patients requiring more than 150 days in the hospital during a year, the patient is fully responsible for payment, with no additional payments made by Medicare (CMS, 2006a).

Medicare part B coverage includes an annual deductible of $131 in 2007. Once the deductible has been met, there is a 20% coinsurance rate, meaning that patients are responsible for 20% of the Medicare-approved charges (CMS, 2006a).

If Medicare were to include no out-of-pocket expenses, then beneficiaries would face no direct cost for services beyond paying the premium. Under such a policy, patients would respond by using more services than they would otherwise, especially for services which provide very little health benefit. This response would greatly increase the Medicare expenditures, while providing relatively little health benefit in return. The use of cost-sharing measures such as deductibles and coinsurance rates are intended to discourage beneficiaries from ‘over-utilizing’ medical care, and help to keep Medicare costs down.

**SUPPLEMENTAL HEALTH INSURANCE BEYOND MEDICARE**

Due to the out-of-pocket expenses present under the traditional Medicare parts A and B coverage, many beneficiaries have additional sources of coverage to supplement Medicare.

Some Medicare beneficiaries also have access to employer-sponsored insurance, either through their own employment or their spouse. Employers are not allowed to discriminate based on age and must offer the same coverage to all eligible employees. Many retired Medicare beneficiaries also receive supplemental health insurance coverage through their pension packages.
Private insurance companies also offer ‘Medigap’ coverage to individuals which provides additional coverage for expenses not paid by Medicare. Medigap policies must conform to one of the ten standard plans approved by the government. Eight of the ten, which insure 93% of Medigap enrollees, completely cover the deductibles and coinsurance rates under Medicare parts A and B. Thus, there is a tendency for these beneficiaries to over-utilize medical services, driving up both Medicare expenditures and Medigap premiums. Starting in 2006, Medigap policies were not allowed to include prescription drug coverage, though such coverage is still covered in many pension packages.

Finally, Medicare participants with incomes below the poverty level are also eligible for Medicaid coverage. In this case, Medicaid covers the Medicare premiums and cost-sharing measures. In addition, Medicaid covers a wider range of services at no cost to the participant including prescription drug coverage, long-term nursing home care, and in many states, dental services. However, Medicaid participants are limited to providers willing to serve Medicaid patients, often resulting in more difficulty finding providers and, perhaps, reduced quality of care.

**MEDICARE PART C: MEDICARE ADVANTAGE**

Medicare Advantage is also known as Medicare part C and was formerly known as Medicare+Choice. This provides beneficiaries an option to enroll in a private policy, typically managed care, in lieu of traditional part A and B coverage. Medicare Advantage policies often cover a broader spectrum of services, such as enhanced preventive care and prescription drug coverage, though they often have managed care restrictions on choice of provider. Participants in these plans continue to pay the same premiums for part A (if applicable) and part B coverage and may be subject to an additional premium from the provider. However, the out-of-pocket expenses are typically lower than under traditional Medicare parts A and B and may include expanded services.

Medicare Advantage providers receive premiums directly from Medicare which are below the average expected cost of recipients. The expectation is that these providers will achieve cost savings through managed care restrictions and negotiated prices with medical providers. The additional premiums paid by participants (if applicable) are intended to cover the expanded services and/or reduced cost-sharing measures of the policy.

In its best light, this arrangement allows for cost savings through managed care which can benefit all parties. The Medicare administration is paying a premium below the expected expenditures under parts A and B. The participant saves on out-of-pocket expenses and may receive expanded services (though with restrictions). The private insurer may also enhance profits if the overall cost savings exceeds the cost savings to Medicare and the participant.
There are, however, some potential problems with the above reasoning. First, this is a voluntary program which is likely to be most attractive to those with lower-than-average expected medical care needs. These are the patients that are likely to be attracted to the expanded services and lower cost-sharing, and who also are least likely to be concerned with the managed care restrictions. Those who expect to need a substantial level of medical care are naturally more concerned with the potential restrictions and consequently are likely to remain in ‘traditional’ Medicare. As a result, the apparent cost savings achieved under Medicare Advantage plans may simply be due to their ability to attract a generally healthier segment of the population. If this is true, the participants in Medicare Advantage plans would have had lower-than-average expenditures regardless, perhaps below the premiums paid by Medicare to the Medicare Advantage insurers.

**MEDICARE PART D: MEDICARE PRESCRIPTION DRUG COVERAGE**

Medicare prescription drug coverage, also known as Medicare part D, went into effect in 2006. Those who participate in Medicare parts A and B, or in a Medicare Advantage plan that does not include prescription drug coverage, are eligible to enroll. The financing is very similar to part B coverage, with enrollees paying premiums which are expected to cover 25% of the overall program cost. The remaining 75% of expected costs are financed through general tax revenues by the federal government. The set of providers is similar to Medicare Advantage plans since the services are provided through private insurers who must be approved by Medicare.

Medicare prescription drug plans have some latitude in their design, though they must be actuarially equivalent to the ‘standard plan.’ The standard plan includes a $250 deductible, with the enrollee paying 25% of additional expenditures until total expenditures reach $2,250. Enrollees are responsible for all additional expenditures until total expenditures reach $3,600. For total annual expenditures beyond $3,600, the enrollee is responsible paying 5% of additional expenditures. The average premium paid for coverage is $386 per year. (KFF, 2006).

While the new prescription drug benefit does provide gains for those who otherwise would not have had such coverage, it clearly does not eliminate the out-of-pocket expenses for participants. There are plans available with lower out-of-pocket expenses, though such plans also come at higher premiums.

**DISTRIBUTION OF MEDICARE COVERAGE**

According to the Kaiser Family Foundation, 88% of the Medicare enrollees in 2002 had some form of supplemental coverage beyond simply holding part A and/or part B coverage. Thus, while parts A and B have the potential for large out-of-pocket expenses, the vast majority of enrollees also have additional coverage (KFF 2005). In
Wisconsin, an even greater percent of seniors hold supplementary coverage. According to the Wisconsin Family Health Survey conducted in 2004, only 8% of seniors hold Medicare without supplemental coverage (Wisconsin Department of Health and Family Services, 2005).

Another report by the Kaiser Family Foundation (2005) indicates that for 2006, 7% of Wisconsin Medicare enrollees participated in a Medicare Advantage program, compared to 12.7% nationally. This same study also found only 16% of Wisconsin Medicare enrollees were also enrolled in Medicaid, compared to 19% nationally. Those who are ‘dual-eligible’ for both Medicare and Medicaid are typically Medicare enrollees with incomes below the poverty-level. For these seniors, Medicaid covers the expenses not covered by Medicare, which masks the true government expense of these seniors if we look only at Medicare data. For those who do not have separate long-term care insurance, many who require long-term care will eventually qualify for Medicaid once their accumulated assets and savings have been eliminated.

As of June 2006, approximately 90% of Medicare participants were covered by some sort of prescription drug benefit, with 53% receiving coverage either through part D directly or through a Medicare Advantage plan which includes prescription drug coverage. At that time, the estimated federal expenditures for these plans totaled $31 billion for 2006 and are projected to total $768 billion for 2007-2016, or an average of $76.8 billion per year. (KFF, 2006).

**FINANCIAL PROJECTIONS**

Each year, the Social Security and Medicare Board of Trustees prepares a report on the current and projected financial status of the trust fund accounts and financial solvency of these programs. The 2006 report predicts part A expenditures will exceed part A revenues, requiring part of this year’s expenditures to be financed by interest payments flowing into the trust fund. It is not expected to fully exhaust the interest payments flowing to the trust fund, thus the trust fund itself will still gain value this year. However, it is anticipated that as the baby boomers retire, the payroll tax revenues for part A will naturally diminish as expenditures increase. The current projections predict the trust fund itself, valued at $285.8 billion at the end of 2005, will begin shrinking in 2010 and will be completely exhausted by 2018 (Social Security and Medicare Board of Trustees, 2006).

The following table, taken from the 2006 Trustees report, shows the projected rates of both Medicare spending (labeled ‘HI + SMI’) and Social Security spending (labeled ‘OASI + DI’) as a percentage of projected GDP.
While the growth in Social Security expenditures is projected to eventually level off, Medicare expenditures continue to grow. In fact, the current projections show that Medicare spending will exceed Social Security by around 2028 (Social Security and Medicare Board of Trustees, 2006).

The long-run test for financial solvency used by the Board of Trustees determines if the trust fund, together with projected revenues, are sufficient to cover projected expenses over the next 75 years. This test is clearly not met for Medicare, nor is it met for Social Security. For Social Security, the trust fund is expected to be exhausted by 2040; current projections indicate Medicare is in much more serious financial trouble (Social Security and Medicare Board of Trustees, 2006).

The short-run test for financial solvency determines if the projected trust-fund balance in 10 years would be sufficient to fully cover projected expenses in that year. While Social Security passes this test, Medicare does not, again indicating the more severe financial strain on the Medicare program (Social Security and Medicare Board of Trustees, 2006).

In addition, the Medicare Modernization Act of 2003 directs the Board of Trustees to determine if the difference between Medicare expenditures and dedicated revenue sources (primarily payroll taxes and premiums) is projected to exceed 45% of total expenditures within the next seven years. In other words, this determines if the projected revenues in each of the next seven years would be sufficient to cover at least 55% of the projected expenditures in that year. The 2006 Trustees' report indicates this...
test also does not pass, with projected revenues falling short of 55% of expenditures in 2012. If this remains true in the 2007 Trustees’ report, the Medicare Modernization Act of 2003 specifies that a funding warning for Medicare will be declared, requiring a Presidential policy response with expedited Congressional consideration of the proposal. In the absence of unusually high macroeconomic growth, it is likely such a warning will, in fact, be made in 2007 (Social Security and Medicare Board of Trustees, 2006).

Unfortunately, all of these dismal forecasts are based only on part A financing. The other parts of Medicare are in some sense fully-financed since the premiums for parts B and D are adjusted annually to cover 25% of the program costs. Similarly, the Medicare Advantage premiums are automatically adjusted to keep pace with changes in average Medicare expenditures. Medical care expenditures are anticipated to continue rising for Medicare participants due to both increased participation, increased medical care utilization, and increased medical prices. This will result in higher premiums under parts B and D, along with a greater need for federal general tax revenues, in order to continue subsidizing 75% of the program costs. Increased medical care expenditures will also cause an increase in the premiums paid by both Medicare and participants in the Medicare Advantage program.

Additionally, the growing need for costly long-term care may push more and more seniors into poverty, resulting in an increase in the number of seniors covered by Medicaid, which is financed out of general tax revenues at both the federal and state levels.

TWO VIEWS OF HEALTH ECONOMICS

Economists typically follow two competing schools of thought when it comes to health care. The competitive market view asserts that health care is no different than other types of goods and services and that the most efficient outcomes will result from competitive forces. The role of government in this view is limited to promoting competition and not directly intervening in the market.

At the other end of the spectrum, the government interventionist view argues that the government should play a very active role in the market for health care. There are two basic arguments which are often used to support the government interventionist view. The first is a practical argument that claims market forces will not lead to the optimal societal outcomes in the case of health care services. Based on economic theory, competition is expected to drive efficiency if the market is, in fact, competitive. This implies that both buyers and sellers choose their actions based on the observation of market prices but lack the ability to effectively influence market prices. In the case of providers, this would imply that there are a large number of independently-acting medical providers competing with one another on the basis of price. This is not entirely true for some types of care. In rural areas, for example, the choice of provider within a reasonable geographic area is particularly limited, which allows those providers the
ability to raise prices beyond the competitive level. Consumers of medical care are also not very responsive to price changes and typically do not even know the prices of the care they are consuming. This is most notable for those with some form of insurance, as the patient is not directly responsible for the full cost of care. As a result, providers often compete not through price, but through reputation, quality, and convenience. While this does result in enhanced quality, such as easy access to high-tech medical equipment, it does very little to encourage affordability. Because health care markets do not fit the usual characteristics of competition, it is unclear if promoting competition will actually result in greater efficiency.

The second argument for the government interventionist is more radical. Even if we could achieve a health care system where competition yields maximum efficiency, the question remains whether efficiency should be our real goal. In a competitive model, goods and services are rationed by prices. Those willing to pay the market price receive the product, while those unwilling to pay the price do not. While the U.S. economic system is very focused on market efficiency, there is also a tendency to treat medical care as an inherent right, rather than a product which should go to the highest bidder. This view is reflected, for example, in laws that prevent emergency rooms from refusing treatment based upon the ability to pay for the services. Unfortunately, providing perfect equity in health care would likely result in efficiency losses. The fundamental question is whether we collectively would prefer at least some gains in equity even if it results in a more costly health care system.

WHAT CAN BE DONE?

The pro-market view is consistent with the overall economic policy of the current administration. The main piece of health legislation passed by the current administration is the Medicare Modernization Act of 2003. Included in this act was the creation of the Medicare prescription drug benefit program (part D) and expanding the Medicare Advantage program (which built off the previous ‘Medicare+Choice’ program). In designing both of these programs, the emphasis has been on promoting competition among providers (albeit with government oversight). Both Medicare part D and Medicare Advantage rely on private insurers competing for the enrollment of Medicare participants. The expectation is that insurers with the ability to offer the best mix of quality and affordability will attract Medicare participants, thus channeling competitive forces toward increased economic efficiency.

The Medicare Modernization Act of 2003 also implemented sliding-scale part B premiums for higher-income participants, beginning in 2007. The intention is to help provide greater funding to help alleviate some of the financial burden of the program. This change is much more consistent with the government-interventionist view.

Separate from Medicare policy, the current administration has also promoted the formation of Health Savings Accounts through the Medicare Modernization Act of 2003. These accounts allow workers to set aside part of their income, tax-free, for medical
expenses including premiums, cost-sharing, and direct payments for medical care services and products. Any funds in the Health Savings Accounts which are not used during the year are allowed to remain in the account and grow through tax-free financial investments. If these accounts become heavily utilized, it may encourage a more competitive health care system as consumers will be more price-sensitive in allocating these funds for health care expenditures. At this point, participation in both Medicare Advantage and Health Savings Accounts is too limited to provide any solid evidence of their effectiveness in reducing medical expenditures.

While the President’s health care policies are consistent with his overall economic view, they presume that a competitive market model is the direction we should take. Again, there is considerable debate on whether we should pursue the competitive model.

With respect to the creation of Medicare part D, there is some evidence that competitive forces have reduced the overall costs of the program. Actual part D premiums in 2006 were 40% lower than originally anticipated (CMS 2006b). This is due in part to the competition among the part D insurers and their ability to negotiate reduced rates for medications. The government interventionist response, however, would argue that the Medicare administration could have greater success negotiating lower rates directly.

While the current administration has taken some steps toward reducing Medicare expenditures, it is extremely unlikely that they will prolong Medicare’s financial solvency. As a result, the solution will likely require unpopular choices such as restricting benefits or raising taxes. Much of the problem stems from the design of Medicare itself.

The strengths of parts A and B are that they provide partial, uniform benefits. The benefits are partial in the sense that they do not fully cover the cost of medical care. A full-coverage policy, with no out-of-pocket expenses beyond the premium, would be attractive from the participants’ view, though it would result in even greater utilization of services. The additional utilization would likely provide little or no added value to the patient (an issue referred to as ‘moral hazard’ in the economics literature) and further drive up program expenditures. Thus, the partial coverage provided under parts A and B helps to limit frivolous services which reduce overall expenditures of the program.

In reality, though, only 12% of the Medicare population was without some form of supplemental coverage in 2002 (KFF, 2005). The remaining 88% have lower out-of-pocket expenses which results in greater utilization. The fact that most Medigap policies completely eliminate out-of-pocket expenses generates much higher utilizations. Since these policies must conform to Medicare approved standards, the Medicare administration is effectively undermining its own cost controls by creating these policies.

Uniformity of benefits refers to the fact that the benefits are defined at the national level with little variation by age, state, health status, etc. Uniformity, in this case, ensures a degree of equity and avoids problems of adverse selection. The competitive market view would certainly argue that uniformity limits competition and is partially responsible
for the inefficiencies that drive costs upward. However, under a competitive insurance market, insurers would gain from designing policies which are primarily attractive to healthier, lower-cost individuals. If successful, they are able to provide such policies at much lower premiums while still earning a profit. Less healthy, higher cost individuals would perhaps look for insurance policies which have very broad coverage and greater patient control of choices. If these policies are only sought out by high-cost individuals, they will be available only at very high premiums.

Government interventionists argue that as Medicare Advantage participation grows (at least for healthier segments of the Medicare population), it will leave the Medicare administration to directly cover the costs of only the high-cost patients, resulting in little actual cost savings. From the competitive market view, the limited cost savings of Medicare Advantage is due to the low participation rates. The government interventionists argue that we must eliminate Medicare Advantage, while the competitive market view argues to move entirely to the Medicare Advantage model in place of parts A and B.

If we abandon uniformity, the competitive pressures would likely result in some enhanced efficiency, though at a significant loss in equity. Namely, we would no longer have a system which provides adequate coverage to all eligible populations.

Finally, there seems to be renewed momentum for legislation to create a national health care plan. The U.S. is the only industrialized country without a national plan to ensure some sort of equal coverage to all citizens. If the Medicare program were replaced with a national policy applying to all citizens, the average cost per participant would be much lower. This is because the rest of the population is generally healthier than the seniors and disabled populations currently receiving Medicare. While such a program would necessarily have higher total expenditures, it would have the advantage that current workers would see an immediate benefit from their additional tax payments. Thus, converting Medicare to a more universal system may have some political appeal to voters, compared with the potential for increased payroll taxes for current workers who are not yet able to participate in Medicare. While this may have some political appeal, it should be noted that this will not solve the fundamental problem. Empirical results show health care in the U.S. is more costly than in other industrialized countries, though with greater access to high-tech treatments (at least for those with insurance). The problem of growing medical expenses, while exaggerated in the U.S. system, is a growing concern in all industrialized countries.
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