Analyzing Options to Cover Prescription Drugs For Medicare Beneficiaries

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for
The Henry J. Kaiser Family Foundation

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Executive Summary

With about one third of the Medicare population lacking prescription drug coverage, and others concerned with diminishing coverage from other sources, prescription drug coverage for Medicare beneficiaries has once again emerged as a salient policy and political issue. As a result, a number of proposals have been introduced that seek to provide prescription drugs coverage to the Medicare population.

This report was commissioned by the Kaiser Family Foundation in 1999 to understand the implications for beneficiaries of various approaches to Medicare prescription drug coverage. The analysis was designed to assess the effects of prescription drug proposals on coverage, benefit levels, out-of-pocket spending and costs. It considers how the effects of leading proposals vary by beneficiary income, source of supplemental insurance, and utilization of prescription drugs. It also examines design features that play a significant role in shaping the extent of drug coverage and its effectiveness in increasing access to affordable drugs for Medicare beneficiaries, especially those who are the most vulnerable.

The analysis focuses on prototype options that are based on but not identical to proposals that appear to be at the center of the national policy debate: the Clinton Administration’s original proposal; the Clinton Administration’s proposal as revised and made more comprehensive with the addition of a stop-loss benefit (announced in June of 2000); and the House-passed proposal, H.R. 4680, sponsored by Representative Thomas. The analysis includes the Administration’s original proposal, although it is not being seriously considered, in order to illustrate the implications of coverage with and without a stop-loss benefit for Medicare beneficiaries. These three proposals were selected not only because they seemed to be the most discussed but also because they illustrate approaches to providing Medicare beneficiaries with outpatient prescription drug insurance that are different on several dimensions.

In very basic terms, the Administration’s proposal would provide subsidized prescription drug coverage under Medicare, while the House-passed plan would provide subsidized prescription drug coverage through private plans that contract with Medicare. The Administration and House-passed proposals provided the basic parameters for the analysis described in this report, however, the options actually modeled differ somewhat. This was due to a variety of factors, some relating to technical reasons and some driven by the changing nature of the proposals. Accordingly, the options analyzed herein are similar but not identical to those being scored by the Congressional Budget Office. This important distinction is carried out in the naming of the options described in the remainder of the report: (1) Full Medicare without Stop-Loss, (2) Full Medicare with Stop-Loss, and (3) Medicare/Private Plan.
Data and Methodology

To analyze the prototype options, a model was developed to assess the effects of each approach on beneficiary coverage, prescription drug utilization and spending, and out-of-pocket expenditures. The primary source of data used for this analysis was the 1995 Medicare Current Beneficiary Survey (MCBS). The MCBS was projected to calendar year 2000 and then adjusted to account for under reporting of drug utilization as well as the undercount of beneficiary expenditures on drugs resulting from the exclusion in the survey of information for the institutionalized population. To analyze implications by income and poverty level, the MCBS was adjusted to develop income classifications that use definitions similar to those used in government low-income programs for Medicare beneficiaries. To analyze how the existence of a new source of prescription drug coverage would affect enrollment in other sources of drug coverage, current law coverage rates were projected through 2009.

With the drug coverage and spending baselines established, it was possible to assess the effects of different drug coverage proposals on Medicare beneficiaries by analyzing how the cost-sharing features of the proposals would change the distributions of beneficiaries by sources of payment and drug expenditures. The model also estimates how much out-of-pocket spending would be incurred by the beneficiary and how the different proposals would affect beneficiaries at different income thresholds. The gross total government cost for the coverage provided by the three prototype options for the two years modeled is also estimated.

It is important to note that impact analyses such as the one provided in this report are necessarily driven by assumptions, and the analysis is only as good as those assumptions. We have attempted throughout this report to make clear the assumptions used and the degree to which they correspond to similar assumptions made by other analysts, such as those at the Congressional Budget Office (CBO) and the Health Care Financing Administration (HCFA).

Findings

The Full Medicare and Medicare/Private prototypes modeled in this report are based on different philosophies of how to structure outpatient prescription drug coverage for Medicare beneficiaries in terms of the amount and flow of subsidies, definition of benefit package(s), and other policy parameters. Yet, the analysis finds that the effects of the prototype options for beneficiaries are similar on several key dimensions. The most dramatic differences stem from the more generous premium subsidies that come with the greater commitment of government dollars under the Full Medicare with Stop-Loss coverage prototype.
In terms of similarities, the analysis found:

**Coverage:** All three prototype proposals would significantly improve the proportion of Medicare beneficiaries with coverage for outpatient prescription drug expenses, when compared against the baseline (34% of beneficiaries without drug coverage in 2009), as seen in Exhibit 1. At full implementation (2009), more Medicare beneficiaries would have prescription drug coverage from all sources under the Full Medicare approaches (99%) than under the Medicare/Private approach (89%). This is because of higher subsidy levels and almost automatic nature of enrollment under the Full Medicare approach. This 89% participation rate is based on the assumption that private plans will be developed, offered, and made available to all beneficiaries under the Medicare/Private approach, an assumption that some have questioned.

![Exhibit 1: Medicare Beneficiaries, by Primary Source of Prescription Drug Coverage](image)

**Low-income Protection:** All three prototype proposals would provide significant financial protection against the costs of outpatient prescription drugs for low-income beneficiaries, through premium and cost-sharing subsidies up to an annual coverage limit. Low-income beneficiaries would still be liable for prescription drug costs above that limit and below the stop-loss threshold in two of the prototypes. Many of the low-income would be eligible to receive Medicaid assistance for those remaining costs. However, all three prototypes provide the low-income subsidies through a separate process linked to Medicaid. Experience with other similarly structured programs for the low-income has shown that a significant number of the low-income do not participate in these programs.

Major differences include:

**Stop-Loss:** Both of the prototype proposals include stop-loss coverage (Full Medicare with Stop-Loss and Medicare/Private), which means the plans would cover all prescription drug costs after an enrollee’s total prescription drug expenses reached a certain amount. This provision would protect the small percentage of beneficiaries with very high-end drug expenditures, although the level at which they receive stop-loss protection varies significantly. Under the Full Medicare with
Stop-Loss, the stop-loss threshold is $4,000 in 2003, compared with $6,000 under the Medicare/Private approach. As seen in Exhibit 2, these stop-loss threshold amounts rise over time at different rates, widening the differences between plans in terms of the share of people receiving stop-loss protection in 2009 (11% of enrollees under Full Medicare with Stop-Loss compared with 4% under Medicare/Private).

**Indexing:** One of the major distinctions between the prototypes, and one that contributes significantly to the cost (and benefits) of the proposals, is the way in which benefit parameters are indexed over time. The Full Medicare with Stop-Loss prototype uses the percentage change in drug prices (estimated to be an increase of about 5.5% per year), which does not account for changes in utilization. Therefore, if total drug spending grows faster than drug prices, which it is predicted to do, more enrollees would trigger the stop-loss threshold and the proportion of drug expenditures borne by the government would increase. The Medicare/Private prototype uses an index of the annual percentage change in total per capita drug spending for Medicare beneficiaries (estimated to be an increase of about 8.9% per year). Using such an index maintains the proportion of drug spending paid by the government at about the same level, but provides less protection to beneficiaries over time, because it has the effect of raising the stop-loss threshold higher. In 2009, the stop-loss threshold amount would be $10,007 under the Medicare/Private approach, compared to $5,515 under the Full Medicare with Stop Loss option.

**Benefits:** The principal differences between the prototypes relate to imposition of a deductible and a stop-loss component. Full Medicare without Stop-Loss represents a policy choice to emphasize providing very limited coverage to the broadest possible number of participants rather than targeting those with high drug expenditures. The addition of a stop-loss component, with the costs of that portion of the benefit paid fully by the government, provides significant financial protection to beneficiaries, but also significantly increases the government’s financial commitment.

The Medicare/Private approach is more conservative in the commitment of government funds. The stop loss coverage is not 100% subsidized, and the plan would impose a front-end deductible which reduces costs by lowering benefit payments and promoting less induced utilization. The imposition of a deductible, however, makes the coverage less attractive to those with less need for
prescription drugs.

**Subsidy levels and government spending:** The most significant distinction among the prototype proposals is in the amount of public funds committed to the program. The Full Medicare options, with their more generous subsidies and much higher benefit level for enrollees, would achieve greater participation and lower out-of-pocket expenditures for Medicare beneficiaries. While no attempt was made to do a thorough cost analysis of the prototype proposals, the gross costs to the government would be substantially higher under the Full Medicare with Stop-loss approach ($75 billion in 2009) than under the Medicare/Private approach, with less generous subsidies ($35 billion).

**Role of Private Sector:** The Full Medicare and the Medicare/Private prototypes obviously differ in the degree of their reliance on the private sector to deliver the benefit. The Full Medicare approaches would have the government contract for administration of the benefit, but the benefit parameters would be federally defined and risk would be borne by the government. The Medicare/Private prototype seeks to subsidize the costs of coverage, but leaves more to the private market to define the benefit options and to assume the financial risk.

This analysis is somewhat limited in that only a very minor attempt was made to predict what the effects of these different approaches would have on drug prices, development of new therapies, and the behavior of various segments of the health care delivery system. As with any major new government initiative, the opportunity for unintended consequences is high.

A final observation and note of caution is that this analysis is based on projections from what we know from past experience about prescription drug costs, utilization, and coverage. Just as no one could have predicted in 1965 what the advances in medical science and practice would be and how they would affect program costs and beneficiary health, we cannot predict today what the future holds with regards to prescription drug costs and benefits. No one has been able to quantify the extent to which prescription drugs are being used today to replace other medical services, much less make such predictions for the future. Medicare prescription drug proposals are likely to have effects on the health care system that reverberate beyond Medicare but which would affect Medicare as well as other government programs. These effects are not fully captured in this modeling effort.

This analysis clearly demonstrates that, under the prototype proposals examined in this report, many would benefit from improved prescription drug coverage, compared with no change in law. Our analysis also shows that the approaches provide comparable assistance to the low-income Medicare population, although the differences between the stop-loss threshold amounts would ultimately have a notable effect on those with modest means. Further, the introduction of the stop-loss benefit would provide critical assistance to those with high drug expenditures. This analysis shows that the choice of approach, the design of the benefit, the level of federal dollars significantly influences the breadth and scope of this coverage.
ANALYZING OPTIONS TO COVER PRESCRIPTION DRUGS FOR MEDICARE BENEFICIARIES

INTRODUCTION

When the Medicare program was enacted 35 years ago, outpatient prescription drugs were not included in the benefit package. Since then, the idea of expanding Medicare to finance prescription drug coverage has been raised unsuccessfully several times. More than two decades after the program was established, Medicare was, in fact, expanded to cover outpatient prescription drugs under the Medicare Catastrophic Coverage Act of 1988 (MCCA), only to be repealed one year later before the new benefit was implemented. President Clinton also proposed a new Medicare drug benefit in 1993 as part of the ill-fated comprehensive health reform plan known as the Health Security Act. The issue of prescription drug coverage for Medicare beneficiaries was also the object of much debate during the deliberations of the National Bipartisan Commission on the Future of Medicare which completed its work in 1999, unable to reach sufficient consensus to forward any formal recommendations to the Congress.

At the time this report is being released, discussions about providing prescription drug coverage to the nation’s Medicare beneficiaries have moved from the question of whether to provide drug coverage to seniors to one of how and how much. To a large degree, the new bipartisan consensus about the need for some government assistance in providing coverage has come about as a result of a larger than anticipated federal budget surplus together with a slowdown in the rate of Medicare spending. After years in which Congress focussed on reducing Medicare costs, the addition of significant new government spending for Medicare now seems a possibility. President Clinton proposed adding prescription drug coverage to Medicare in his 1999 Medicare modernization proposal, included it in his FY2001 budget proposal, and has recently specified changes to make the benefit even more generous by adding a stop-loss benefit to protect against catastrophic prescription drug expenses. On June 28, 2000, the House of Representatives passed by a narrow margin H.R. 4860, the Medicare Rx 2000 Act. The bill was sponsored by Representative Bill Thomas (R-CA), chair of the House Ways and Means Subcommittee on Health. The Senate Finance Committee has begun consideration of the issue including a prescription drug proposal developed by Chairman Bill Roth (R-DE). Given the deep philosophical and partisan divisions on Capitol Hill and the politics of an election year, the outcome of the prescription drug debate is uncertain. What is clear, however, is that the issue has emerged as one of the most important to the electorate, especially those on Medicare.

The Importance of Prescription Drugs for Medicare Beneficiaries

Prescription drug coverage for Medicare beneficiaries has become a salient policy and political issue because the cost of prescription drugs is becoming an increasingly significant financial burden for many Medicare beneficiaries. Despite the growing reliance on prescription drugs in the
prevention and treatment of many acute and chronic conditions, Medicare does not generally cover them on an outpatient basis. When Medicare was first enacted in 1965, pharmaceutical therapies were not as commonly available as they are now. Today, however, they are a primary form of medical care and often substitute or reduce the need for other costly medical services such as hospitalizations and surgery.

The growing importance and increased use of prescription drugs have had a disproportionate effect on the elderly, who account for 13% of the population but over a third of the nation's total drug expenditures. While two-thirds of beneficiaries have some form of drug coverage to supplement their Medicare, a third (13 million) lack coverage and must pay for their medications out-of-pocket (Figure 1). Some without drug coverage may have assistance through state pharmacy programs (in 16 states). Even those with some coverage are not fully insulated from this debate, given the decline in retiree health benefits, new limits on prescription drug benefits offered by many Medicare HMOs, and the rise in Medigap rates for policies covering a portion of drug costs.

![Prescription Drug Coverage of Medicare Beneficiaries, 2000](image)

In many respects, beneficiaries without drug coverage look similar to the overall Medicare population. Over half of all beneficiaries without drug coverage have incomes above 150% of poverty and more than one in four are in fair or poor health. Still, lack of drug coverage disproportionately affects the near-poor, the oldest-old, and those living in rural areas. For example, 39% of beneficiaries with incomes between 100% and 150% of poverty lack drug coverage, compared with 24% of those with incomes above 300% of poverty. Beneficiaries 85 and older are more likely to lack drug coverage than their younger counterparts 65 to 74 (38% vs. 29%). Likewise, beneficiaries in rural areas are far more likely than those in non-rural areas to be without drug coverage (43% vs. 27%).

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1 Actuarial Research Corporation projection of drug coverage of the Medicare population to 2000, trended forward from the 1995 Medicare Current Beneficiary Survey. (See Methodology discussion later in this report.)

2 Unless otherwise noted, the data source for the remainder of this section is Poisal, John and George Chulis, Medicare Beneficiaries and Drug Coverage, Health Affairs, March/April 2000, p. 248-256. The data are based on an analysis of the 1996 Medicare Current Beneficiary Survey.
The burden of pharmaceutical expenditures is not evenly distributed across the Medicare population (Figure 2). In 2000, 87% of Medicare beneficiaries are estimated to use one or more prescriptions, averaging about $1,260 in total drug expenditures, paid by third party insurance or by the beneficiary out-of-pocket. However, prescription drug spending is highly skewed. While nearly one-third of all beneficiaries are expected to incur less than $250 in drug expenditures in 2000, another 42% of all beneficiaries will have one-year expenditures at or exceeding $1,000. As might be expected, those with the highest expenditures account for a disproportionate share of total spending. The 7% of beneficiaries with drug spending in excess of $4,000 will account for 32% of drug expenditures for this population in 2000.\(^3\) These distributions have important implications for the design and cost of a prescription drug benefit.

Having drug coverage significantly influences the use of prescription drugs by Medicare beneficiaries. Beneficiaries without drug coverage average five fewer prescriptions per year than those who have coverage. The disparities are even wider among those in poor health: those who lack coverage average eleven fewer prescriptions than their insured counterparts. Consistently lower utilization levels among those without drug coverage may indicate under-use of prescribed medications, which could have a negative effect on health.

The disparity in the utilization of prescription drugs by Medicare beneficiaries is further revealed in data that compares total drug spending by insurance status. For example, total annual per capita drug spending averaged $673 in 1996 but was more than $300 lower for Medicare beneficiaries without drug coverage ($463) than for those with drug coverage ($769). Among those in poor health, beneficiaries who lacked coverage spent less on prescription drugs than those with coverage ($749 versus $1,340).

Beneficiary out-of-pocket spending for pharmaceuticals is related to a variety of factors, including beneficiaries’ health needs, their access to drug coverage and the generosity of that coverage, and the prices of drugs. Average out-of-pocket spending for drugs in 1996 was $318. As might be expected, those with drug coverage spent, on average, less out-of-pocket for their medicines than those without it ($253 vs. $463). Disparities in out-of-pocket spending between those with and without coverage were even wider among those in poor health ($423 vs. $749).

\(^3\) Actuarial Research Corporation projection to 2000 of drug expenditures incurred by the Medicare population.
Absent a change in law, out-of-pocket spending for pharmaceuticals for the Medicare population is projected to rise, with the continued introduction of new, high-priced breakthrough drugs, increases in direct-to-consumer advertising, and insurance plans imposing higher cost-sharing requirements and caps on drug benefits.

The Purpose of this Report

This report was commissioned by the Kaiser Family Foundation in 1999 when drug coverage for Medicare beneficiaries was being debated in the larger context of Medicare reform. A premium support approach in which beneficiaries could elect to receive drug coverage by enrolling in high option plans offered by private insurers or the government had emerged as the leading option considered by members of the Bipartisan Commission on the Future of Medicare. The Clinton Administration soon followed with a Medicare reform proposal that included the addition of an optional drug benefit to the Medicare program under a new Part D. Also being considered at the time were competing proposals to: provide tax credits to Medicare beneficiaries to offset some of the cost of their prescription drugs; provide subsidies for private, stand-alone supplemental prescription drug insurance; target federal financial assistance to low-income beneficiaries through state pharmacy assistance programs; and regulate the price of drugs so that uncovered beneficiaries would not have to pay as much for their prescriptions. These approaches differ in fairly significant ways with potentially important implications for beneficiaries as well as other stakeholders.

It was a desire to understand the implications of various proposals on beneficiaries that motivated this analysis. Specifically, the analysis was designed to address such questions as: What would be the effect of prescription drug coverage on Medicare beneficiaries? Which beneficiaries would be helped the most under each approach? The least? How much would beneficiaries incur in out-of-pocket costs for outpatient prescription drugs with the benefits specified in each option? How would the effects of the proposal vary by beneficiary income, source of supplemental insurance, and utilization of prescription drugs? Which design features of the proposals would play the most significant role in shaping the drug coverage and in increasing access to affordable drugs for Medicare beneficiaries, especially for those who are the most vulnerable? And what would be the overall implications of the proposal for government spending?

Ideally, this analysis would have been of the actual bills moving through the legislative process. As the pace of legislative activity quickened, however, it became evident that modeling specific bills was not practical. The details of the bills were in flux, and predicting which bills would emerge as

4 See the tax credit proposal developed by the Health Insurance Association of America.
5 See S. 1480/H.R. 2782, introduced by Senator Snowe and Representative Pallone.
6 See H.R. 2925, introduced by Representative Bilirakis.
7 See, for example, H.R. 664, introduced by Representative Allen and S. 731 introduced by Senator Kennedy.
8 Part of this project was to produce a detailed side-by-side analysis of the various proposals under consideration. Prescription Drug Coverage for Medicare Beneficiaries, A Side-by-side Comparison of Selected Proposals was published by the Kaiser Family Foundation in March 2000 and is available at www.KFF.org.
the major competitors seemed risky. The project, in fact, began with an assessment of a wider range of options but as the analysis evolved, a focus on the few leading approaches still in play in the summer of 2000 seemed to make the most sense. We therefore decided to model and analyze prototype options that were based on but not identical to the proposals at the center of the debate at the time. These were judged to be:

- the Clinton Administration’s proposal, as revised and made more comprehensive with the addition of a stop-loss benefit,\(^9\) that was announced in June, 2000; and

- the House-passed proposal, H.R. 4680, sponsored by Representative Thomas.

In addition, we decided to include the 1999 Clinton proposal, although it is not being seriously considered, in order to illustrate the implications of coverage with and without a stop-loss benefit for Medicare beneficiaries. These three proposals were selected not only because they seemed to be the most discussed but also because they illustrate approaches to providing Medicare beneficiaries with outpatient prescription drug insurance that are different on several dimensions. Although they all provide for a voluntary drug benefit provided through a new Part D of the Medicare program, they vary in the magnitude of coverage. They are also based on different philosophies about the role of the government and the private sector in providing insurance coverage. Importantly, however, they are remarkably similar in their treatment of low-income Medicare beneficiaries, with all three options providing for almost 100%-paid covered drug benefits to beneficiaries with incomes below 135% of the federal poverty level.

The basic distinctions in approach between the proposals reflect the differences between Medicare Part B and Medicare Part C. The Clinton options are structured much like Medicare Part B, with voluntary enrollment at the time a beneficiary becomes eligible for Medicare, payment of a uniform national premium that is computed as a percentage of the benefit costs and deducted from Social Security checks, provision of a standard benefit package, and payment of benefits on a fee-for-service basis by the government through exclusive contracts with a private sector administrator in each geographic area. Drug prices would be negotiated by the private sector benefit administrators.

The Thomas approach more closely resembles in concept Medicare+Choice, or Part C. Beneficiaries would choose from a menu of government-approved and subsidized private sector options each year. Plans would have to meet government standards, but would have their own premiums that would be collected directly from enrollees. Benefit packages could vary so long as a minimum value was provided. Most of the insurance risk would be borne by the private plan sponsors. Government subsidies would be provided through a reinsurance mechanism that would result in lower premiums being charged to enrollees. Plan sponsors would have greater flexibility in negotiating prices and managing utilization.

\(\text{It is important to note that, although the Clinton and Thomas proposals provided the basic}\)

\(^9\) Stop-loss coverage is used in this report to mean full coverage of a plan enrollee’s out-of-pocket expenditures over a specified threshold. Some proposals refer to this design feature as “catastrophic” coverage.
parameters for the analysis described in this report, the options actually modeled differ somewhat. This was due to a variety of factors, some relating to technical reasons and some driven by the changing nature of the proposals. Accordingly, the options analyzed herein are Clinton-like and Thomas-like but not the same as those being scored by the Congressional Budget Office (CBO). This important distinction is carried out in the naming of the options described in the remainder of the report: (1) Full Medicare without Stop-Loss, (2) Full Medicare with Stop-Loss, and (3) Medicare/Private Plan. (Details of the prototype options are specified in the next section).

It is also important to understand that the Medicare prescription drug proposals being considered by Congress and modeled in this report are complex, with numerous moving parts. Once implemented, they would produce changes in the behaviors of stakeholders, such as physicians, pharmaceutical manufacturers, and beneficiaries, that are uncertain and thus difficult to estimate. Moreover, Medicare prescription drug proposals are likely to have effects on the health care system that reverberate beyond Medicare but which would affect Medicare as well as other government programs. These effects are not fully captured by this modeling effort.

On a similar note, impact analyses such as the one provided in this report are necessarily driven by assumptions, and the analysis is only as good as those assumptions. We have attempted throughout this report to make clear the assumptions used and the degree to which they correspond to similar assumptions made by other analysts, such as those at the Congressional Budget Office (CBO) and the Health Care Financing Administration (HCFA).

Many of the results of this analysis are driven by assumptions relating to the amount of government subsidy provided. As a result, nuances between the different approaches related to various individual design characteristics may be overshadowed by the implications of the differences in subsidy levels. In order to truly ascertain the effects of changing various design details, an analysis that holds all other variables constant would be needed. This analysis compares the results of the entire proposals, with the full combination of design elements. It was beyond the scope of this project to produce a detailed analysis of the effect of individual design elements.

Finally, just as this analysis is of prototype options and not actual legislative proposals, it is intended to help inform the debate about the implications of different approaches, and not to provide a cost estimate in the manner of CBO.

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10 For example, once outpatient prescription drugs are a covered benefit under Medicare, physicians may change their prescribing practices; manufacturers may alter their product development in ways that affect prices or availability of therapies; and beneficiaries may become more or less compliant in using prescribed medications, which could affect Medicare expenditures on other medical services.

11 If, for example, the new drug benefit succeeded in bringing down the price of drugs for newly insured beneficiaries, pharmaceutical manufacturers might increase their prices for other purchasers such as the private insurance plans that participate in the Federal Employee Health Benefits Program and that contract with M+C plans.
DESCRIPTION OF THE PROTOTYPE OPTIONS

As noted above, three prototypes of proposals being considered by Congress for providing coverage of outpatient drugs to Medicare beneficiaries were modeled for this report. The following discussion provides more complete information on the details of each prototype. All three prototypes are assumed to begin providing prescription drug coverage in 2003, and to be fully implemented by 2009. A summary table of the benefit specifications is presented in the appendix (Table A1).

Full Medicare without Stop-Loss Approach

Structure: The Full Medicare without Stop-Loss prototype would add a new Part D to Medicare structured in much the same way as Medicare Part B is structured. Participation would be voluntary, although Medicare beneficiaries would have a one-time option to enroll – current Medicare beneficiaries would have to make a decision to enroll during the first year of the program; future beneficiaries would have to make a decision at the time of their initial eligibility for Medicare.12 Part D participants enrolled in Medicare+Choice (M+C) plans would receive their Part D benefits under a capitated arrangement with the plan in a manner much the same as for Medicare Part A and Part B benefits.

Benefit design: The outpatient prescription drug benefit package would be defined in statute: there would be no annual deductible and enrollees would pay 50% coinsurance up to the annual coverage limit. The annual coverage limit in 2003 would be $2000 (i.e., $2,000 in drug expenses, paid 50% by Medicare and 50% by beneficiary). In 2009, the annual coverage limit would be $5,000. There would be no annual stop-loss coverage of out-of-pocket expenses for covered drugs paid by enrollees. Part D enrollees would have access to the same discounted prices for all of their prescription drugs purchased through the plan, even for drugs purchased after the annual coverage limit was reached.

Delivery System/Drug Price Discounts: The Secretary of Health and Human Services would contract with one qualified private entity, such as a pharmacy benefit manager (PBM) or insurer, in each area to manage the benefit. Beneficiaries in M+C plans would receive the Part D prescription drug benefit through the M+C plan. (All M+C plans would have to provide prescription drug coverage that is equivalent to the standard Medicare drug benefit, with some variation in cost-sharing allowed within actuarial limits.) The contracting entities could establish appropriate incentives for generic substitution, use formularies, and reduce coinsurance (under certain conditions) and use other cost containment strategies subject to limitations and guidelines. All covered drugs would be guaranteed when medically necessary, regardless of whether they were listed on the entity’s formulary. Entities would be required to contract with all pharmacies

12 There would be an exception to these rules for active workers, who could elect to delay enrollment so long as they were actively working.
meeting minimum standards. Prescription drug prices would be negotiated between contracting entities and the manufacturers.

**Subsidies:** For Medicare Part D enrollees in general, the government would subsidize 50% of the costs of the program. The remaining costs would be financed through a beneficiary premium, similar to Part B, that would be uniform nationally for all Part D enrollees.

Low-income beneficiaries would be eligible for additional subsidies provided through state Medicaid programs. Part D enrollees with incomes up to 135% of the federal poverty level would be eligible to have their Part D premium and cost-sharing paid by the Medicaid program. To receive these subsidies, individuals would have to apply and be found to meet income and resource requirements by the state Medicaid agencies. There would be no additional assistance for drug costs in excess of the annual coverage limit, other than through current law policies for beneficiaries who qualify for full Medicaid benefits as well as Medicare benefits.

Part D enrollees with incomes between 135% and 150% of the federal poverty level would receive additional subsidies to assist in paying for beneficiary premiums. These would be applied on a linear sliding scale ranging from 100% of the beneficiary premium at 135% of poverty to 0% at 150% of poverty.

The Full Medicare without Stop-Loss prototype would also provide incentive payments to employer-sponsored retiree group health plans providing at least the value of Part D coverage. For each Medicare beneficiary enrolled in the group plan, the government would pay an amount equal to 2/3 of the beneficiary premium (i.e., 1/3 of per capita program costs).

**Full Medicare with Stop-Loss Approach**

The Full Medicare with Stop-Loss prototype would be essentially the same as the Full Medicare without Stop-Loss prototype in terms of structure, benefits and subsidies, except that a “stop-loss benefit” or limit on an enrollee’s annual out-of-pocket drug expenses would be added. The stop-loss benefit would be implemented in 2003 with an enrollee stop-loss threshold of $4,000 (e.g., once the enrollee had incurred $4,000 in out-of-pocket costs for covered drugs, the plan would pay 100% of additional drug costs). The stop-loss threshold would be indexed annually to overall inflation in prescription drug prices, thus making it $5,515 in 2009. Costs for the stop-loss benefit would be borne fully by the federal government and not incorporated into the premium paid by beneficiaries.

**Medicare/Private Approach**

**Structure:** The Medicare/Private Plan prototype is a variation of an approach that would provide subsidized outpatient prescription drug coverage to Medicare beneficiaries through private sector plans under contract with the federal government. All Medicare beneficiaries would have the choice of at least two plans offering subsidized drug coverage (one of which could be an M+C
plan). Beneficiaries could exercise their choice annually, so long as they maintained continuous drug coverage through a subsidized Medicare drug plan or through other public or private drug coverage.

**Benefit design:** A standard benefit package would be defined in statute. Plans could offer the standard package, benefits actuarially equivalent to the standard package, or a richer package of benefits. In 2003, the standard package would have an annual deductible of $250, and 50% enrollee cost-sharing up to an annual coverage limit of $2,350 in drug expenditures ($1,300 paid by the enrollee, $1,050 paid by the plan). There would be an annual out-of-pocket stop-loss threshold of $6,000, after which the plan would pay 100% of an enrollee’s drug costs for the remainder of the year. Plans offering actuarially equivalent coverage could vary deductible and coinsurance or copayment amounts but would be required to have the same actuarial benefit up to the annual coverage limit and also to have the same stop-loss threshold. Deductible, annual coverage limit and beneficiary stop-loss threshold amounts would be indexed to the growth in average per capita spending for outpatient drugs for Medicare beneficiaries. Therefore, in 2009, the standard annual deductible would be $417; the annual coverage limit would be $3,919 ($1,751 paid by plan and $2,168 paid by beneficiary); and the annual stop-loss threshold would be $10,007. (Legislative proposals would round these values.)

**Delivery System/Drug Price Discounts:** For this prototype approach it is assumed that drug benefits would be delivered by a variety of health plan entities, similar to what exists in the private market today. Benefits would be delivered by PBMs or other entities, by themselves (to the extent they are licensed to bear risk) or under contract to health insurers. Sponsors of drug coverage would have a great degree of latitude to employ cost and utilization strategies such as using formularies, generic substitution, structured copayments, and other techniques to control expenditures used by many health plans today.

**Subsidies:** In general, the government would provide a 35% subsidy for premiums for qualified drug coverage providing standard benefits (or equivalent value coverage). The subsidy would be provided through a reinsurance mechanism. The government would reimburse plans for a portion of the benefit costs of enrollees with higher drug expenditures. The proportion paid by the government would increase as an enrollee’s drug expenses increased during a year, but the maximum amount of government payment would be 90% of benefit costs. The government-provided reinsurance would have the effect of reducing the premiums charged to beneficiaries for the standard coverage.

Additional subsidies would be provided for low-income Medicare beneficiaries that would be very similar to the low-income subsidies provided under the two Full Medicare prototypes. For those enrolling in a qualified drug plan with incomes not exceeding 135% of the federal poverty level, Medicare would pay the entire premium for any plan offering standard value coverage. Up to 95%

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13 The way in which these values were estimated is discussed in the next section on “Findings.”
of cost-sharing would be subsidized; low-income enrollees would have to pay nominal copayments. For individuals enrolling in qualified drug plans with incomes between 135% and up to 150% of poverty, there would be a partial premium subsidy. The subsidy would be determined on a linear sliding scale with 100% of the beneficiary premium paid at 135% of poverty and 0% of the beneficiary premium at 150% of poverty (beneficiary premiums would incorporate the 35% reinsurance subsidy). Although the subsidies would be provided through Medicare, individuals would have to meet eligibility standards as determined by state Medicaid offices.
DATA AND METHODOLOGY

Establishing the specifications of the three prototype approaches represented the starting point for the analysis. The next step was to use the model developed by the Actuarial Research Corporation (ARC) to assess the effects of each prototype on beneficiary coverage, prescription drug utilization and spending, and out-of-pocket expenditures.

The major source of data used for this analysis was the 1995 Medicare Current Beneficiary Survey (MCBS). The MCBS is a continuous survey of a nationally representative sample of more than 16,000 Medicare beneficiaries. It focuses on socioeconomic and demographic characteristics of the Medicare population, their health care use (including use of prescription drugs), cost and sources of payment, health status, secondary sources of health insurance, and their access to and satisfaction with Medicare services. Beneficiaries are sampled from Medicare enrollment files and are interviewed in person.15 Those interviewed are asked a wide range of questions related to supplemental insurance coverage and payment including whether they had prescription drug coverage, the prescriptions they had received during the year, and the sources of payment for those prescriptions.

The MCBS data were projected to calendar year (CY) 2000 by broad primary supplemental insurance category (e.g., employer-sponsored coverage or Medicaid) using the Health Care Financing Administration’s (HCFA’s) estimates and projections of national health expenditures. These projections are issued annually by the National Health Accounts team, part of the National Health Statistics Group of the Office of the Actuary. The National Health Accounts are composed of all of the health services rendered and sources of funding – private and public – for each type of service. They represent a comprehensive snapshot of health expenditures in relation to the national economy.

The MCBS relies on self-reporting of drug use by beneficiary respondents that results in a significant under-reporting of actual utilization. In this analysis, ARC assumed an under-reporting of 10% and adjusted accordingly. The MCBS data also had to be adjusted to reflect the undercount of beneficiary expenditures on drugs resulting from the exclusion in the survey of information for the institutionalized population. To do this, ARC applied a 10% adjustment.16 These amounts then needed to be trended forward to 2009, the year for which the illustrative proposals are assumed to be fully implemented. Again, this was done based on the National Health Accounts projections. To analyze implications by income and poverty level, the MCBS was

15 U.S. Department of Health and Human Services, Health Care Financing Administration, Medicare Current Beneficiary Survey, www.hcfa.gov/mcbs. During the development of this analysis, results of the 1996 MCBS became available. ARC did a comparison of the implied distribution of drug expenses to that of the 1995 MCBS and found no substantial differences (once both data sets were adjusted to CY 2000 expenditure levels).

16 Consistent with CBO, ARC did this by adjusting the base year data by an average multiplicative factor of 1.096.
adjusted to develop income classifications that use definitions similar to those used in government low-income programs for Medicare beneficiaries (e.g., the Qualified Medicare Beneficiary program). This results in a higher count of persons in poverty than the measures used by the other major federal source of poverty data, the Census Bureau’s Current Population Survey.\textsuperscript{17}

The analysis begins by using the MCBS data to establish a CY 2000 baseline for Medicare beneficiary prescription drug coverage and spending under current law. “Coverage” refers to any source of supplemental insurance that a beneficiary may have that reimburses or covers expenditures for outpatient prescription drugs. It includes Medicaid, employer-sponsored retiree health insurance, coverage under Medicare+Choice (M+C) plans, Medigap policies, and other sources of third-party payment, such as the drugs paid for by the Veterans’ Administration. The CY2000 baseline estimates assume that approximately 34% of all Medicare beneficiaries lack any source of coverage to pay for their outpatient prescription drugs. Of the 67% of beneficiaries with drug coverage in 2000, employer-sponsored coverage is the most common source (24%), followed by M+C plans (17%), Medicaid (12%), individual, which is largely Medigap (8%), and other (5%).

Extrapolations from the MCBS also produce per capita drug expenditures by source of coverage for the Medicare population for 2000 and later. In 2000, the average total per capita spending on such drugs for the Medicare population is estimated to be $1,262. Average per capita spending ranges from about $1,000 for beneficiaries without any insurance coverage to over $1,600 for beneficiaries covered by Medicaid. Also included in the baseline are estimates of the percentage discount in drug prices that apply to beneficiary drug expenditures for each coverage category. These discounts range from a high of 16% for Medicaid to a retail price that is about 12% higher than average prices for individuals who have no source of drug coverage.\textsuperscript{18} The baseline coverage tables are presented in the appendix in Table A-3.

To analyze how the existence of a new source of prescription drug coverage would affect enrollment in other sources of drug coverage, it was necessary to project current law coverage rates through 2009. Rather than attempt to forecast trends in the supplemental insurance market over the next ten years, a decision was made to hold the rates of coverage constant but trend them forward for the growth in Medicare beneficiaries. The assumption that rates of enrollment in the

\textsuperscript{17} Analyses of drug coverage by income can produce different results depending on the source of data, the definition of poverty, and how a beneficiary’s income is defined. Using the Census Bureau’s 1997 Current Population Survey, 4.6 million Medicare noninstitutionalized beneficiaries (13%) had incomes below 100% of the federal poverty level in 1996, according to Moon et al. A major study of the 1996 MCBS done by HCFA found that for the same year, there were 8.1 million noninstitutionalized beneficiaries (22%) with incomes below 100% of poverty. As Moon et al. discuss, there are several possibilities for the wide discrepancy. First, the wording of survey questions from which the estimates are derived are different. Second, decisions about how to treat family income also play a significant role. Unlike the CPS, household income is based solely on the beneficiary and spouse (to conform with program eligibility rules (as in the MCBS). Other likely sources of income (other adults living in the same household) are not included. Failure to count their income adds to the number of poor beneficiaries. The definition in this analysis results in 22% of Medicare beneficiaries falling below 100% of poverty in 2000.

\textsuperscript{18} Assumed discount levels are based on the April 2000 DHHS analysis, Prescription Drug Coverage, Spending, Utilization, and Prices, adjusted to reflect the relation to average final prices.
different sources of prescription drug coverage will remain constant could be easily challenged, since trends suggest, for example, that employer-sponsored coverage will decline. In addition, most experts have been predicting (at least until very recently) that an increasing proportion of Medicare beneficiaries would enroll in M+C plans and receive drug benefits.

The baseline expenditure estimates presented here are somewhat different from those being used by the Congressional Budget Office (CBO). In 2000, CBO estimates that total Medicare per capita expenditures on drugs are about 22% higher than ARC estimates. The difference is due mostly to CBO’s higher adjustment for the MCBS undercount of utilization (33% upward adjustment as compared to 10% made by ARC). The difference in per capita spending estimates would not, however, result in widely varying conclusions about the effects on beneficiaries of the three prototypes analyzed in this report. It does contribute to CBO’s more conservative estimates of the overall costs of proposals on which the three prototypes are based.

With the drug coverage and spending baselines established, it was possible to evaluate the effects of different drug coverage proposals on Medicare beneficiaries by seeing how the cost-sharing features of the proposals change the distributions of beneficiaries by sources of payment and drug expenditures. This modeling exercise allowed an estimate of how much spending would be incurred by the beneficiary out-of-pocket. It was also possible to estimate how the different proposals would affect beneficiaries at different income thresholds. Finally, it produced an estimate of the total government cost of the three prototype options for the two years modeled.
ANALYSIS OF THE PROTOTYPE OPTIONS

The major objective of this analysis was to answer key questions about the financial effects of each prototype approach on Medicare beneficiaries. The findings of the analysis are addressed first for the general Medicare population and then specifically for low-income beneficiaries. The assumptions used are specified throughout, and are summarized in Table A-2 in the appendix.

GENERAL MEDICARE POPULATION

Coverage

As shown in Figure 3, all three prototype options would achieve high rates of prescription drug coverage, and would significantly reduce the number of Medicare beneficiaries lacking any financial help with the cost of their drugs. Not surprisingly, both of the Full Medicare options would achieve higher rates of coverage than the Medicare/Private option, a reflection of the higher government subsidies built into the drug benefit. The Full Medicare options would also result in more replacement of other sources of drug coverage than the Medicare/Private option.

Table 1 shows that at full implementation of the prototype options in 2009, more Medicare beneficiaries would have prescription drug coverage from all sources under the Full Medicare approaches than under the Medicare/Private approach. The Full Medicare prototypes would approximate universal coverage (99%), with all but about 5% of covered beneficiaries obtaining their primary prescription drug coverage through the new Medicare part D. The remaining beneficiaries would retain other sources of supplemental insurance as their primary source of drug coverage, largely employer-sponsored retiree health plans. Less than 1% of the Medicare population would still be uncovered for prescription drug expenditures.

The Medicare/Private approach would achieve a total coverage rate of nearly 89%, leaving about 5.5 million beneficiaries without any form of coverage for outpatient prescription drug expenses in 2009. Most low-income beneficiaries would have drug coverage but about 16% of beneficiaries with incomes above 135% of the federal poverty level would remain uncovered. About 70% of all beneficiaries who were insured in 2009 would obtain their primary prescription drug insurance
through the drug plans established under the new program. The vast majority of beneficiaries with other sources of coverage would be retirees with employer-sponsored plans.

Table 1

Prescription Drug Coverage under Prototype Options for Beneficiaries, 2009

<table>
<thead>
<tr>
<th></th>
<th>Full Medicare without Stop-Loss</th>
<th>Full Medicare with Stop-Loss</th>
<th>Medicare/Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total beneficiaries</td>
<td>45.5 million</td>
<td>45.5 million</td>
<td>45.5 million</td>
</tr>
<tr>
<td>Total beneficiaries with any prescription drug coverage</td>
<td>45 million</td>
<td>45 million</td>
<td>40 million</td>
</tr>
<tr>
<td>Percent of beneficiaries with any prescription drug coverage</td>
<td>99%</td>
<td>99%</td>
<td>89%</td>
</tr>
<tr>
<td>Percent of beneficiaries with incomes above 135 poverty with any drug coverage</td>
<td>99%</td>
<td>99%</td>
<td>84%</td>
</tr>
<tr>
<td>Percent of beneficiaries newly covered</td>
<td>33%</td>
<td>33%</td>
<td>22%</td>
</tr>
<tr>
<td>Percent of beneficiaries with other coverage enrolling in new plan</td>
<td>62%</td>
<td>62%</td>
<td>45%</td>
</tr>
<tr>
<td>Total percent of beneficiaries enrolled in new plan</td>
<td>94%</td>
<td>94%</td>
<td>70%</td>
</tr>
<tr>
<td>Percent of beneficiaries with no Rx coverage</td>
<td>1%</td>
<td>1%</td>
<td>12%</td>
</tr>
</tbody>
</table>

The different coverage rates projected for each prototype result from several factors, but most important is how much the drug coverage would cost beneficiaries. All three proposals would provide for voluntary prescription drug coverage. As such, beneficiaries would have the option of enrolling in the new drug coverage, staying with their existing source of drug coverage, or remaining uncovered. To be attractive to beneficiaries, the new drug insurance option would, therefore, have to be readily available, affordable, and offer equivalent or better coverage at a lower price than other available sources.  

The Full Medicare options would achieve the highest coverage rates largely because they provide

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19 This assumes that beneficiaries behave as rational actors, electing the plan that provides the most value for the least cost. However, beneficiaries may base their plan decisions on other considerations, such as familiarity or even inertia.
the highest overall premium subsidies to the general Medicare population, averaging about 72% across all income groups for Full Medicare without Stop-Loss and 81% with the stop-loss benefit (taking into account both the general and the low-income premium subsidies). By comparison, the Medicare/Private proposal would provide on average a 71% premium subsidy across all covered beneficiaries.\textsuperscript{20} For beneficiaries above 135% of poverty, the contrast in premium subsidies is more stark. Full Medicare prototype without Stop-Loss provides for an average 52% subsidy compared with an average 37% for the Medicare/Private approach.\textsuperscript{21} Full Medicare with Stop-Loss provides for an average subsidy of 67% of premiums.\textsuperscript{22}

\textit{Modeling assumptions.} It is assumed that although all three prototypes depend, to differing degrees, on contracts with private entities, the new Part D drug coverage would be available to all Medicare beneficiaries throughout the country. In reality, however, this assumption may be more or less valid depending on the design and implementation of the option.

Under the Full Medicare approaches, the Medicare program would contract with a single private entity, such as a PBM, in each region of the country but the entity would not assume any risk for paying claims (i.e., insurance risk). Thus, the entity would essentially administer the drug benefits on behalf of the Medicare program. If no entity expressed an interest in covering a region of the country, the Secretary of Health and Human Services would presumably be able to persuade an entity covering another area to expand into “orphan” areas. The result should be that the Medicare drug benefit would be available throughout the country.

Under the Medicare/Private approach, the ability to achieve universal availability is more uncertain. The private plan sponsors would have to offer a drug-only benefit and assume partial risk for payment of claims. (The reinsurance mechanism would cover most of the claims in excess of a specified threshold.) In today’s market, PBMs are not licensed as risk bearing entities and generally do not assume insurance risk in administering drug benefits for managed care organizations or employer plans. Supporters of the Medicare/Private approach argue that if there is a subsidized Medicare drug benefit and the reinsurance payments are adequate, PBMs and health insurance carriers will participate. Indeed, one major PBM has indicated its interest in participating in the program that would be established by the House-passed bill similar to the Medicare/Private option modeled here. On the other hand, some insurance industry representatives say that many insurance companies would not be willing to participate in the Medicare drug program because of the high risk associated with selling such drug-only policies. In any event, the analysis here

\begin{itemize}
  \item \textsuperscript{20} Given the higher premium subsidies of Full Medicare, a question may arise as to why the average subsidy for all beneficiaries under Medicare/Private is almost the same. The reason is because these are weighted averages. The distribution of beneficiary expenditures under the Medicare/Private prototype is weighted toward the low income with their 100% premium subsidy. If the Medicare/Private option had a distribution like Full Medicare, the subsidy for all beneficiaries would be 61%.
  \item \textsuperscript{21} The premium subsidy for beneficiaries over 150% of poverty is 50%; for those between 135% and 150%, there is a partial premium subsidy for those between 135 and 150% of poverty. The 52% is a weighted average. The Medicare/Private approach has a similar subsidy for those between 135% and 150% of poverty resulting in a weighted average of 37%.
  \item \textsuperscript{22} Actuarial Research Corporation estimates.
\end{itemize}
assumes the availability of plans to all beneficiaries under all three options.

In each prototype plan examined in this analysis, election of outpatient drug coverage by Medicare beneficiaries would be voluntary. This introduces both a degree of uncertainty about the rates of participation in the coverage option and makes the new coverage vulnerable to biased selection. Under voluntary coverage arrangements, several factors may affect whether an individual elects to participate. These include the level of the premiums and how they are collected, and the nature of the election process. Would election and enrollment be fairly automatic, such as it is currently for Medicare Part B, or would the beneficiary have to become familiar with a new election process? Would the beneficiary have to remit the premium payment on a timely basis or would it be automatically deducted from the Social Security check? If the former, then some beneficiaries may fail to send in premiums and be disenrolled. Even if the beneficiary enrolls in the new drug plan, the enrollee would still have to be willing and able to pay any required premium contributions and cost-sharing amounts, or if eligible for low-income subsidies, actually establish and maintain their eligibility for them.

In this analysis, participation rates were assumed for the Medicare population as a whole as well as for the low-income. Under the Full Medicare proposals, 94% of all beneficiaries were assumed to participate in the new plan created under Medicare Part D compared with 70% under the Medicare/Private option. The rate was higher for Full Medicare because of the higher overall premium subsidies, the fact that enrollment would be comparable to enrolling in Part B, with premium deductions taken automatically from beneficiaries’ Social Security checks, and because more beneficiaries would switch from employer-sponsored coverage. Under the Medicare/Private option, the process would be more like that for enrolling in a Medicare+Choice plan. The beneficiary would have to actively select a prescription drug plan, enroll in it, and send their premiums to the plan sponsor on a timely basis.

Previously uncovered low-income beneficiaries were assumed to enroll in higher numbers in the new Part D program under the Full Medicare prototypes than under the Medicare/Private option (97.5% versus 85%). Although the premium and cost-sharing subsidies would be similar, the Medicare/Private option again would require more active enrollment, and premiums would have to be sent to the plan by the beneficiary. Given the history of low participation rates by low-income individuals in other publicly subsidized insurance programs, these participation assumptions for all three prototypes might be too high. Moreover, a beneficiary could enroll in Part D coverage and still not be able to take advantage of the coverage if they also did not establish eligibility for the low-income subsidies. In this analysis, 60% of eligible beneficiaries were assumed to take advantage of the low-income subsidies under all three prototypes. The coverage of low-income beneficiaries is discussed in greater detail below.

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23 Although CBO assumed lower overall participation rates for the Clinton and Thomas proposals, the relative differences in the participation rates for the two approaches are comparable.
24 Under current procedures, individuals are automatically enrolled in Part B at the time they become eligible for Medicare Part A. A notice is sent to the individual with instructions on the procedure to follow should the individual wish to decline Part B enrollment.
The other major assumption driving the coverage rates relates to the effects of the prototype options on supplemental sources of insurance, especially employer-sponsored retiree coverage. This issue is addressed next in the discussion of replacement/substitution effects.

**Replacement of Other Sources of Coverage.** Any new publicly subsidized insurance program is likely to result in some replacement of existing sources of coverage. The concern, however, is that people who are satisfied with their current source of coverage may not be able to retain it under the new policy or program. Their existing coverage might be more generous and less costly out-of-pocket. Moreover, any change in insurance can produce transition problems, such as having to switch to a provider that participates under the new plan. Concerns also arise about the extent to which new government expenditures are incurred to insure people who had previously been insured by other sources of coverage. The replacement or substitution of government for private expenditures means that it takes more government spending to achieve higher rates of coverage, because significant dollars end up being spent on behalf of individuals who already have coverage.

In this analysis, more replacement of public coverage for private coverage would occur under the Full Medicare approaches than under the Medicare/Private prototype. As shown in Table 1, about 62% of beneficiaries are estimated to switch from other sources of coverage to the new Medicare part D in 2009 as their primary source of drug coverage under the two Full Medicare approaches. Under the Medicare/Private approach, only 45% of beneficiaries are estimated to switch.

**Modeling Assumptions.**

**Employer-Sponsored Coverage:** One major factor explaining the difference in coverage rates for Full Medicare and Medicare/Private approaches is in the percentage of beneficiaries who move from employer-sponsored coverage to the new program. Employer-sponsored retiree health coverage is currently the largest source of prescription drug coverage for Medicare beneficiaries. This coverage represents an increasing liability for employers even as many employers have reduced their prescription drug coverage. In a separate study for the Kaiser Family Foundation, Hewitt Associates projects that drug benefits could represent as much as 80% of total age 65+ retiree health costs in 2003. And 40% of large employers surveyed by Hewitt in 1999 report that they would seriously consider cutting back prescription drug coverage in the near future.25

Under most proposals being considered, employers would have the opportunity to make use of the new drug coverage, while still supplementing the Medicare benefit to hold their retirees harmless. If, as a condition of participating in the employer plan, an employer required its retirees to enroll in the newly offered Medicare benefit, but also paid the retirees’ premium for that benefit, filled in the Medicare benefit’s cost-sharing up to the level of the employer plan, and covered drug expenses above any annual coverage limit, then the retirees would be no worse off than before. The employer’s cost, however, could be somewhat lower. It thus follows that given employers’

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interest in reducing their liability for retiree medical costs, and especially drug costs, some employers could be expected to make such use of a new Medicare drug benefit.

Under the Full Medicare prototypes, employers who maintained their current retiree drug coverage would get a subsidy equal to 1/3 of the government benefit (2/3 of the beneficiary premium). If the employers instead required their retirees to take the Part D coverage, the government would be subsidizing 50% of the benefit. While tax implications could reduce the difference in the value of the two subsidies, it appears that employers could reduce their costs more by putting their retirees directly into Part D, even if the employers held their retirees harmless. Accordingly, it was assumed in this analysis that most retirees (80%) would end up in Part D as their primary source of drug coverage with the remaining 20% of retirees receiving drug coverage under their employer plan.26

Under the Medicare/Private prototype, the mechanism to subsidize drug coverage would be a reinsurance payment from the government to the employer-sponsored drug plan. The dollar value of the subsidy would be the same, regardless of whether the employer chose to keep the retirees covered only under a retiree medical plan or to have their retirees enroll in a Medicare prescription drug plan (PDP). Clearly some employers would opt to move their retirees into a PDP (and perhaps supplement the coverage). However, the financial incentives for shifting the retirees to the new PDP do not appear to be very significant. It was thus assumed that about 1/3 of persons with retiree medical coverage would shift their primary coverage to Medicare Part D. (Some in the employer community have cautioned that the reporting requirements for the reinsurance payments could dampen employers’ enthusiasm for participating in the reinsurance mechanism.27)

Medicare+Choice: This analysis assumes that some portion of beneficiaries would continue to obtain prescription drug coverage through M+C plans. Under current law, those drug benefits are largely financed by the plan as extra benefits resulting from the adjusted community rate process. In the prototype plans modeled in this analysis, the M+C plans would receive payments from Medicare to subsidize the drug benefit, either through increased M+C capitation payments (as under the Full Medicare prototypes) or through reinsurance payments (Medicare/Private). Whatever the mechanism, a shift is assumed to occur so that even though the source of drug coverage would be the M+C plan, the financing for that coverage would come from a mix of government dollars and beneficiary premium contributions and cost-sharing. The result is that M+C enrollees are shown as shifting to Part D for their covered outpatient prescription drug coverage. As with employer plans, some M+C plans may also provide additional drug benefits that wrap-around Part D coverage.

Medigap: Only 3 of the standardized Medigap policies currently include coverage of prescription drugs (H, I, and J) and that coverage is limited and typically very expensive. Medigap drug plans require beneficiaries to pay 50% of the cost of their prescription drugs after meeting a $250 drug

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26 Assumptions about the magnitude of such movement were informed in this analysis by the Hewitt study.
deductible. Benefits are capped at either $1,250 (Plans H and I) or $3,000 (Plan J) annually. It is assumed that at full implementation of the prototype insurance proposals, almost all beneficiaries now obtaining their drug insurance through Medigap would have switched to the Part D plans.

States and Medicaid: Assuming no change in law, an estimated 5.3 million Medicare beneficiaries would obtain drug coverage through state Medicaid programs in 2009. Plan J also has a standardized high deductible option.

Eligibility for such coverage varies by state as does the scope and nature of the benefits. In this analysis, it was assumed for both the Full Medicare and Medicare/Private approaches that beneficiaries who were previously insured for drug benefits under Medicaid would receive Medicare drug coverage as their primary insurance. State Medicaid programs would continue to provide wrap-around coverage for drug expenses in excess of Medicare benefits, in conformance with state Medicaid plans.

PREMIUMS AND BENEFITS

One of the most basic questions about any new prescription drug proposal is whether it would provide good value for the cost. How much would it cost the beneficiary out-of-pocket in premium? And how much would the coverage be worth to the average beneficiary in terms of covered expenses? (The related issue of how much protection the proposal would provide for beneficiaries with different levels of drug spending is assessed below.)

Most critical to the premium charged to the beneficiary is the extent to which it is subsidized. The level of subsidy not only affects the bottom line cost to the beneficiary; it also influences the beneficiary’s decision as to whether to elect the prescription drug coverage.

The general premium subsidy is greatest under the Full Medicare approaches and thus it is not surprising that their premiums charged to enrollees are almost always the lowest when compared to Medicare/Private. In 2003, for example, a beneficiary not receiving low-income premium subsidies would pay 50% of the total annual premium or about $267 for Full Medicare without Stop-Loss or $290 for Full Medicare with Stop-Loss. This compares to $418 for the Medicare/Private option, in which 35% of premium costs would be subsidized through reinsurance.

28 Some beneficiaries are enrolled in Medigap plans that predate the requirement for standardized benefits and which might include payment for prescription drugs.
29 Plan J also has a standardized high deductible option.
30 Actuarial Research Corporation estimate.
31 In this section, benefits and premiums are shown for an average population, reflecting a mix of high and low users of prescription drugs.
32 As modeled in this analysis, the reinsurance program under Medicare/Private would subsidize 35% of plan premiums. Under the proposal passed by the House of Representatives, the subsidy would be closer to 32% because it is specified as 35% of benefit costs, which would not include administrative costs. Using the 32% as opposed to the 35% subsidy level would produce a small increase in the premiums charged to beneficiaries, some reduction in coverage rates under the new plan, and a modest reduction in government program costs.
As shown in Figure 4, the comparison is much the same for 2009, with the two Full Medicare annual premiums being lower than the one for the Medicare/Private option.

A more complete value comparison is allowed by examining the average annual level of benefit for the 3 options. The annual level of benefit is basically a measure of the drug purchasing power of the benefit package assumed for each of the options, minus administrative costs. In the case of the Full Medicare approaches, the benefit is specified by statute. For the Medicare/Private approach, plans could offer a standard package (defined in statute) or an actuarially equivalent or richer package, with the same stop-loss threshold and the same actuarial benefit at the annual coverage limit. For purposes of this analysis, the standard benefit package was used in the modeling.

As shown in Figure 5, for enrollees who do not qualify for cost-sharing subsidies (i.e., the non-poor), the two Full Medicare options would appear to provide better value than the Medicare/Private approach. Again, this is largely due to the higher level of government subsidies, both for basic and stop-loss coverage, under the Full Medicare proposals. It is also a reflection of Full Medicare’s relatively lower cost-sharing requirements (i.e., no deductible, a higher annual coverage limit, and for the option with stop-loss coverage, a lower spending threshold before stop-loss coverage is triggered).

As shown in Table 2, for Full Medicare without Stop-Loss, the average enrollee would get back
about $1.90 for every $1.00 paid in premium. For Full Medicare with Stop-Loss, an enrollee would get back about $2.90 for every $1.00 in premium in 2003 and $2.70 for every $1.00 in premium in 2009.33 Even with the subsidies from the reinsurance provisions of the Medicare/Private prototype, which are designed to hold down plan liabilities and thus premiums for enrollees, the ratio of benefits to premiums for an average enrollee is not as high ($1.40 in benefits for every $1.00 in premium). This said, it should be noted that the comparison does not reflect the added value to the enrollee of the lower drug prices obtainable under the Medicare/Private option than under the Full Medicare options.

Table 2
Plan Premiums and Average Annual Level of Benefits for Enrollees with Incomes Above 135% of Poverty, 2003 and 2009

<table>
<thead>
<tr>
<th></th>
<th>Full Medicare without Stop-Loss</th>
<th>Full Medicare with Stop-Loss</th>
<th>Medicare/Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollee Premiuma</td>
<td>$267</td>
<td>$551</td>
<td>$290</td>
</tr>
<tr>
<td>Annual Benefit Level</td>
<td>$510</td>
<td>$1,042</td>
<td>$843</td>
</tr>
<tr>
<td>Ratio of Benefits to Premium</td>
<td>1.9</td>
<td>1.9</td>
<td>2.9</td>
</tr>
</tbody>
</table>

*a This is the premium paid by non low-income beneficiaries and thus does not include the premiums that are subsidized for beneficiaries between 135% and 150% of poverty under the Full Medicare and Medicare-Private prototype options.

Although both the Full Medicare with Stop-Loss and the Medicare/Private proposals contain a stop-loss benefit, the Full Medicare proposal provides for both more generous protection as well as protection that would remain more stable over time. With the lower stop-loss threshold of Full Medicare with Stop-Loss ($4,000 compared with Medicare/Private $6,000 in 2003), the annual benefit valuation would be $261 more than the benefit value for Medicare/Private. By 2009, the difference in value would grow more dramatic: $1,647 for Full Medicare versus $971 for Medicare/Private. This results from the different ways in which the stop-loss thresholds are indexed in the two proposals. The inflation adjustment for the Full Medicare stop-loss benefit is defined as the annual increase in prescription drug prices, annualized in this analysis at 5.5% per

33 An average beneficiary’s “return” on their premium in terms of annual benefits would decline a bit for the Full Medicare with stop-loss benefit between 2003 and 2009. The is because of the interaction between the growth of the benefit maximum ($2,000 in 2003 increased to $5,000 in 2009) and the indexing of the stop-loss threshold ($4,000 in 2003 rising to $5,515 in 2009). By 2009, the beneficiary would be spending somewhat more out-of-pocket before the stop-loss threshold was reached.
year. For the Medicare/Private approach, it is the annual per capita increase in prescription drug expenditures (reflecting changes in both price and utilization) for Medicare beneficiaries, estimated to be an annualized 8.9% per year. As discussed under “Out-of-Pocket Expenditures” below, this difference in indexing has significant implications for beneficiaries’ out-of-pocket drug spending.

_Modeling assumptions._ The premium is the estimate of what the prototype plan would cost in total to provide the required set of prescription drug benefits. Included in the calculation of the premium are the projected covered drug expenditures for the enrolled population as well as the cost to the plan of administering the drug benefit (inclusive of marketing costs and profit). Estimating the premium under each proposal therefore requires assumptions about what would happen to the utilization of covered prescription drugs under each of the prototypes and the prices of the drugs utilized.

If an individual who previously had no or limited drug coverage obtains improved coverage under a new drug benefit, one would expect two utilization responses: 1) increased use of prescribed prescription drugs by the beneficiary due to decreased out-of-pocket costs, and 2) changes in the prescribing patterns of physicians. Evidence of the RAND Health Insurance Experiment and subsequent studies gives researchers at least some sense of the extent to which the utilization of prescription drugs is determined by the presence of third party coverage. For all prototype options in this analysis the same .5 utilization response is assumed. That is, for every $1.00 saved by a beneficiary in out-of-pocket expenses for prescription drugs, spending on such drugs increases by $.50. This assumption is applied to the basic coverage as well as the stop-loss benefit in both approaches. The induction assumptions implicit in CBO’s cost-estimates of the 1999 Clinton proposal and the House/Thomas proposal (H.R. 4680) appear to generate similar effects. However, CBO also has assumed that drug prices would climb higher with a stop-loss benefit.

Perhaps harder to estimate is the effect of increased demand on the cost of prescription drugs. To what extent will drug prices rise or fall in response to the increase in the number of Medicare beneficiaries with a third party paying a portion of their drug costs? Will the newly covered beneficiaries (i.e., those who did not previously have coverage) obtain the same levels of discounts on their prescription drugs as those who are currently covered by employer-sponsored retiree health plans? And, will reduced prices paid by the newly covered result in cost shifts to other purchasers? This analysis assumes higher price discounts for newly insured beneficiaries under the

36 Other studies have used different induction factors. For example, a 1994 HCFA analysis assumed that every $1.00 in current law beneficiary spending that was transferred to third-party coverage increased spending by $1.00. Waldo, D.R. Estimating the Cost of a Medicare Prescription Drug Benefit, _Health Care Financing Review_ 15 (3): 103-112.
37 “Medicare enrollees who spent enough on prescription drugs to trigger the catastrophic coverage [“stop-loss” in this report] would no longer have to be conscious of the price of drugs. As a result, demand would grow and prices would increase for some drugs used heavily by Medicare enrollees—particularly drugs with no close substitutes. Congressional Budget Office. _Analysis of the Health Insurance Initiatives in the Mid-Session Review_, July 18, 2000.
Medicare/Private proposal (15%) than for Full Medicare (11%). The rationale is that drug prices would be differentially affected under each of the approaches by the varying capacity of insuring entities to manage drug utilization and obtain discounts from manufacturers. In general, under the Medicare/Private prototype there would be more players in the market and an opportunity to more carefully manage the benefit. It has been suggested that entities administering the drug benefit under the Full Medicare approach would, by contrast, be relatively unsuccessful in restricting access to formulary drugs because of the ease in which beneficiaries could seek exceptions. If a PBM was unsuccessful in limiting beneficiaries to a particular formulary (and especially for expensive drugs), it would not be able to promise the manufacturer the size of market share that is required for substantial price discounts.

A final factor affecting premiums is a plan’s administrative “load,” the amount of premium required to cover the plan’s administrative overhead (marketing, enrollment, other administrative transaction costs, and, profit). In this analysis, the Full Medicare approaches are assumed to have 50% lower administrative costs than the Medicare/Private approach (administrative loads of 5% versus 10%). This is because under the Full Medicare approaches, the entity would have an exclusive market and would not have to advertise to retain market share. The entity also may spend less on utilization review and other cost containment activities because such activities would be more constrained by Full Medicare rules. Moreover, it is unlikely that the government would pay significant profit charges to the private entities.

**OUT-OF-POCKET EXPENDITURES**

A specific prescription drug option can also be evaluated in terms of its effects on beneficiaries’ out-of-pocket liability. How much in out-of-pocket costs would the average beneficiary experience under each prototype option? The estimates for each option for the general population are provided in Table 3. This table splits out the effects of the new (Part D) coverage only as well as when considered in addition to other sources of prescription drug coverage.

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38 Across all payers, however, the full Medicare proposal would result in a 0% increase in prescription drug prices whereas the Medicare/Private option would produce an average price reduction of 6% across all payers. For the 1999 Clinton proposal (without stop-loss coverage), CBO assumed that PBMs would reduce costs below the level that an uninsured retail purchaser would face by about 12.5 percent. Testimony of Dan Crippen to the Senate Finance Committee on the President’s Proposal for Medicare Reform, July 22, 1999. In its estimate of the revised proposal announced in June 2000, CBO reportedly reduced the assumed price discount but did not specify by how much. For the House/Thomas bill (H.R. 4680), the CBO assumed that PBMs would be able to reduce spending by an average of about 25% from what an uninsured retail purchaser would pay under current law. It also assumed that an overall increase in drug prices would be reflected in higher drug prices for other government programs, such as Medicaid and military health care. CBO, *Cost Estimate of H.R. 4680*, provided to the Honorable Bill Archer, June 28, 2000.
Table 3
Beneficiary Out-of-Pocket Expenditures under Prototype Prescription Drug Coverage Options, 2003 and 2009

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Only reflecting new plan</td>
<td>$1,375</td>
<td>$1,088</td>
<td>$1,132</td>
<td>$1,189</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (includes coverage from other sources)</td>
<td>$675</td>
<td>$551</td>
<td>$650</td>
<td>$1,084</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of total drug spending covered</td>
<td>34%</td>
<td>51%</td>
<td>45%</td>
<td>45%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only reflecting new plan coverage</td>
<td>72%</td>
<td>80%</td>
<td>73%</td>
<td>73%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of total out-of-pocket drug expenditures beyond $1,807</td>
<td>32%</td>
<td>13%</td>
<td>20%</td>
<td>25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of new plan enrollees exceeding $1,500/$1,807 out-of-pocket</td>
<td>22%</td>
<td>23%</td>
<td>18%</td>
<td>23%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of new plan enrollees above 135% of poverty with expenditures exceeding $1,500/$1,807 out-of-pocket</td>
<td>24%</td>
<td>25%</td>
<td>15%</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of new plan enrollees reaching stop-loss threshold</td>
<td>N/A</td>
<td>10%</td>
<td>4%</td>
<td>4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of new plan enrollees exceeding 10% of income on drug expenditures</td>
<td>9%</td>
<td>7%</td>
<td>12%</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: "Stop loss" refers to full coverage of an enrollee’s out-of-pocket drug expenditures over a specified threshold.

In 2003 and 2009, an average beneficiary with Full Medicare with Stop-Loss coverage but lacking any other sources of drug coverage would incur lower out-of-pocket expenditures than if the same beneficiary were covered under Medicare/Private or, even more obviously, Full Medicare without Stop-Loss protection. The difference between the three options is shown in Figure 6.
Another measure used to express the beneficiary out-of-pocket burden, the percentage of total prescription drug spending covered for participants in the prototype plan, produces a similar finding. At full implementation in 2009, the Full Medicare with Stop-loss approach would cover about 60% of beneficiary drug expenditures, the Medicare/Private approach would cover 45%, and Full Medicare without Stop-loss would cover 41%.

As might be expected, with the inclusion of other sources of drug coverage, beneficiary liability drops considerably across all three prototypes. This is because coverage from other payers, such as employer-sponsored plans or Medicaid, is capturing a portion of prescription drug expenses.

As shown in Figure 7, Full Medicare without Stop-Loss, combined with other sources of coverage, could result in the average beneficiary having 76% of drug expenditures paid for by the plan. Full Medicare with Stop-Loss, combined with other sources, would cover 84% of drug spending. Combining Medicare/Private with other sources would cover 73% of all drug expenditures.

Although both the Full Medicare and Medicare/Private approaches include a stop-loss benefit, the amount of enrollee out-of-pocket spending for drugs that would trigger the stop-loss benefit differs and the differences widen over time. In 2003, the trigger is $4,000 under Full Medicare and $6,000 under Medicare/Private, for a difference of $2,000. By 2009, the amount of out-of-pocket drug spending that triggers the stop-loss benefit would grow to $5,515 under Full Medicare and $10,007 under Medicare/Private, for a difference of almost $4,500. In other words, in 2009, a very high cost beneficiary covered under Medicare/Private would have to spend about $4,500 more out-of-pocket than if the beneficiary were covered under Full Medicare before the stop-loss benefit would begin paying 100% of their drug costs.39

39 More precisely, once the stop-loss threshold was reached, the plan would pay for 100% of those outpatient drugs prescribed for the enrollee that were covered by the plan.
As shown in Figure 8, under the Full Medicare prototype, about 11% of all beneficiaries would reach the plan’s stop-loss threshold in 2009. Under the Medicare/Private approach in the same year, about 4% of beneficiaries would reach the stop-loss threshold.

The relative erosion of stop-loss protection under the Medicare/Private option results from the difference in the way the prototype proposals are indexed. Under Full Medicare, the stop-loss benefit is indexed to the consumer price index for drugs; under Medicare/Private, it is indexed to the annual increase in per capita Medicare prescription drug spending. The difference in the rates of growth produced by these indices is illustrated in Figure 9.

The gap between the point at which the annual coverage limit is reached and the point at which the stop-loss protection is triggered under a proposal also creates effects worth examining. Under the Full Medicare prototype, the annual coverage limit would be phased up from $2,000 (50% paid by the beneficiary and 50% by Medicare) in 2003 to $5,000 in 2009. Absent another source of drug coverage, the beneficiary would be responsible for 100% of drug costs between the annual coverage limit and the point at which the stop-loss benefit would be triggered. This is the hole in the coverage donut to which some people refer. Under Full Medicare with a $4,000 stop-loss benefit, a beneficiary incurring high drug spending would have an out-of-pocket liability inside the hole of $3,000 in 2003. As a result of the increase in the annual coverage limit to $5,000 in 2009, the beneficiary’s liability in the hole would be $3,015, that is, the difference between the stop-loss threshold of $5,515 and the $2,500 paid in coinsurance below the annual coverage limit (See Figures 10 and 11). (Obviously, Full Medicare without Stop-Loss leaves the beneficiary liable for
Applying the same analysis to the Medicare/Private prototype reveals the higher beneficiary out-of-pocket liability resulting from its combination of deductibles, annual coverage limits, and stop-loss thresholds. In 2003, the annual coverage limit would be $2,350 ($1,050 paid by the enrollee and $1,050 paid by the plan after the enrollee incurred a $250 deductible). Thus, an enrollee lacking additional drug coverage would have to incur another $4,700 in out-of-pocket liability (spending in the donut hole) before hitting the stop-loss threshold at $6,000. In subsequent years, the annual coverage limit and the deductible would grow by the per capita increase in Medicare prescription drug spending. Thus, in 2009, the annual coverage limit would reach about $3,917 ($1,750 paid by the enrollee and $1,750 paid by the plan after the enrollee incurred a $417 deductible). Thus, an enrollee would have to incur almost $7,840 in drug out-of-pocket expenditures in the donut hole (now at $10,000) before the stop loss benefit would be triggered.

In comparing the different stop-loss thresholds provided for in drug proposals, it is also useful to examine the amount of total drug spending (enrollee and drug plan) that would be incurred before the stop-loss coverage is triggered. As shown in Figures 10 and 11, under the Full Medicare with Stop-Loss proposal in 2003, total spending would be $5,000; under the Medicare/Private prototype, spending would be $7,050. In 2009, total drug spending under the stop-loss threshold would be $8,015 under Full Medicare and $11,757 under Medicare/Private.

Yet another way to examine beneficiary liability is to assess the extent to which beneficiaries would exceed a specified out-of-pocket burden under competing proposals. Somewhat arbitrarily, it was assumed that out-of-pocket expenditures for drugs in excess of $1,500 per year in 2003 would be financially burdensome to the average beneficiary. This amount was indexed to general inflation, reaching $1,807 by 2009. Looked at in these terms, for beneficiaries with incomes above 135% of poverty, the three prototypes are only marginally different in 2009, with 29% of beneficiaries exceeding $1,807 in out-of-pocket spending under Full Medicare and 30% under...
Medicare/Private\textsuperscript{40} (See Table 3). The differences in amounts of uncovered beneficiary spending above the $1,500 and $1,800 thresholds are, however, more striking. In 2009, for beneficiaries above 135% of poverty as a group, the proportion of out-of-pocket spending beyond $1,807 is 37% under Full Medicare without Stop-Loss, 20% under Full Medicare with Stop-Loss, and 32% under Medicare/Private.

A final indicator of the extent to which beneficiaries are protected from out-of-pocket liability is the percentage of beneficiaries who have drug coverage and still incur drug expenditures exceeding 10% of their income, \textit{not inclusive of premiums paid for any drug coverage}. This measure reflects the generosity of a plan’s benefits as well as the extent to which a beneficiary’s drug expenditures are covered by other forms of drug coverage. Figure 12 shows how beneficiaries above 135% of poverty fare under the three prototypes. Under Full Medicare without Stop-Loss, 8% of beneficiaries would exceed 10% of their income on outpatient prescription drugs. The proportion would fall to 7% with the addition of stop-loss coverage. By comparison, 11% of beneficiaries would exceed the 10% threshold under the Medicare/Private option.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure12.png}
\caption{Percent of Beneficiaries with Incomes above 135% Poverty Spending More than 10% of Income on Prescription Drugs (Excluding Premiums) by Prototype Plan, 2009}
\end{figure}

\textit{Modeling assumptions.} The analysis of out-of-pocket expenditures under each prototype is highly sensitive to the way in which benefits are indexed for inflation under each proposal. While the method for indexing is usually specified in proposals, the actual effect on drug prices has to be projected along with the baseline for average per capita drug costs in 2003. As discussed in the methodology section, the analysis incorporates the per capita increase projected by HCFA in its National Health Expenditures (published in 1999), as adjusted by CBO. (The CBO adjustment yields a slightly higher per capita amount than estimated by HCFA.) The base per capita expenditure on prescription drugs is then projected to rise from $1,262 in 2000 to $2,815 by 2009 absent a change in current law, for an average annual increase of 9.3%.

\footnote{The small difference results from the relatively small percentage of beneficiaries with drug spending exceeding the two benefit maximums but falling short of the stop-loss thresholds. In contrast, those beneficiaries would account for a significant percentage of overall drug expenditures.}
LOW-INCOME BENEFICIARIES

The cost of prescription drugs is particularly burdensome for the low-income population, especially those who do not qualify for Medicaid assistance and have no other source of coverage for prescription drugs. For this reason, it is important to estimate the effect of various proposals on the low-income population. All three of the prototype proposals target the low-income with additional federal government subsidies, delivered through either the Medicaid program or through Medicare.

COVERAGE

Low-income subsidy policies between the two Full Medicare prototypes and Medicare/Private are very similar. Both would provide a 100% premium subsidy and significant cost-sharing subsidies (100% in Full Medicare prototypes and 95% in the Medicare/Private prototype) for enrollees with incomes below 135% of the federal poverty level who meet resource tests. The Full Medicare prototypes would provide the low-income assistance through the Medicaid program, while the Medicare/Private would incorporate the low-income subsidies into Medicare. However, they would all require that eligibility for the low-income subsidies be determined by state Medicaid offices.

Although enrollment would be very high for all of the prototype approaches, more of the low-income would likely enroll in the Medicare Part D plan under the Full Medicare prototype approaches (98%) than under the Medicare/Private approach (93%), as seen in Table 4. This would result in virtually all (99%) of low-income Medicare beneficiaries having some source of drug coverage under the Full Medicare prototype proposals, and 95% of Medicare beneficiaries having some source of drug coverage under the Medicare/Private approach. The displacement of existing coverage for this income group would be the same in either approach, with 63% switching from another source of primary coverage.

41 To qualify for lower-income subsidies, the prototype proposals require that beneficiaries also have only limited resources. For purposes of this modeling exercise, only beneficiary income was considered.
**Table 4**

Comparison of Prototype Approaches for Beneficiaries With Incomes Below 135% Poverty, 2009

<table>
<thead>
<tr>
<th></th>
<th>Full Medicare without Stop-Loss</th>
<th>Full Medicare with Stop-Loss</th>
<th>Medicare/Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Medicare beneficiaries with prescription drug coverage</td>
<td>99%</td>
<td>99%</td>
<td>95%</td>
</tr>
<tr>
<td>Percent of Medicare beneficiaries enrolled in new plan</td>
<td>98%</td>
<td>98%</td>
<td>93%</td>
</tr>
<tr>
<td>Annual beneficiary premium for new plan coverage, net of low-income premium subsidy&lt;sup&gt;a&lt;/sup&gt;</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Average level of benefit (including cost-sharing subsidy) for low-income enrollees&lt;sup&gt;b&lt;/sup&gt;</td>
<td>$1,752</td>
<td>$2,455</td>
<td>$1,598</td>
</tr>
<tr>
<td>Average prescription drug out-of-pocket costs (including new plan premium; all sources of coverage)</td>
<td>$607</td>
<td>$426</td>
<td>$634</td>
</tr>
<tr>
<td>Average prescription drug out-of-pocket costs (new plan only – including premium)</td>
<td>$1,536</td>
<td>$888</td>
<td>$1,342</td>
</tr>
</tbody>
</table>

<sup>a</sup> Applies to those enrollees who seek and are qualified for the low-income subsidies by state Medicaid offices

<sup>b</sup> Reflects the average benefit level for all low-income enrollees, those receiving the low-income subsidies and those who are not

**Modeling assumptions.** The slightly higher enrollment by the low-income in the new Part D plans in the Full Medicare prototypes versus the Medicare/Private prototype is based on assumptions that are similar to those discussed above for the general population. Experience with other low-income subsidy programs for Medicare beneficiaries through Medicaid has been that significant numbers of persons who would be eligible for the subsidies do not enroll in Medicaid for a variety of reasons. These include the degree to which they need medical services, their knowledge of the availability of the assistance, the bureaucratic hassle associated with eligibility determinations (documentation needed for income and resource tests) and the stigma of having to enroll in a welfare program. In this analysis, it is thus assumed that although enrollment and covered drugs could essentially be provided free of charge for most persons in this income class (recognizing that some individuals in this income category would not meet the resource requirements), participation in the low-income subsidies would be affected by similar factors.

Therefore, in all three prototype approaches, it was assumed that only 60% of the low-income would actually take advantage of the low-income subsidies, leaving the remainder of enrollees liable for premium and cost-sharing amounts. In addition, participation assumptions related to the structure of the program (e.g., payment of premiums directly or by automatic deductions from...
social security checks, confusion related to coverage options, etc.) would also affect enrollment for this population group.

The degree of displacement of other coverage for this income group is based on the assumption that most of the existing coverage for this population today is provided through Medicaid. It is assumed that all state Medicaid programs would require their Medicare beneficiaries to enroll in the Medicare coverage and take advantage of the federal subsidies for drug costs now being paid in part by the states through Medicaid.

**PREMIUMS AND BENEFITS**

Under all three of the prototype approaches, beneficiaries with incomes below 135% of poverty would be eligible for a full premium subsidy for outpatient drug coverage. Premiums charged to beneficiaries in 2009 would be $551 for Full Medicare without Stop-Loss, $599 for Full Medicare with Stop-Loss, and $697 for the Medicare/Private prototype. Even though these premiums could be fully subsidized for this income group under all of the prototype proposals, the cost of premiums would affect those beneficiaries who opt for coverage but do not take advantage of the low-income subsidies, for whatever reason. Under the Full Medicare approaches, there would be one standard benefit package (with some variations allowed for M+C plans) and a uniform national premium, similar to the Medicare Part B premium. Under Medicare/Private, the average national premium of $697 in 2009, is a national average for coverage of the standard benefits.

However, under Medicare/Private, premiums would be priced according to service areas defined by the plan sponsors. While drug prices do not vary significantly geographically, drug utilization does, reflecting provider practice patterns, penetration of managed care, demographics, delivery systems, etc. Therefore, locally determined premiums would eliminate any cross subsidies among geographic areas, and result in lower premiums in some areas and higher premiums in other areas for the same coverage and thus could affect participation rates for low-income populations in various areas who do not take advantage of the low-income subsidies.

The three prototype proposals also provide assistance with cost-sharing for the low-income. The Full Medicare prototypes would pay the full enrollee cost-sharing for those qualified low-income beneficiaries who enroll in Medicaid. Under Medicare/Private, cost-sharing would be reduced to only nominal amounts for those qualified low-income beneficiaries determined to be eligible by state Medicaid programs. The cost-
sharing subsidies improve the value of the coverage for the low-income. The average annual level of benefit per low-income enrollee in 2009, including the cost-sharing subsidies, would be $1,752 for Full Medicare without Stop-Loss, $2,455 for Full Medicare with Stop-Loss, and $1,598 for Medicare/Private (See Figure 13).

**Modeling assumptions.** The modeling assumptions used to determine the premiums and benefit levels for the low-income population are the same as those discussed above for the Medicare population in general.

**OUT-OF-POCKET EXPENDITURES**

Although all three prototype plans are generous in terms of subsidies for the low-income under 135% of poverty, enrollees would still experience out-of-pocket expenditures for drugs. All three of the prototype proposals provide for cost-sharing subsidies for drug expenditures up to the annual coverage limit. In 2009, the annual coverage limit would be $5,000 for the two Full Medicare proposals, and an actuarial value of $3,917 for Medicare/Private. The two prototypes (Full Medicare and Medicare/Private) that include a stop-loss benefit, have a stop-loss threshold significantly above the annual coverage limit ($5,515 and $10,007 in out-of-pocket spending, respectively, in 2009). All enrollees, including the low-income with cost-sharing subsidies, would be liable to pay for drug expenditures exceeding the annual coverage limit until they incurred enough cost-sharing expenses to qualify for the stop-loss coverage.\(^{42}\)

As shown in Figure 14, average annual out-of-pocket spending for the low-income group in 2009, taking into consideration all sources of drug coverage (but excluding any amounts paid for premiums for other than a Medicare drug plan), would be $607 for Full Medicare without Stop-Loss, $426 for Full Medicare with Stop-Loss, and $634 for the Medicare/Private option.

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\(^{42}\) Even though the cost-sharing threshold is referred to as an “out-of-pocket” limit, expenses would count towards the threshold even if they were paid by another source of coverage, such as Medicaid, instead of literally being paid by the enrollee.
**Modeling assumptions.** The same modeling assumptions as discussed above for the Medicare population in general apply to assumptions for out-of-pocket spending for the low-income. Many of the low-income who use a lot of prescription drugs would likely have other coverage for expenses above the annual coverage limit in their Part D plans. It is assumed such coverage would primarily be through Medicaid, but some may have other sources such as employer-sponsored coverage, Veteran’s coverage, or coverage through state pharmaceutical assistance programs.

**COST OF PROPOSAL**

It is no surprise that the proposal with the richest benefits and highest amount of government subsidy -- Full Medicare with Stop-Loss -- is also the most expensive. The government costs for each prototype proposal presented in Table 5 was computed by taking the premium for the coverage times the projected number of enrollees, less the beneficiary paid portion of the premiums, and adding the additional low-income and employer plan subsidies. The above calculation produces an estimated cost in 2009 for Full Medicare without Stop-loss of $46 billion, Full Medicare with Stop-loss of $75 billion, and Medicare/Private of $35 billion. No attempt was made to distinguish between federal and state obligations or on the extent to which expenditures would offset existing government spending, or any affects on tax revenues. It must also be stressed that these figures are not intended to be comparable to estimates prepared by the CBO on the overall effect of the proposals on government revenues and spending. The analysis does, however, give some sense of the relative magnitude of government dollars that would have to be committed under each prototype proposal.  

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**Table 5**

Costs of the Prototype Options in 2003 and 2009

<table>
<thead>
<tr>
<th>Prototype</th>
<th>Total costs in 2003</th>
<th>Total costs in 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Medicare (without Stop-Loss)</td>
<td>$20 billion</td>
<td>$46 billion</td>
</tr>
<tr>
<td>Full Medicare (with Stop-Loss)</td>
<td>$35 billion</td>
<td>$75 billion</td>
</tr>
<tr>
<td>Medicare/Private</td>
<td>$19 billion</td>
<td>$35 billion</td>
</tr>
</tbody>
</table>

43 While the vast majority of the spending would be overwhelmingly federal, the proposals would include a degree of state government spending for the low-income. No attempt was made to distinguish between federal and state spending requirements.
Notably, all three prototypes require significant government expenditures. This results from several causes. One is that substantial dollars are needed to provide insurance to previously uninsured beneficiaries (projected to be about 13.8 million in 2003 and 15.3 million in 2009 absent a change in law).\textsuperscript{44} Also, prescription drugs are expensive and drug prices are projected to rise faster than general, or even medical, inflation for the foreseeable future. Prices could rise even higher than predicted as the new designer drugs come onto the market. The high cost of the prototype options is also due to the significant substitution of federal spending for existing state, individual, and employer spending for drug coverage in the three prototypes.

\textsuperscript{44} Actuarial Research Corporation estimates.
FINAL OBSERVATIONS

The Full Medicare and Medicare/Private prototypes modeled in this report are based on different philosophies of how to structure outpatient prescription drug coverage for Medicare beneficiaries in terms of the amount and flow of subsidies, definition of benefit package(s), and other policy parameters. Yet, the analysis finds that the effects of the prototype options for beneficiaries are similar on several key dimensions. The most dramatic differences stem from the more generous premium subsidies that come with the greater commitment of government dollars under the Full Medicare with Stop-Loss coverage prototype. In summary, the analysis found:

• **Coverage:** All three prototype proposals would significantly improve the proportion of Medicare beneficiaries with coverage for outpatient prescription drug expenses. Compared with the projected 34% of beneficiaries in 2009 without drug coverage under current law policies, a Medicare/Private approach would lower that amount to 12%, and a Full Medicare approach would result in drug coverage for virtually all Medicare beneficiaries (99%).

• **Low-income Protection:** All three prototype proposals would provide significant financial protection against the costs of outpatient prescription drugs for low-income beneficiaries, defined as those with incomes below 135% of poverty and some assistance for those between 135 and 150% of poverty. Those eligible beneficiaries participating in the low-income subsidy programs would be insulated from the premium and cost-sharing requirements associated with the drug coverage, up to the annual coverage limit, leaving them exposed only for those prescription drug costs above the annual coverage limit and, for two of the prototypes, below the stop-loss threshold. Many of the low-income would be eligible to receive Medicaid assistance for those remaining costs. However, all the prototypes also provide for low-income subsidies through a separate process linked to Medicaid. Experience with other similarly structured programs for the low-income has shown that a significant number of the low-income do not participate in these programs.

• **Stop-Loss:** Both of the prototype proposals that include stop-loss coverage, Full Medicare with Stop-Loss and Medicare/Private, would protect the small percentage of beneficiaries with very high-end drug expenditures and could make the difference between whether or not a beneficiary decides to undergo a very expensive course of pharmaceutical treatment that could make a significant difference in the individual’s survival or quality of life.

There are, however, major differences among the three prototypes, and these differences have an impact on the effect of the program on beneficiaries:

• **Government Spending:** The most significant distinction among the prototype proposals, and the one that has the most impact on the number of beneficiaries who would end up with drug expenditures.

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45 In 2000, about 7% of all Medicare beneficiaries will incur $4,000 or more in drug expenditures, accounting for 32% of all drug expenditures. About 4% of beneficiaries will incur $5,000 or more, accounting for 24% of expenditures. Actuarial Research Corporation estimates.
coverage, as well as the financial exposure remaining for the beneficiary for drug expenses, is in the amount of public funds that would be committed to the program. In this analysis, it is assumed that the amount of subsidy, and therefore, the less costly it is for beneficiaries to participate in the program, would drive participation rates. Therefore, the Full Medicare options, with their more generous subsidies and much higher benefit level for enrollees, would achieve greater participation and result in lower out-of-pocket expenditures for Medicare beneficiaries. However, while no attempt was made to do a thorough cost analysis of the prototype proposals, the gross costs to government to provide the benefits under each prototype to the estimated number of enrollees varies dramatically. In 2009, Full Medicare with Stop-loss, the prototype with the most generous subsidies would cost $75 billion, more than twice what Medicare/Private, with the least generous subsidies, would cost ($35 billion).

- **Indexing:** One of the major distinctions between the Full Medicare and Medicare/Private prototypes, and one that contributes significantly to the cost and benefit levels of the proposals, is the way in which the benefit parameters are indexed over time. As discussed earlier in this report, the Full Medicare with Stop-Loss prototype uses as an index the percentage change in drug prices (estimated to be an increase of about 5.5% per year). This index does not include any adjustment that reflects changes in the utilization of drugs. Therefore, if total drug spending grows faster than drug prices, which it is predicted to do, more enrollees would trigger the stop-loss threshold and the proportion of drug expenditures borne by the government would increase. The Medicare/Private prototype, on the other hand, uses an index of the annual percentage change in total per capita drug spending for Medicare beneficiaries (estimated to be an increase of about 8.9% per year). Using such an index maintains the proportion of drug spending paid by the government at about the same level. There is an obvious tradeoff of whether to provide more constant protection to beneficiaries (whose incomes rise at closer to the lower rates of general inflation), or protect the general taxpayer from having to absorb an ever-increasing amount of costs for drug coverage for a portion of the population whose numbers are increasing at the same time the numbers of persons bearing the tax burden are decreasing.

- **Enrollment and Premium Payments:** The Full Medicare prototypes are modeled after Part B of Medicare, with enrollees having basically a one-time opportunity to enroll, a uniform benefit package, a monthly premium deducted from Social Security checks, and premium subsidies delivered directly as a reduction in premium (i.e., the government would pay 50% of the premium and enrollees would pay the other 50%). In contrast, the Medicare/Private approach would allow more movement between non-Medicare and Medicare coverage, allow more variation in benefits, have premiums paid directly to private health plan sponsors, and have the general government subsidies delivered to the plans through a reinsurance mechanism. The Full Medicare approach is familiar and would be better understood by beneficiaries, whereas, the Medicare/Private approach would be tend to be more confusing and provide greater opportunity for beneficiaries to decline participation or drop out after enrolling. Such differences would have some effect on the amount of participation in the program.
Benefits: All three prototypes differ in the structure of the benefit. The two principal differences relate to imposition of a deductible and a stop-loss component. Full Medicare without Stop-Loss represents a policy choice to emphasize providing very limited coverage to the broadest possible number of participants rather than targeting those with high drug expenditures or the most financial need. The addition of a stop-loss component, with the costs of that portion of the benefit paid fully by the government, significantly increases the government’s financial commitment. On the other hand, the Medicare/Private approach is more conservative in the commitment of government funds. It provides for less generous stop-loss coverage and imposes a front-end deductible which reduces costs by lowering benefit payments, reducing administrative costs, and promoting less induced utilization. The imposition of a deductible, however, makes the coverage less attractive to those with less need for prescription drugs. In 2003, about 27% of beneficiaries would have drug expenditures of less than the deductible amount for that year ($250), and therefore, would receive no benefit from the coverage.46

- Role of Private Sector: The Full Medicare and the Medicare/Private prototypes obviously differ in the degree of their reliance on the private sector to deliver the benefit. The Full Medicare approaches would have the government contract for administration of the benefit, but the benefit parameters would be federally defined and risk would be borne by the government. The Medicare/Private prototype seeks to subsidize the costs of coverage, but leaves more to the private market to define the benefit options and to assume the financial risk. This analysis is limited in that only a very minor attempt was made to predict what the effects of these different approaches would have on drug prices, development of new therapies, and the behavior of various segments of the health care delivery system. As with any major new government initiative, the opportunity for unintended consequences is high. Another limiting factor is that it does not consider the effects on beneficiaries if private plans do not choose to participate under each of the three prototype options.

A final observation and note of caution is that this analysis is based on projections from what we know from past experience about prescription drug costs, utilization, and coverage. Just as no one could have predicted in 1965 what the advances in medical science and practice would be and how they would affect program costs and beneficiary health, we cannot predict today what the future holds with regards to prescription drug costs and benefits. No one has been able to quantify the extent to which prescription drugs are being used today to replace other medical services, much less make such predictions for the future. For example, to what extent are medications being used to manage heart disease instead of performing open heart surgery, or at least delaying the need for surgery? The use of medications to prevent, diagnose, manage, or cure disease in the future could ultimately reduce other spending for medical care. Or conversely, to the extent new breakthrough drugs are produced that improve and prolong life, the costs for such drugs may be much higher than predicted in this analysis. Ideally, coverage for prescription drugs would be integrated with other Medicare benefits, so that decisions by providers and patients regarding the most appropriate medical interventions would not be influenced by the structure of the coverage.

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46 Actuarial Research Corporation estimate; includes beneficiaries with no drug spending.
Another major caveat that must be emphasized is that this analysis examined the addition of outpatient prescription drug coverage to the existing Medicare program. In fact, the leading proposals contain more comprehensive Medicare reforms designed to safeguard the future of the program that were not incorporated into this analysis. The interrelationships between broad Medicare reform and the establishment of a Medicare outpatient prescription drug benefit are likely to produce effects that are not captured in this study.

For these reasons, we expect that the major contribution of this report to the policy-making process is in providing an understanding of the implications of various benefit design features for the Medicare population. In addition, it reveals the complexity of estimating the costs and effects of expanding Medicare to include prescription drug coverage.
## Appendix

### Table A-1
Prototype Specifications – 2003 and 2009

<table>
<thead>
<tr>
<th>Benefit Feature</th>
<th>Full Medicare without Stop-Loss</th>
<th>Full Medicare with Stop-Loss</th>
<th>Medicare/Private</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of coverage</strong></td>
<td>Medicare benefit without stop-loss</td>
<td>Medicare benefit with stop-loss</td>
<td>Competitive plans with stop-loss. Private plans, M+C plans, and employer-sponsored retiree health plans</td>
</tr>
<tr>
<td><strong>Premium</strong></td>
<td>Uniform nationally; 50% of costs of benefit.</td>
<td>Uniform nationally; 50% of costs of initial coverage (for stop-loss benefit not included in premium costs)</td>
<td>Set by plans with 35% on average of cost of standard plan subsidized by government through reinsurance</td>
</tr>
<tr>
<td><strong>Deductible</strong></td>
<td>$0</td>
<td>$0</td>
<td>$250 under standard option, indexed for inflation&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$417 in 2009</td>
</tr>
<tr>
<td><strong>Coinsurance/copayment</strong></td>
<td>50%</td>
<td>50%</td>
<td>50% under standard option&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Annual coverage limit</strong></td>
<td>$2,000 in 2003 ($1,000 paid by Medicare and $1,000 by enrollee)</td>
<td>$2,000 in 2003 ($1,000 paid by Medicare and $1,000 by enrollee)</td>
<td>$2,350 in 2003 ($250 deductible plus $1,050 paid by enrollee, $1050 paid by Medicare plan)</td>
</tr>
<tr>
<td></td>
<td>$5,000 in 2009 ($2,500 paid by Medicare and $2,500 paid by enrollee).</td>
<td>$5,000 in 2009 ($2,500 paid by Medicare and $2,500 paid by enrollee).</td>
<td>$3,917 in 2009 ($417 deductible plus $1,750 paid by beneficiary and $1,750 paid by plan).</td>
</tr>
<tr>
<td><strong>Stop-loss threshold</strong></td>
<td>None</td>
<td>$4,000 in 2003</td>
<td>$6,000 in 2003</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$5,515 in 2009</td>
<td>$10,007 in 2009</td>
</tr>
<tr>
<td>Benefit Feature</td>
<td>Full Medicare without Stop-Loss</td>
<td>Full Medicare with Stop-Loss</td>
<td>Medicare/Private</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------</td>
<td>----------------------------</td>
<td>------------------</td>
</tr>
</tbody>
</table>
| **Cost-sharing subsidies**<sup>c</sup>  
  Below 100% FPL | 100% (Medicaid covers cost-sharing) | 100% (Medicaid covers cost-sharing) | 100% for plan offering standard package in area except for nominal copayment |
| 100-135% FPL | 100% (Medicaid covers cost-sharing) | 100% (Medicaid covers cost-sharing) | 100% for plan offering standard package in area except for nominal copayment |
| 135% - 150% FPL | 0% | 0% | 0% |
| **Premium subsidies**<sup>c</sup>  
  Below 100% FPL | 100% | 100% | 100% |
| 100-135% FPL | 100% | 100% | 100% |
| 135% - 150% FPL | 50-100% on linear scale | 66-100% on linear scale | 35%-100% on linear scale |
| Above 135% FPL | 50% | 67% | 37% |
| **Plan reinsurance of high drug costs** | None | None | Government reinsures a portion of per enrollee drug expenditures by M+C, PDP, and employer-sponsored retiree health plans. Reinsured amount increases from 15% to 90% as per enrollee drug expenditures increase in excess of $1250 |
| **Indexing Provisions** | After 2009, annual coverage limit amounts indexed to annual increase in prescription drug prices (5.5% annual rate of growth) | After 2009, annual coverage limit and stop-loss threshold amounts are indexed to annual increase in prescription drug prices (5.5% annual rate of growth) | Deductible, stop-loss threshold, and annual coverage limit are indexed annually to average per capita aggregate growth in expenditures for outpatient prescription drugs for Medicare beneficiaries (8.9% annual rate of growth) |

<sup>a</sup> Plans may also offer actuarially equivalent packages which could have no or different levels of deductibles.

<sup>b</sup> Plans may also offer actuarially equivalent packages that could have different levels of coinsurance.

<sup>c</sup> Amount of total government subsidy available to qualified individuals would be determined by state Medicaid programs.
Table A-2
Modeling Assumptions for Analysis of Prototype Options

<table>
<thead>
<tr>
<th>Model</th>
<th>Full Medicare without Stop-Loss</th>
<th>Full Medicare with Stop-Loss</th>
<th>Medicare/Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation rate in illustrative plan(^a)</td>
<td>94%</td>
<td>94%</td>
<td>66%</td>
</tr>
<tr>
<td>Participation rate for low-income beneficiaries in illustrative plan who were not previously covered(^b)</td>
<td>97.5%</td>
<td>97.5%</td>
<td>85%</td>
</tr>
<tr>
<td>Participation of previously uninsured beneficiaries in new drug plan(^c)</td>
<td>97.5%</td>
<td>97.5%</td>
<td>64%</td>
</tr>
<tr>
<td>Take-up rate for low-income subsidies (percentage of eligible beneficiaries)</td>
<td>60%</td>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>Drug price discounts after benefit limit</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Previously covered under employer plans electing new plan(^d)</td>
<td>80%</td>
<td>80%</td>
<td>36%</td>
</tr>
<tr>
<td>Administrative load</td>
<td>5%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>Induction</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Reduction in prices of drugs for people who previously lacked drug coverage</td>
<td>11%</td>
<td>11%</td>
<td>15%</td>
</tr>
<tr>
<td>Overall reduction in aggregate prices paid for drugs by all payers</td>
<td>0%</td>
<td>0%</td>
<td>6%</td>
</tr>
</tbody>
</table>

\(^a\) The same participation rates are assumed for 2009 as 2003. The estimates do not include beneficiaries in employer-sponsored drug plans that receive a government subsidy in return for maintaining their drug coverage as primary under Full Medicare or those that participate in the government reinsurance mechanism under Medicare-Private.

\(^b\) The participation rates for low-income beneficiaries in the illustrative plan are assumed to be lower for the Medicare-Private option because beneficiaries would face a more complex enrollment and re-enrollment process under that option.

\(^c\) The new drug plan is the plan established by the proposal.

\(^d\) The estimates are for the percentage of beneficiaries who had employer-sponsored retiree health coverage as primary coverage who switch to the new prescription drug plan established by the proposal. Many beneficiaries would retain employer-sponsored coverage as secondary. Alternatively, employers may pay the drug premium for some beneficiaries in this group.
### Table A-3a

<table>
<thead>
<tr>
<th>Source of Coverage</th>
<th>Number of People</th>
<th>Percent of Medicare Population</th>
<th>Per Capita Expenditures in 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>4,597,828</td>
<td>11.6%</td>
<td>$1,628</td>
</tr>
<tr>
<td>Employer-sponsored insurance</td>
<td>9,637,326</td>
<td>24.3%</td>
<td>$1,584</td>
</tr>
<tr>
<td>Individual coverage (Medigap)</td>
<td>3,235,928</td>
<td>8.2%</td>
<td>$1,349</td>
</tr>
<tr>
<td>Medicare+Choice/Risk contracts</td>
<td>6,891,928</td>
<td>17.4%</td>
<td>$1,024</td>
</tr>
<tr>
<td>Other</td>
<td>1,952,454</td>
<td>4.9%</td>
<td>$1,586</td>
</tr>
<tr>
<td><strong>No prescription drug coverage</strong></td>
<td>13,308,664</td>
<td>33.6%</td>
<td><strong>$957</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>39,624,128</td>
<td>100.0%</td>
<td><strong>$1,262</strong></td>
</tr>
</tbody>
</table>

### Appendix: Table A-3b
**Prescription Drug Coverage Under Current Law -- Beneficiaries with Incomes Below 100% of Poverty (CY2000)**

<table>
<thead>
<tr>
<th>Source of Coverage</th>
<th>Number of People</th>
<th>Percent of Population</th>
<th>Per Capita Expenditures in 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>3,528,989</td>
<td>39.5%</td>
<td>$1,535</td>
</tr>
<tr>
<td>Employer-sponsored insurance</td>
<td>491,062</td>
<td>5.5%</td>
<td>$1,774</td>
</tr>
<tr>
<td>Individual coverage (Medigap)</td>
<td>408,850</td>
<td>4.6%</td>
<td>$1,196</td>
</tr>
<tr>
<td>Medicare+Choice/Risk contracts</td>
<td>1,131,987</td>
<td>12.7%</td>
<td>$1,149</td>
</tr>
<tr>
<td>Other</td>
<td>431,679</td>
<td>4.8%</td>
<td>$1,628</td>
</tr>
<tr>
<td><strong>No prescription drug coverage</strong></td>
<td>2,941,962</td>
<td>32.9%</td>
<td><strong>$785</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8,934,528</td>
<td>100.0%</td>
<td><strong>$1,241</strong></td>
</tr>
</tbody>
</table>
Table A-3c
Prescription Drug Coverage Under Current Law --
Beneficiaries with Incomes Below Between 100 and 135% of Poverty (CY2000)

<table>
<thead>
<tr>
<th>Source of Coverage</th>
<th>Number of People</th>
<th>Percent of Population</th>
<th>Per Capita Expenditures in 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>740,419</td>
<td>12.4%</td>
<td>$1,857</td>
</tr>
<tr>
<td>Employer-sponsored insurance</td>
<td>713,000</td>
<td>12.0%</td>
<td>$1,529</td>
</tr>
<tr>
<td>Individual coverage (Medigap)</td>
<td>520,638</td>
<td>8.7%</td>
<td>$1,245</td>
</tr>
<tr>
<td>Medicare+Choice/Risk contracts</td>
<td>1,133,819</td>
<td>19.1%</td>
<td>$1,033</td>
</tr>
<tr>
<td>Other</td>
<td>390,263</td>
<td>6.6%</td>
<td>$1,724</td>
</tr>
<tr>
<td>No prescription drug coverage</td>
<td>2,452,845</td>
<td>41.2%</td>
<td>$983</td>
</tr>
<tr>
<td>Total</td>
<td>5,950,985</td>
<td>100%</td>
<td>$1,238</td>
</tr>
</tbody>
</table>

Appendix Table A3-d
Prescription Drug Coverage Under Current Law –
Beneficiaries with Incomes Above 135% of Poverty (CY2000)

<table>
<thead>
<tr>
<th>Source of Coverage</th>
<th>Number of People</th>
<th>Percent of Population</th>
<th>Per Capita Expenditures in 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>328,420</td>
<td>1.3%</td>
<td>$2,118</td>
</tr>
<tr>
<td>Employer-sponsored insurance</td>
<td>8,433,264</td>
<td>34.1%</td>
<td>$1,578</td>
</tr>
<tr>
<td>Individual coverage (Medigap)</td>
<td>2,306,441</td>
<td>9.3%</td>
<td>$1,400</td>
</tr>
<tr>
<td>Medicare+Choice/Risk contracts</td>
<td>4,626,121</td>
<td>18.7%</td>
<td>$992</td>
</tr>
<tr>
<td>Other</td>
<td>1,130,512</td>
<td>4.6%</td>
<td>$1,523</td>
</tr>
<tr>
<td>No prescription drug coverage</td>
<td>7,913,857</td>
<td>32.0%</td>
<td>$1,012</td>
</tr>
<tr>
<td>Total</td>
<td>24,738,616</td>
<td>100.0%</td>
<td>$1,275</td>
</tr>
</tbody>
</table>