A Detailed Description of CBO’s Cost Estimate for the Medicare Prescription Drug Benefit
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July 2004
Note

Numbers in the text and tables of this report may not sum to totals because of rounding.
The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 was signed into law by the President on December 8, 2003. The Congressional Budget Office (CBO) provided analysis to the Congress during its deliberations over the addition of an outpatient prescription drug benefit to Medicare and issued in July 2003 federal cost estimates for H.R. 1 and S.1 as passed by the House and Senate as well as an estimate of the conference agreement on H.R. 1 in November 2003.

This paper provides details of the reasoning behind CBO’s cost estimate of the prescription drug provisions contained in the Medicare Modernization Act. In accordance with CBO’s mandate to provide impartial analysis, this report makes no recommendations. Philip Ellis prepared the report in conjunction with Jeanne De Sa and Eric Rollins, with additional contributions from Niall Brennan, Robert Nguyen, Margaret Nowak, and Shinobu Suzuki. Arlene Holen, Allison Percy, and Tom Bradley, all of CBO, provided thoughtful comments on earlier drafts, as did Len Nichols of the Center for Studying Health System Change and Rachel Schmidt of the Medicare Payment Advisory Commission. (The assistance of external reviewers implies no responsibility for the final product, which rests solely with CBO.)

Over the past several years, numerous people at CBO have contributed to the agency’s analysis of the issues related to a Medicare drug benefit. Those analysts are Joseph Antos, David Auerbach, James Baumgardner, Shawn Bishop, Kate Bloniarz, Jennifer Bowman, Tom Bradley, Niall Brennan, Hayley Buchbinder, Kathleen Buto, Julia Christensen, Sandra Christensen, Anna Cook, Jeanne De Sa, Philip Ellis, Peter Fontaine, Carol Frost, Samuel Kina, Mara Krause, Steven Lieberman, Deborah Lucas, Mark Miller, Robert Nguyen, Margaret Nowak, Karuna Patel, Eric Rollins, Rachel Schmidt, Emily Shelton, Robert Sunshine, Shinobu Suzuki, Sarah Thomas, Bruce Vavrichek, Judith Wagner, and Daniel Wilmoth.

Christine Bogusz edited the paper, and Leah Mazade proofread it. Maureen Costantino prepared the report for publication as well as designed and took the photograph for the cover; Lenny Skutnik printed the copies of the report; and Annette Kalicki produced the electronic versions for CBO’s Web site (www.cbo.gov).

Douglas Holtz-Eakin
Director

July 2004
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The recently enacted Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) contains many provisions that affect the Medicare program specifically and the U.S. health sector more generally. This paper focuses on the provisions that establish a new outpatient prescription drug benefit under Medicare and explains the basis for and rationale behind the Congressional Budget Office's (CBO's) cost estimate of those provisions. CBO estimated that, on net, the Medicare drug benefit would increase mandatory outlays by $407 billion for fiscal years 2004 to 2013 and would raise federal revenues by $7 billion over that period. Those estimates consist of many components and reflect the complex interactions of the law's many provisions (see Summary Table 1). In describing how CBO derived its estimates, this paper also presents the agency's analysis of how the drug benefit is anticipated to operate in practice. Taken as a whole, the MMA's other provisions would reduce outlays by $13 billion and revenues by $7 billion, in CBO's estimation, for a net savings of $6 billion. As a result, the MMA would increase deficits—or reduce surpluses—by $394 billion over the 2004-2013 period (reflecting an increase of $395 billion in federal outlays and an increase of $0.5 billion in federal revenues).

Factors in Estimating the Cost of the Basic Medicare Drug Benefit
The MMA established a basic outpatient drug benefit as Part D of Medicare and made it available on a voluntary basis to all Medicare beneficiaries. Estimating the costs of providing that basic benefit involved three main steps: determining the number of beneficiaries who would decide to enroll in a Medicare drug plan; estimating the average and total costs of providing those enrollees with covered benefits; and using the resulting estimate of gross costs to calculate offsetting premium receipts on the basis of the law's subsidy formulas. In addition, CBO had to calculate whether and to what extent employers that currently provide drug coverage to their retirees on Medicare would continue to do so once the new drug benefit was in place, and whether they would take advantage of an alternative mechanism in the MMA to receive direct payments from Medicare for continuing to provide qualified drug coverage to those retirees.

Participation
Overall, CBO estimated that 87 percent of Medicare beneficiaries would participate in the drug benefit once it became available in 2006, with average enrollment rising from 37 million in that calendar year to 43 million by 2013. In large measure, CBO based those estimates on historical rates of participation in Medicare Part B—which is similar to Part D in that it is a voluntary program, has a premium subsidy of about 75 percent, and imposes significant penalties for late enrollment. Although 94 percent of Medicare beneficiaries enroll in Part B, CBO assumed that participation in Part D would be somewhat lower because many active workers and federal retirees enrolled in Part B would decide not to sign up for the drug benefit. About 19 percent of Medicare beneficiaries would receive subsidized drug coverage through a former employer (and thus would technically not be enrolled in Part D), but the remaining 68 percent would be expected to receive their drug benefits from newly established prescription drug plans or through integrated private health plans that also provided Medicare's other benefits.

Costs for Medicare Drug Plans
Under the MMA, Medicare will not pay directly for drugs provided to its enrollees. Instead, private entities are expected to deliver Part D benefits and will be paid partly on the basis of their expected costs (as expressed in bids) and partly on their actual costs. As a result, CBO’s estimate of federal costs took into account what types of entities would participate as drug plans and what sorts of costs they would incur. While those costs would depend
Summary Table 1.

CBO’s Estimate of the Total Cost of the Medicare Prescription Drug Benefit, Fiscal Years 2004 to 2013

(Billions of dollars)

<table>
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<th>Changes to Direct Federal Spending</th>
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<td>Beneficiaries’ premiums</td>
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<td>Subsidies for employer and union drug plans</td>
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<td>Subsidies for low-income benefits</td>
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<td>Federal Medicaid spending</td>
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<td>Transfers from states’ Medicaid programs</td>
<td>-88</td>
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<tr>
<td>Other effects on federal spending</td>
<td>-2</td>
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<tr>
<td>Total</td>
<td>407</td>
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</table>

| Changes to Federal Revenues                                                                      | 7                        |
| Net Budgetary Impact of the Drug Benefit Provisions                                               | 400                      |
| Net Budgetary Impact of the MMA’s Other Provisions                                                | -6                       |
| Net Budgetary Impact of the MMA                                                                  | 394                      |

Memorandum:

Net Change to Direct Federal Spending 395

Source: Congressional Budget Office.


a. Figures for the total impact on direct spending of the drug benefit provisions differ slightly from figures previously released by CBO because certain expenditures have been reclassified from Part D to other provisions of the MMA and vice versa. That difference does not affect CBO’s overall cost estimate, however. See Congressional Budget Office, The Budget and Economic Outlook: Fiscal Years 2005 to 2014 (January 2004), pp. 12-13.

primarily on the share of beneficiaries’ drug spending that would be covered by the statutory benefit’s design, CBO’s estimate assumed that the new benefit would not only redistribute drug spending among the various payers but also change the level of total spending.

The standard drug benefit specified by the MMA for calendar year 2006 will have a $250 annual deductible; pay 75 percent of covered drug costs between $250 and $2,250 (the “initial coverage limit”); provide no further coverage until an enrollee has incurred $3,600 in out-of-pocket drug costs for the year (the end of the so-called doughnut hole); and pay about 95 percent of covered drug costs beyond that catastrophic threshold. Because the benefit’s parameters are indexed to per capita drug spending, the benefit will cover about the same share of total drug spending for enrollees each year. The catastrophic threshold is defined in terms of the “true out-of-pocket costs” that enrollees actually incur—meaning that enrollees who purchased additional private drug coverage would delay the point at which they reached that threshold and thus would receive less coverage through Medicare, an outcome that CBO assumed would discourage them from purchasing such additional coverage.

To estimate the costs for drug plans of providing those covered benefits, CBO started with a projection of total outpatient drug spending by the Medicare population in the absence of a Medicare drug benefit. The agency then adjusted that total by several factors:
A “price effect” to reflect the likelihood that average drug prices will be slightly higher because beneficiaries who currently lack drug coverage (about 25 percent of the Medicare population) will become partially insulated from those prices;

A “use effect” to capture changes in demand for drugs resulting from changes in beneficiaries’ cost-sharing liabilities (to reflect the assumption that beneficiaries’ total drug use will increase somewhat if their own out-of-pocket costs fall);

An adjustment to reflect the degree to which Medicare drug plans will manage the drug costs of their enrollees (discussed further below); and

A slight decrease in spending because prices negotiated by Medicare drug plans will be exempt from Medicaid’s best-price provisions—an exemption that gives those plans more leeway to negotiate steeper price discounts from manufacturers since those manufacturers will not have to pass on the same discount to Medicaid.

In estimating the degree of cost management that Medicare drug plans would achieve on average, CBO focused on two main considerations: the incentives that plans would have to control costs (based on the degree of financial risk they would bear and the type of competition they would face); and the tools that they could use to control spending (such as preferred drug lists and pharmacy networks). To summarize the effects of those factors on cost management, CBO estimated the degree to which spending would be reduced in comparison with an unmanaged benefit, such as a traditional indemnity insurance plan. The gross drug savings achieved by the Medicare plans would result from negotiating price discounts or rebates from drug manufacturers and pharmacies; controlling overall drug use; and changing the mix of drugs used. The savings are gross in that they do not reflect the administrative costs of the mechanisms used to achieve them (which were accounted for separately).

Drug plans bearing the full level of financial risk specified by the MMA would achieve average gross drug savings of 20 percent initially, CBO estimated, growing to 25 percent over the budget window. That initial level of savings reflected CBO’s assessment that the MMA would create a highly competitive environment for drug plans but would somewhat limit the financial risk they faced—in part because of relatively narrow initial “risk corridors”—and also would place certain constraints on their use of cost-management tools. (Under the law’s risk corridor provisions, drug plans incurring costs that exceeded their expected levels by a sufficient degree would be partially compensated by additional federal payments, whereas drug plans with costs that fell far enough below their expectations would have to reimburse Medicare.) Over time, with the gradual widening of the MMA’s risk corridors, drug plans would be exposed to greater financial risk, so CBO’s estimate of gross drug savings rose accordingly. For beneficiaries whose current drug spending already reflected some degree of cost management, however, CBO adjusted that spending to capture only the incremental savings that would be achieved. CBO also assumed that there was some chance that beneficiaries would be enrolled in reduced-risk or “fallback” drug plans as specified by the law; in those cases, CBO estimated that gross savings would be about half as large owing both to the limited financial risk those plans would face and to the less competitive environment in which they would operate.

To calculate the costs of providing covered benefits to Part D enrollees, CBO then applied the law’s drug benefit design and added an estimate of drug plans’ administrative costs (which also reflected the degree of financial risk they would face). In sum, CBO estimated that the average cost per enrollee for providing basic benefits would be $1,640 in calendar year 2006, rising to $2,713 in 2013. Multiplying the average costs for each year by the number of enrollees and then converting them to fiscal year outlays, CBO projected total payments to Medicare drug plans of $507 billion over the 2006-2013 period.

Beneficiaries’ Premiums

A portion of the costs of providing the drug benefit will be financed by premiums paid by or on behalf of beneficiaries, which CBO estimated would total $131 billion through fiscal year 2013. Although the MMA’s subsidy formulas are complex—specifying both a “direct” subsidy that is fixed and a “reinsurance” subsidy that varies with the share of spending above the catastrophic threshold—CBO estimated average premiums for beneficiaries by applying the law’s 74.5 percent average subsidy to average gross costs. Reflecting the agency’s estimate of average costs per enrollee, average premiums for beneficiaries would rise from $418 in calendar year 2006 (or about
$35 per month) to $692 in 2013 (or about $58 per month), CBO projected. The premiums that beneficiaries paid would depend on which drug plan they joined, however, and would be higher if they joined a plan with above-average costs overall and lower if they joined a plan with below-average costs. As a result, drug plans will have strong incentives to keep their costs low to attract enrollees, and beneficiaries will be strongly encouraged to consider whether the extra premium of a more costly plan is worth paying—two factors that also affected CBO’s assumption about the gross savings that drug plans would achieve on average.

**Employers’ Subsidies**

Former employers are an important source of drug coverage for Medicare beneficiaries, and CBO had projected that in the absence of a Medicare drug benefit, the share of beneficiaries with such coverage would remain roughly constant through 2013. Under the MMA, those employers would have three options for providing drug coverage. First, they could serve as the prescription drug plan for their retirees or could supplement the drug benefits offered by a generally available Medicare drug plan. If employers’ supplemental coverage was generous, though, even individuals with very high drug use might never reach the Medicare benefit’s catastrophic threshold because they would not incur sufficient out-of-pocket costs themselves. Medicare’s average subsidy payments would thus be lower under that option than if employers dropped their drug coverage—that is, stopped providing such coverage themselves to Medicare beneficiaries and did not supplement the drug benefit for Part D enrollees. A third option for employers would be to provide Medicare-eligible retirees with qualified drug coverage and receive a tax-free payment directly from Medicare equal to 28 percent of their total drug costs in a specified dollar range. But CBO estimated that on average, those direct Medicare payments would also be much lower than the net Medicare subsidies for retirees whose employers had dropped drug coverage. At the same time, those direct payments would be accorded favorable tax treatment, making that option somewhat more attractive for employers.

CBO concluded that the net difference in subsidies under the MMA would give employers a new financial incentive to drop prescription drug coverage for Medicare-eligible retirees and that some employers would respond to that incentive. In particular, CBO estimated that 2.7 million Medicare-eligible retirees who would have had more generous employer drug coverage in 2006 in the absence of a Medicare drug benefit would enroll in Part D but would see their former employer decide not to supplement its basic benefits (although they could have their premium paid or receive some other compensation instead). Of the remaining nonfederal retirees that were projected to have generous employer-sponsored drug coverage, CBO assumed that nearly all—about 8.2 million individuals in calendar year 2006, rising to 9.5 million in 2013—would see their employer take the 28 percent subsidy payment from Medicare, both because of its tax advantages and for reasons of administrative simplicity. CBO’s estimate of $71 billion in direct subsidy payments to qualified employer and union plans for fiscal years 2006 to 2013 reflected the share of drug spending by those retirees that was projected to fall in the covered range. The Medicare drug benefit’s provisions would increase revenues by about $7 billion over that period, CBO further estimated, as businesses reduced expenditures for the (non-taxable) drug benefits they had previously provided and increased them for other (taxable) forms of compensation.

**Costs of the Low-Income Drug Subsidies and Effects on Medicaid and Other Direct Spending**

**Low-Income Drug Subsidies and Transitional Assistance**

The MMA established two levels of additional drug benefits for enrollees with relatively low income and countable assets: a substantially higher subsidy for beneficiaries who are either dually eligible for full Medicare and Medicaid benefits or have income below 135 percent of the federal poverty level and few assets; and a somewhat higher subsidy for those with income below 150 percent of the poverty level and assets below a slightly higher limit. Those subsidies would pay all or a portion of those beneficiaries’ Part D premiums and substantially reduce their cost-sharing liabilities (both by lowering their copayment rate and by extending that coverage to costs falling between the initial benefit limit and the catastrophic threshold). About 35 percent of beneficiaries enrolled in Part B of Medicare would be eligible for those low-income subsidy benefits, CBO estimated.

In estimating enrollment in the low-income drug subsidy program, CBO assumed that all dual eligibles would re-
receive the subsidies but that a significant proportion of the remaining eligible population would not apply. That assumption primarily reflected the fact that participation is low in similar Medicaid programs that pay for premiums and cost sharing under Parts A and B of Medicare. (Those programs are for qualified Medicare beneficiaries [QMBs] and specified low-income Medicare beneficiaries [SLMBs], who have income below 120 percent of the poverty level and limited assets.) Ultimately, CBO assumed that almost 70 percent of eligible enrollees would receive low-income subsidies under the MMA. About 75 percent of those eligible for the substantially higher subsidy (including all dual eligibles) would receive it, while about 35 percent of those eligible for the somewhat higher subsidy would receive that benefit. Take-up rates would be slightly lower in the initial years of the benefit.

In estimating the costs of the low-income subsidy payments, CBO assumed that participants would generally have higher average drug costs than beneficiaries who were eligible for those subsidies but chose not to enroll. The total cost of $192 billion that CBO estimated for the low-income subsidies over 10 years also includes about $1 billion for the costs of covering the enrollment fees and providing up to $600 of assistance for certain low-income beneficiaries in conjunction with the Medicare drug discount card. For that transitional assistance program, which is scheduled to operate from mid-2004 through December 2005, CBO assumed a relatively low take-up rate (nearly 1 million enrollees in 2005) because of the program’s limited benefits and temporary nature.

**Interactions with Medicaid**

The MMA transfers responsibility for the prescription drug benefits of dual eligibles from Medicaid to Medicare. As a result, CBO estimated that federal spending on Medicaid would be reduced by $152 billion through fiscal year 2013 compared with projections of spending in the absence of a Medicare drug benefit. Those savings on drug costs would be partly offset by an additional $10 billion in federal Medicaid outlays over that period stemming primarily from additional spending on other benefits for Medicare beneficiaries who would enroll in Medicaid or the QMB and SLMB programs as a result of applying for the low-income drug subsidy program. In the absence of other provisions, those federal Medicaid savings on drug costs would be accompanied by corresponding savings for the states. The MMA’s “clawback” provision, however, would recapture a substantial portion of the states’ estimated drug savings, which CBO projected would further reduce federal costs by $88 billion for fiscal years 2004 to 2013.

**Other Effects on Direct Spending**

CBO estimated that some federal retirees would enroll in a Medicare drug plan; as a result, a portion of their prescription drug costs would be indirectly shifted to Medicare (the figures provided above reflect that estimate). On the basis of that impact, as well as small effects on other federal programs that pay for prescription drugs, CBO estimated that the Medicare law’s drug benefit provisions would reduce mandatory federal spending by about $3 billion through fiscal year 2013. At the same time, the MMA provided $1.5 billion in mandatory spending for the federal administrative costs of implementing the drug benefit in 2004 and 2005, so the estimated impact on other direct spending was a net reduction of about $2 billion over 10 years. CBO assumed that the drug benefit would not generally increase or decrease spending for hospitalizations, doctors’ visits, or other services paid for under Parts A and B of Medicare and that it would not substantially affect net enrollment in private health plans (Part C).

**Uncertainty and Conclusions**

Anytime a complex and substantially new program is created, difficulties arise in predicting its outcome, particularly in the case of an entitlement program with a large number of potential enrollees. For many reasons, actual program costs could turn out to be higher or lower than CBO has estimated. Several key variables—including the number of participants in the basic drug benefit or in the low-income subsidy program, their level of drug spending in the absence of a Medicare drug benefit, and the adjustments made to that spending to determine average costs per participant—could deviate, in either direction, from CBO’s projections. Until such information becomes available, however, the cost estimate described here represents the agency’s best judgment about the net budgetary impact of the Medicare drug benefit that was established by the MMA.
Introduction
The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA), Public Law 108-173, was passed by the House of Representatives on November 22 and by the Senate on November 25 and was signed into law by the President on December 8, 2003. That legislation contains numerous provisions that modify Medicare’s payments to hospitals, doctors, and other health care providers, as well as provisions that affect other parts of the health sector (such as those establishing health savings accounts or changing the rules that govern the introduction of generic prescription drugs). This paper focuses on the provisions of the MMA that create an outpatient prescription drug benefit under Medicare, explaining how the Congressional Budget Office (CBO) generated its cost estimate for those provisions.1

The provisions of the MMA that established the Medicare drug benefit would increase outlays for direct federal spending by $407 billion for fiscal years 2004 to 2013, in CBO’s estimation.2 That projection has several components (see Table 1). Under the law, drug benefits would be delivered by private-sector entities bearing some financial risk—generally through newly established prescription drug plans (PDPs) or through integrated private health plans that also provide Medicare’s other benefits to their enrollees. Those plans would incur costs of $507 billion in providing the basic statutory drug benefit, CBO projected, which would be partially offset by $131 billion in premium payments made by or on behalf of enrollees. The law provides a separate payment system for beneficiaries who instead receive qualified drug coverage through plans offered by employers or unions; CBO estimated that Medicare payments to those plans would amount to $71 billion. The impact of the drug benefit provisions on employers’ costs would indirectly raise federal revenues by $7 billion over the fiscal year 2004-2013 period, in CBO’s estimation, modestly offsetting the impact of the increases in direct spending on future federal deficits or surpluses.

In addition to offering a basic drug benefit to all Medicare beneficiaries, the MMA would subsidize more generous drug coverage for certain low-income enrollees, which CBO estimated would cost $192 billion through fiscal year 2013. Because the new benefit and low-income subsidies would replace the drug coverage that many Medicare beneficiaries receive through Medicaid, federal spending on drugs under Medicaid would decline by $152 billion compared with projected spending in the absence of a Medicare drug benefit. Those savings would be partly offset by an additional $10 billion in federal outlays for Medicaid resulting from the new law’s drug benefit provisions—largely owing to additional spending on other benefits for Medicare beneficiaries who enroll in Medicaid when they apply for the low-income drug subsidy program. Thus, the net federal Medicaid savings shown in Table 1 were estimated at $142 billion over 10

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1. A section-by-section breakdown of CBO’s scoring for the entire MMA was provided in Congressional Budget Office, H.R. 1, Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (November 2003), and additional details were provided in Congressional Budget Office, The Budget and Economic Outlook: Fiscal Years 2005 to 2014 (January 2004), pp. 12-13. CBO’s scoring of the MMA was also discussed by CBO Director Douglas Holtz-Eakin in his statement, Estimating the Cost of the Medicare Modernization Act, before the House Committee on Ways and Means, March 24, 2004.

2. That figure differs slightly from the $409 billion total shown in recent CBO publications. The reason for the difference is a slight reclassification of certain expenditures from the drug benefit to other provisions of the MMA and vice versa, but the difference does not affect CBO’s overall cost estimate for the MMA.
### Table 1.

**CBO's Cost Estimate for the Medicare Prescription Drug Benefit, Fiscal Years 2004 to 2013**

(Billions of dollars)

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<td><strong>Payments to Medicare Drug Plans for Basic Benefits and Administrative Costs</strong></td>
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Source: Congressional Budget Office.

Notes:
- a. Includes $1.5 billion in mandatory spending for federal administrative costs of implementing the drug benefit.
- b. Figures for the total impact on direct spending of the drug benefit provisions differ slightly from figures previously released by CBO because certain expenditures have been reclassified from Part D to other provisions of the MMA and vice versa. That difference does not affect CBO's overall cost estimate, however. See Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2005 to 2014* (January 2004), pp. 12-13.
- c. Includes the estimated effect on revenues of MMA provisions that would modify the Hatch-Waxman Act (an increase of $0.2 billion over the 2004-2013 period).
Another provision of the act would capture a substantial portion of states' savings on Medicaid drug expenditures, reducing federal costs by an estimated $88 billion. Finally, the Medicare drug benefit would on net reduce mandatory spending for the Federal Employees Health Benefits (FEHB) program and other federal programs that currently pay for prescription drugs, although the MMA also included mandatory spending for the federal administrative costs of implementing the drug benefit. Over 10 years, the net reduction in other direct spending would be about $2 billion.

Taking into account all of the MMA's provisions, including those unrelated to the drug benefit, CBO estimated that the law would yield a net increase in deficits or a reduction in surpluses of $394 billion over the fiscal year 2004-2013 period.\(^4\)

This paper aims to explain what each component of CBO's cost estimate for the Medicare drug benefit represents and how those components were derived. In doing so, the paper also reviews how the agency addressed a number of difficult but fundamental questions raised by the prospect of such a new benefit. For example, would Medicare beneficiaries sign up for it—and in particular, would enrollment in the benefit be broad and representative, or would it be concentrated among the small share of beneficiaries with the highest drug costs? Would private-sector entities step forward to provide a stand-alone drug benefit to the Medicare population and accept the degree of financial risk specified by the MMA? If so, how well would they be able to control drug spending, what costs would they incur in doing so, and how would enrollees balance the costs and benefits of competing drug plans when deciding which one to select? If private-sector entities did not come forward, what would be the costs of providing benefits through reduced-risk or “fallback” drug plans, and how would the market for drug coverage evolve over time? How would the organizations currently providing drug coverage to many Medicare beneficiaries—such as their former employers—react to the new benefit's provisions? And how would beneficiaries who were eligible for the low-income subsidies respond to their availability?\(^5\)

The first section of this paper focuses on the drug benefit that will be made generally available to Medicare beneficiaries and discusses the factors affecting the number of participants in that program and the costs per participant, both in gross terms and net of beneficiaries' premium payments. It includes a discussion of the related impact on employer-sponsored drug coverage for Medicare beneficiaries and of the payments Medicare will make to qualified employer and union plans for drug costs. The second section focuses primarily on the subsidies for providing more generous drug coverage to certain low-income beneficiaries—and the related provisions affecting federal Medicaid spending—but also covers several other effects on federal outlays. A concluding section notes the uncertainty inherent in estimating the costs of such an entitlement program, given that the federal government will be offering an entirely new type of benefit to a large number of individuals.

Factors in Estimating the Cost of the Basic Medicare Drug Benefit

Eligibility and Enrollment

A key determinant of total federal costs for providing a Medicare drug benefit is the number of beneficiaries who enroll. Under the MMA, benefits will be first available on January 1, 2006, and beneficiaries who are enrolled in either Part A or Part B of Medicare at that time (including those who get their Medicare benefits through a private health plan under Part C) will be eligible for the new prescription drug benefit, which will be established as Part D

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3. In a comparable table that CBO released in November 2003, the additional federal Medicaid outlays were included with “other direct spending,” whereas Medicaid drug savings were added to the net savings on drug costs for other federal programs (yielding a 10-year total of $155 billion). See Congressional Budget Office, Letter to the Honorable Don Nickles providing additional information about CBO’s cost estimate for the conference agreement on H.R. 1 (November 2003).

4. Taken together, the MMA’s other provisions would reduce outlays by $13 billion, CBO estimated, so that the net increase in mandatory outlays for the MMA as a whole would round to $395 billion. The MMA’s other provisions would also reduce revenues—by $7 billion, CBO projected—nearly offsetting the effect on revenues of the drug benefit provisions.

5. For additional background information and a discussion of how CBO approached many of those questions, see Congressional Budget Office, Issues in Designing a Prescription Drug Benefit for Medicare (October 2002).
of Medicare. Enrollment in Part D will be voluntary, however, so CBO modeled the decision to participate as a function of the “carrots and sticks” that potential enrollees would face—carrots in the form of federal subsidies to keep their premiums down and sticks in the form of late-enrollment penalties. In large measure, CBO based its approach for estimating participation in Part D on the experience of Part B, which is also voluntary, has similar premium subsidies and late-enrollment penalties, and enrolls nearly all beneficiaries who are eligible.

**Key Considerations.** The federal subsidies that will be provided under Part D are a major incentive to enroll in the drug benefit. As discussed in more detail below, those subsidies mean that beneficiaries’ premiums will, on average, cover about 25 percent of the costs of providing the standard Part D benefit. Because of those subsidies, most Medicare beneficiaries by enrolling will receive more in benefits than they will pay in premiums. Even those enrollees who end up paying more in premiums than they save on their drug costs in a given year will derive the benefit of having had insurance protection against the risk of incurring higher out-of-pocket costs. Although beneficiaries generally will not be enrolled in Part D by default—unlike Part B—CBO assumed that the premium subsidy would be sufficient to overcome the hurdle of actively signing up. Eligible beneficiaries who currently have drug coverage will have a clear incentive to enroll in Part D—or the sponsors of their coverage will want them to enroll—in order to obtain those new federal subsidies, regardless of their current drug use. (CBO estimated that about 75 percent of Medicare beneficiaries have some form of drug coverage, though in many cases that coverage is rather limited.) For beneficiaries who have sufficiently low income and assets, the additional premium and cost-sharing subsidies they are offered will provide a further inducement to enroll in the basic drug benefit.

Although enrollment in Part D is voluntary, beneficiaries who do not sign up when they are first eligible, and those who disenroll and subsequently reenroll, will be subject to a late-enrollment penalty (unless they maintain drug coverage from certain other sources in the meantime that is at least as generous as the Medicare benefit). For example, beneficiaries who went without drug coverage for two years before signing up would generally pay a surcharge of at least 24 percent of the average premium each year thereafter; as a result, they would very likely owe more in total premium payments over their lifetime than if they had signed up for the Medicare benefit when it was first available. Even beneficiaries whose current drug use is relatively low will thus have strong financial incentives to enroll in Part D promptly to protect against the risk of having higher drug costs in the future. In essence, the late-enrollment penalty changes the decision about whether to enroll from one that compares next year’s premium with next year’s expected benefits—a choice that could lead beneficiaries to delay signing up until they had recurring, high drug costs—to one that compares lifetime premiums with expected benefits over the same period—a choice that is likely to favor prompt enrollment because of the substantial premium subsidies and the probability of incurring significant drug costs sooner or later.

**Estimated Participation.** In light of those factors, CBO started with the assumption that the share of eligible Medicare beneficiaries who will participate in Part D will be no larger than the share who enroll in Part B—about 94 percent. In other words, CBO assumed that because 6 percent of all Medicare beneficiaries choose not to participate in Part B—with its 75 percent premium subsidy and substantial late-enrollment penalty—a comparable share of beneficiaries would forgo a drug benefit with a

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6. For calendar year 2006, CBO projects that the average number of beneficiaries enrolled in Medicare at any point will be 42.6 million. While most of them will be enrolled in both Part A (Hospital Insurance) and Part B (Supplementary Medical Insurance), CBO projects that 2.7 million will be enrolled only in Part A and 0.5 million will be enrolled only in Part B. The corresponding projections for 2013 are 49.6 million total beneficiaries, with nearly 3.1 million in Part A only and about 0.6 million in Part B only. The number of Part B enrollees (whether enrolled in Part A or not) will thus increase from 39.9 million in 2006 to 46.6 million in 2013.

7. Medicare beneficiaries who also receive full Medicaid benefits (commonly known as dual eligibles) will be enrolled in Part D by default.

8. Under the MMA, the late-enrollment penalty will be the greater of “an amount that the Secretary [of the Department of Health and Human Services, or HHS] determines is actuarially sound” or 1 percent of the national average premium for each “uncovered month.” (See section 1860D–13(b)(3) of the Social Security Act, as amended.) In setting an actuarially sound penalty, HHS would have to take into account the expected program costs for individuals who chose to enroll late even in the face of the penalty, costs that would probably exceed average program costs for other enrollees. That penalty could therefore be greater than the 1-percent-per-month minimum.
similar structure. CBO then reduced the projected rate of participation in Part D below the rate for Part B, for two reasons. First, CBO assumed that Part B enrollees who are active workers and have drug coverage through their employer would keep that primary coverage rather than sign up for the Medicare benefit. Second, CBO assumed that Part B enrollees who are retired but also qualify for the FEHB program or the military’s TRICARE For Life (TFL) program would be less likely to participate in a new Medicare drug benefit. Because they already have fairly generous drug coverage, many of them would find that the premium for Part D was not worth the additional benefits. Those active workers and federal retirees together account for about 7 percent of Part B enrollees.

In sum, CBO assumed that 87 percent of all Medicare beneficiaries would elect to participate in the prescription drug benefit. Thus, the average number of Part D participants would rise from 37.2 million in calendar year 2006 to 43.4 million in calendar year 2013, CBO estimated. CBO further assumed that Part D participants would not have systematically higher drug costs than nonparticipants because the combination of premium subsidies and late-enrollment penalties would be sufficient to avoid the insurance-market phenomenon known as adverse selection, in which people who expect to have above-average costs disproportionately enroll. Those participation figures also include a substantial number of beneficiaries—about 19 percent of all Medicare enrollees—who will continue to receive drug coverage through a plan from their former employer or union (which would be subsidized by Medicare through a separate mechanism but technically would not constitute enrollment in Part D).

The reasons that CBO assumed that certain beneficiaries would receive coverage from those sources are discussed separately below. First, however, this paper examines the gross costs and premium payments that would be incurred by the remaining majority of Part D participants and the delivery system through which they would receive their drug benefits.

**Gross Costs of Providing the Basic Drug Benefit**

Having concluded that enrollment in the Medicare drug benefit would be broadly representative, CBO estimated average and total costs for enrollees in a series of steps. CBO projected what drug spending would be in the absence of a Medicare drug benefit (that is, under prior law); adjusted individual spending levels to reflect provisions of the MMA that would either increase or decrease total drug spending; and then applied the MMA’s benefit design provisions to determine the gross costs of providing covered benefits. This section explains what each of those steps involved and specifically reviews the following factors:

- CBO’s baseline projections of drug spending under prior law;
- The design of the MMA’s standard drug benefit and the provisions for varying, supplementing, and indexing that benefit design over time;
- The delivery mechanisms specified by the law;
- CBO’s estimate of the impact that different delivery mechanisms would have on covered drug spending;
- Other provisions of the MMA that CBO judged would affect drug prices or utilization; and
- CBO’s estimate of various administrative costs that would be incurred in providing the new drug benefit.

**Baseline Drug Spending.** Data on current drug spending are not available for all Medicare beneficiaries. CBO therefore chose to develop a microsimulation model for use in generating cost estimates that was designed to capture how a given proposal would affect a representative sample of those beneficiaries. The model contains detailed information about beneficiaries’ spending for prescription drugs and Medicare-covered services, their

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9. To some extent, those are simplifying assumptions. Some active workers might enroll in a Medicare drug benefit, but under Medicare’s secondary-payer rules, their employer’s plan would pay first and thus would probably offset most of Medicare’s costs. And if more FEHB annuitants or TFL beneficiaries enrolled in Part D than CBO assumed, Medicare spending would be greater, but there would be offsetting federal savings for those programs. In both cases, CBO also assumed that those beneficiaries would be exempt from any late-enrollment penalties if they later lost their drug coverage since that coverage would be at least equivalent to and probably better than the Medicare benefit. As a result, they would not have a strong incentive to enroll in Part D. It is also worth noting that some of the Medicare beneficiaries who do not enroll in Part B are active workers or federal retirees.

plemental insurance coverage (both public and private), their health status, and their income. The information used in the model is based on data from Medicare claims for 1999 and from the 1999 and 2000 Medicare Current Beneficiary Survey (MCBS), projected forward using CBO’s March 2003 economic and technical assumptions and baseline projections of Medicare spending. For drug spending, the MCBS data were adjusted to account for underreporting in survey responses and for missing data on nursing home residents. The assumptions used about subsequent growth rates for per capita drug spending were based on the most recent historical estimates and on projections for national health expenditures made by the Centers for Medicare and Medicaid Services (CMS).11

On the basis of that model, CBO projected the total outpatient drug costs that would be incurred by or on behalf of Medicare beneficiaries in the absence of a new Medicare benefit.12 For calendar years 2004 to 2013, CBO estimated that cumulative spending would total $1.84 trillion. Reflecting the assumption that a two-year implementation period would be required before drug benefits could be delivered, however, the focus of CBO’s analysis was on spending from 2006 to 2013, which was projected to total $1.61 trillion. CBO then excluded drug spending covered by Veterans Health Administration (VHA) programs and spending by projected nonparticipants in Part D to generate a total baseline of $1.36 trillion for drug spending that could be covered by the Medicare benefit.13 Under that baseline, average spending for participants would rise from $3,096 in 2006 to $5,617 in 2013, while median spending would increase from $1,913 to $3,475. (Those figures include spending by participants who are projected to receive coverage through a qualified employer or union drug plan.)

The primary factor that determines the gross federal costs of a drug benefit proposal is the share of enrollees’ current drug spending—how much of that $1.36 trillion—that the new benefit will cover, which is a function of the benefit’s design. But CBO’s estimates also assume that, rather than simply rearrange who pays for drug spending, the new benefit will change the level of total spending in various ways. Some enrollees will fill more prescriptions or use more brand-name drugs once they gain better insurance coverage, thus increasing overall drug spending. The new Medicare benefit will also give manufacturers somewhat greater leeway to raise prices on certain drugs (to the extent that enrollees become less sensitive to the underlying price of their prescriptions). Conversely, spending will be reduced to the extent that the entities administering the drug benefit make aggressive use of cost-management tools, which can result in substantial price discounts and changes in the mix of drugs prescribed or purchased. Because the provisions of the MMA that affect the drug benefit’s cost per enrollee are complicated, CBO’s modeling of those provisions was correspondingly complex.

Benefit Design. In addition to specifying a standard benefit design for 2006, the MMA included various rules regarding ways in which the benefit design could be varied or supplemented and defined a mechanism for indexing the benefit’s parameters for future years. (It also included provisions that stipulated how the benefit should be provided, such as requirements for determining which drugs would be covered and which pharmacies could be used to fill prescriptions. A discussion of those provisions is presented later in this paper.) The standard drug benefit for calendar year 2006 will have these specifications:

- A $250 annual deductible;
- Coverage for 75 percent of drug costs (on average) between the deductible and an initial coverage limit of $2,250;


12. The calculation excluded spending for drugs already covered by Medicare, such as drugs used during an inpatient hospital admission, which are covered under Part A, and the limited number of drugs used on an outpatient basis that are already covered under Part B.

13. Because the drug benefits provided by the VHA are relatively generous, CBO assumed that Medicare beneficiaries who had been filling prescriptions through that system would continue to do so. For purposes of estimating the effect of the Part D provisions on mandatory federal spending, CBO thus assumed that prescription drug spending by the VHA (which is discretionary) would not be shifted to Medicare—and thus would not differ substantially from the levels projected under prior law.
A “doughnut hole” beyond $2,250 in which no coverage is provided until an individual has incurred $3,600 in out-of-pocket drug costs for the year; and

Catastrophic coverage of about 95 percent of covered drug costs beyond that point.\(^\text{14}\)

Subject to the approval of the Department of Health and Human Services (HHS), drug coverage can be offered that deviates from the standard design as long as four key conditions are met: the catastrophic coverage is the same as the standard benefit’s; the deductible is no higher than the standard benefit’s; the average value of the alternative coverage (based on the drug use of a representative sample of seniors) is the same as the standard benefit’s value; and payments by the plan for benefits at the initial coverage limit equal what the plan would have paid using the standard benefit design. Basic drug plans could thus be offered that had a lower deductible combined with slightly higher average coinsurance below the initial coverage limit, or that simply varied the coinsurance rate between the standard benefit’s deductible and initial coverage limit (so long as cost sharing in that range averaged 25 percent).\(^\text{15}\) Because the cost of providing an alternative benefit design is supposed to be the same as the cost of providing the standard benefit (taking into account the effects of that design on drug use), CBO estimated the MMA’s costs as though the standard benefit were offered uniformly.

The fact that the catastrophic threshold was defined in terms of out-of-pocket costs rather than total drug spending would have been immaterial but for another feature of the MMA—one commonly referred to as the “true out-of-pocket” provision. Under that provision, out-of-pocket costs will generally count toward the catastrophic threshold only if they are incurred by an individual and are not reimbursed by third-party insurance coverage (such as supplemental drug coverage provided by a former employer). As a result, an enrollee with no supplemental drug coverage will reach the catastrophic threshold in 2006 when he or she had purchased $5,100 worth of covered drugs.\(^\text{16}\) Beneficiaries with supplemental coverage, however, would not reach the catastrophic threshold until they had incurred higher levels of total drug spending—and if their supplemental plan included a lower limit on out-of-pocket costs, they would never reach the Medicare benefit’s catastrophic threshold. At the same time, costs covered by Medicare’s low-income subsidies or by state pharmaceutical assistance programs would still be counted as true out-of-pocket expenses; that is, they would be treated as though the beneficiary had paid them. Beneficiaries with those forms of supplemental coverage could therefore reach the catastrophic threshold once they had purchased $5,100 worth of drugs in 2006 (and thus, as an accounting matter, most of their remaining drug spending would be covered by the standard Medicare benefit and not by those low-income subsidies).

Drug plans could also provide coverage that was more generous than the standard design, but the costs of any extra benefits would not be federally subsidized, so beneficiaries would have to pay an additional premium for those benefits. Such supplemental coverage would also delay the point at which the catastrophic threshold was reached and thus could reduce the cost of providing the standard drug benefit. Yet beneficiaries with very high drug spending would find it disadvantageous to purchase such coverage because in addition to paying their supplemental premium, they would still need to incur $3,600 in out-of-pocket costs in 2006 before they reached the catastrophic threshold.

\(^\text{14}\) For 2006, cost sharing above the catastrophic threshold will be the greater of 5 percent coinsurance or a copayment of $2 for all generic drugs and preferred brand-name drugs with generic competitors or $5 for other drugs including all brand-name drugs without generic competitors. After 2006, the $2 and $5 amounts will be indexed to per capita drug costs for the Medicare population.

\(^\text{15}\) Coverage provided above the initial coverage limit (that is, in the doughnut hole) would not count toward meeting the fourth condition and thus would be treated as an extra benefit. According to the MMA, therefore, a drug plan could not offer a basic benefit with a higher initial coverage limit that was offset by a higher average coinsurance rate above the deductible, even if the overall expected value of that benefit design for a representative sample of seniors was equal to the standard benefit’s value. Although HHS could waive those restrictions in a budget-neutral way (that is, without increasing net federal spending), a drug plan might be reluctant to seek such a waiver since providing coverage in the doughnut hole would be most attractive to enrollees with high drug costs and thus could raise the issue of adverse selection for that plan.

\(^\text{16}\) At that point, the beneficiary would have paid the $250 deductible; $500 in cost sharing to cover 25 percent of his or her drug costs between that deductible and the $2,250 initial coverage limit; and $2,850 in spending above that limit (which would be paid for entirely by the beneficiary), for a total of $3,600 in out-of-pocket costs.
catastrophic threshold. Consequently, CBO assumed that individuals would not purchase supplemental coverage in a way that substantially affected the cost of providing the standard drug benefit (but did assume that most employers now providing more generous drug coverage to Medicare-eligible retirees would continue to do so).

The MMA also specifies that, after 2006, the standard benefit’s deductible, initial benefit cap, and catastrophic threshold will increase each year at the projected rate of growth in per capita drug expenditures for the Medicare population. As a result, the drug benefit will, on average, cover about the same share of enrollees’ drug costs each year. (See Table 2 for CBO’s projections of each of those benefit parameters through calendar year 2013 as well as the associated levels of beneficiaries’ cost-sharing liabilities and total drug spending.) CBO estimated that per capita drug spending for Medicare beneficiaries would increase at an average annual rate of nearly 9 percent between 2006 and 2013, by which time the deductible would be $445, the initial coverage limit would be $4,000, and the catastrophic threshold for out-of-pocket costs would be $6,400.

17. For example, beneficiaries who expected to have $7,100 in drug spending in 2006 would incur $3,700 in out-of-pocket costs under the standard benefit ($3,600 for the first $5,100 in drug spending plus 5 percent of the remaining $2,000). If they purchased a supplemental policy that provided up to $1,000 worth of benefits in the doughnut hole, their out-of-pocket costs would fall only to $3,650 ($3,600 for the first $6,100 in drug spending, which is the point at which they would reach the catastrophic threshold, plus 5 percent of the remaining $1,000). In addition, they would have to pay a premium for that supplemental coverage. Given that enrollees with high drug costs would be most attracted to that package—and could decide each year whether to sign up for the additional protection—that premium would probably be a large share of the maximum $1,000 benefit. Even if enrollment in that supplemental coverage was broadly representative, its premium would undoubtedly exceed the $50 in savings on cost sharing that such enrollees would gain.

18. Medigap policies that cover cost sharing for other Medicare benefits are prohibited from including supplemental drug coverage for Part D enrollees, so enrollees who desire such coverage will have to obtain it from another source (such as a former employer or their Medicare drug plan). CBO estimated that about 8 percent of Part B enrollees currently have an individual medigap policy that includes drug coverage. If they chose to sign up for Part D, those beneficiaries would be allowed to enroll in another medigap policy or in a modified version of their current policy that did not provide drug coverage.

Delivery Mechanism. Under the MMA, Medicare will not pay directly for drugs provided to its enrollees. Instead, private entities are expected to deliver Part D benefits and will be paid partly on the basis of their expected costs and partly on their actual costs for doing so. As a result, CBO’s estimate of federal costs considered what types of entities would participate as drug plans and what sorts of costs they would incur. In particular, CBO assumed that plans’ costs would be related to the degree of financial risk they would bear. Consequently, CBO sought to model the effects of the MMA’s provisions on the level of risk that the plans would generally be asked to assume; then, taking into account the provisions allowing drug plans to accept lesser degrees of risk under certain circumstances, CBO estimated the probability that beneficiaries would be enrolled in plans bearing those differing levels of risk, both initially and over time.

Subject to the approval of HHS, various entities could provide Part D benefits. Beneficiaries who received their Part A and Part B benefits through a private health insurance plan, such as a health maintenance organization or preferred provider organization under the renamed Medicare Advantage program, generally would obtain their drug coverage through that plan. (Medicare Advantage will take the place of the existing Medicare+Choice program.) Those enrolled in the traditional fee-for-service Medicare program would generally obtain drug coverage through a prescription drug plan that provided only their Part D benefits. CBO assumed that such plans would probably combine the attributes of an insurance company and a pharmacy benefit manager (PBM), but a wide array of organizational arrangements could be allowed. Once enrolled in Part D, beneficiaries could also switch among plans annually, and those plans would be responsible for providing all covered benefits and tracking each enrollee’s total drug costs for the year. Although Medicare Advantage drug plans could have a service area as small as a county, prescription drug plans would have to serve an entire region. (The MMA encourages but does not require HHS to divide the country into at least 10 but no more than 50 regions.)

Provisions for Full-Risk Plans. In general, prescription drug plans and Medicare Advantage drug plans would be expected to assume insurance risk in delivering Part D benefits. They would submit bids reflecting their expected costs of providing those benefits and would largely be paid on the basis of those bids (subject to review by HHS). Thus, they would stand to profit if their costs of
providing benefits turned out to be lower than expected but would lose money if their costs exceeded expectations. Such a system could provide strong incentives for cost control. But if drug plans were paid only a single and fixed amount per enrollee that was set at the beginning of the year—and thus assumed all financial risk for providing covered benefits—they would also have very strong incentives to avoid enrollees with high drug spending (especially since the same enrollees might incur high drug costs year after year). At the same time, the range of drug plans’ potential profits or losses could be large given the uncertainty that surrounds predictions of their costs of providing this new benefit—particularly in the initial years of its operation—and companies might be either unwilling to accept that degree of financial risk or unable to insure against it (through private reinsurance or other mechanisms) at a reasonable cost. Policymakers might also be concerned about the potential for windfall profits if plans’ costs turned out to be substantially lower than had been projected.

To mitigate those concerns, the MMA included two sets of provisions that limit the degree of insurance risk that plans would face and that reduce their incentives to avoid the highest-cost enrollees:

- **Individual-Level Reinsurance.** Federal reinsurance payments would cover 80 percent of total drug costs actually incurred once a beneficiary reached the catastrophic threshold on out-of-pocket costs. From that point on, drug plans would thus bear about 15 percent of those costs, while beneficiaries would be liable for about 5 percent.\(^\text{19}\)

\[\text{Table 2.} \]

**Key Features of the Standard Drug Benefit Under the Medicare Modernization Act, Calendar Years 2006 to 2013**

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<td>Total spending at limit</td>
<td>2,250</td>
<td>2,470</td>
<td>2,710</td>
<td>2,920</td>
<td>3,170</td>
<td>3,400</td>
<td>3,690</td>
<td>4,000</td>
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<tr>
<td>Coinsurance Between Initial Coverage Limit and Catastrophic Threshold (Percent)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Catastrophic Threshold</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Out-of-pocket spending at threshold</td>
<td>3,600</td>
<td>3,950</td>
<td>4,350</td>
<td>4,650</td>
<td>5,050</td>
<td>5,450</td>
<td>5,900</td>
<td>6,400</td>
</tr>
<tr>
<td>Total spending at threshold(^a)</td>
<td>5,100</td>
<td>5,596</td>
<td>6,158</td>
<td>6,596</td>
<td>7,165</td>
<td>7,715</td>
<td>8,360</td>
<td>9,066</td>
</tr>
<tr>
<td>Coinsurance above threshold (Percent)(^b)</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Congressional Budget Office.

Note: Benefit parameters shown here reflect the Medicare Modernization Act’s rounding rules.

a. Represents total spending at the catastrophic threshold for individuals without other drug coverage.

b. For 2006, cost sharing will be the greater of 5 percent coinsurance or a copayment of $2 (for generic drugs and preferred brand-name drugs with generic competitors) or $5 (for other drugs, including all brand-name drugs without generic competitors). After 2006, the $2 and $5 amounts will be indexed to per capita drug costs for the Medicare population.

19. The portion of federal subsidy payments that were made to drug plans on a capitated basis would also be adjusted for risk to reflect the expected costs of enrollees based on their health status or other characteristics. However, the adjustment would be made in a manner that was budget neutral overall. Those capitated, or "direct," subsidies are discussed further below.
Aggregate “Risk Corridors.” After subtracting reinsurance payments, drug plans that experienced benefit costs that were somewhat higher than they had expected would see an increasing share of those costs covered by additional federal payments, whereas plans with benefit costs that were somewhat below expected levels would essentially have to reimburse Medicare for a corresponding share of the savings. The thresholds of the risk corridors would be relatively narrow in 2006 and 2007 but would double beginning in 2008 and could be increased further by HHS after 2011. (The mechanics of the risk corridor system, how it relates to the MMA’s other risk-abatement mechanisms, and the approach that CBO used in estimating its impact on program costs are discussed in the appendix.)

The MMA set no limit on the number of drug plans that could participate if they were willing to accept the full statutory levels of financial risk that resulted from those reinsurance and risk corridor mechanisms. The law specified that at a minimum, though, all Medicare beneficiaries should have a choice of at least two drug plans—one of which could be part of an integrated health plan under the Medicare Advantage program. Thus, the minimum number of prescription drug plans that are supposed to be available to enrollees in the traditional fee-for-service Medicare program is one in areas where a drug plan is offered via Medicare Advantage and two otherwise.

Provisions for Limited-Risk Plans. In case the number of PDPs that are willing to accept full risk in a given area is not sufficient, the MMA provides two mechanisms designed to ensure that beneficiaries have a plan available to them through which to get their drug coverage.

Reduced-Risk Plans. PDPs that were willing to accept some insurance risk could submit bids that provided for narrower risk corridors in order to reduce (but not eliminate) the risk they would face. Those reduced-risk bids would not be considered, however, unless the number of full-risk plans approved for an area was insufficient to meet the access requirements. If reduced-risk bids were considered, only one or two could be approved (depending on the number of other plans available in the area), with priority generally given to plans willing to accept the most risk.

Fallback Plans. In case there are not enough plans willing to bear insurance risk (either on a full-risk or reduced-risk basis) in an area, HHS would contract with another organization—designated as a fallback plan—to offer the prescription drug benefit in that area on a “performance-risk” basis.20 One fallback plan would be chosen for each region of the country through a competitive bidding process; however, it would be allowed to enroll members only in the event that too few plans bearing insurance risk were available. At other times, the fallback plan would essentially be on call.

Probability of Enrollment in Limited-Risk Plans. Because of those provisions, CBO assumed that all Medicare beneficiaries would have access to prescription drug coverage under the MMA. Nevertheless, CBO had to estimate the probability that beneficiaries would be enrolled in reduced-risk or fallback plans. That estimate sought to account for several competing considerations.

Factors Increasing Enrollment Probability. In general, CBO assumed that the easier it was for drug plans to participate as reduced-risk or fallback plans, the greater the likelihood that such plans would be available and thus the higher the expected share of enrollees in those plans. For example, the greater the number of risk-bearing plans that the law requires, the greater the odds that an insufficient number of full-risk bidders will step forward—thus triggering the reduced-risk and fallback provisions. Similarly, the more opportunities that plans have to enroll and retain members while operating on a limited-risk basis, the more attractive it will be to operate as such a plan.

20. With performance risk, the organization would be reimbursed for all costs it incurred in providing benefits and thus would not bear insurance risk, but a portion of its administrative fee would be tied to certain performance requirements. The MMA specified that those requirements should include the following measures: containing costs to Medicare and enrollees “through mechanisms such as generic substitution and price discounts”; providing “quality programs that avoid adverse drug reactions and overtreatment and reduce medical errors”; and providing “timely and accurate” customer service and “efficient and effective benefit administration and claims adjudication.” (See section 1860D–11(g)(5) of the Social Security Act, as amended.)
Factors Reducing Enrollment Probability. Conversely, mechanisms that encouraged companies seeking to participate in Part D to bear the statutory level of risk—or that made it easier for such companies to displace reduced-risk and fallback plans—would tend to limit the availability of such plans and thus would reduce the expected share of enrollees in those plans, both initially and over time. For example, because reduced-risk plans could be displaced if enough full-risk plans submitted acceptable bids, those reduced-risk plans would have a strong incentive to accept full risk as quickly as possible. Similarly, entities such as PBMs that served as fallback plans in one area could not participate as part of a risk-bearing PDP in another area of the country at the same time and could not participate as part of a risk-bearing PDP in the same area in the following year—factors that would make it less attractive to be a fallback plan.

CBO also assumed that the probability of enrollment in reduced-risk and fallback plans would generally decline over time as uncertainty surrounding the cost of providing the benefit diminished.

After analyzing the specific provisions of the MMA, CBO estimated that the expected share of Part D participants enrolled in reduced-risk plans or fallback plans would be about 18 percent in 2006, declining to about 5 percent by 2013. (In other words, about 82 percent of enrollees would be in full-risk plans in the first year of the benefit, increasing to about 95 percent by the end of the budget window.) The percentages represent the likelihood that all enrollees will be in full-risk drug plans and not the share of the population that will be covered by such plans. Although it is possible that full-risk plans will emerge in some regions and not others, CBO did not ascribe an important role for locality per se in the outcome (except insofar as the availability of a Medicare Advantage drug plan would affect the number of prescription drug plans needed in an area to avoid triggering the reduced-risk or fallback provisions).

More generally, in considering whether and to what extent risk-bearing drug plans would participate, CBO assumed that the kind of local disparities that have historically been seen in the Medicare+Choice program would probably not be replicated—largely because the drug benefit program would differ from the Medicare+Choice system in two important respects. (Medicare+Choice plans are currently available to about 60 percent of beneficiaries, primarily those living in urban areas.) First, the only local network of providers that a drug plan would have to establish would be a network of retail pharmacies, which CBO understood was already in place nationwide. By contrast, the need to establish a network of doctors and hospitals could significantly constrain private health plans seeking to provide Medicare’s current benefits, at least in many areas of the country. Second, as discussed further below, the payment system for the drug benefit would base federal subsidies on the average costs of drug plans, not an external reference point. As a result, those subsidies would automatically adjust to reflect faster or slower growth in the average costs of providing the drug benefit, so that efficiently run plans could expect to cover their costs while still offering relatively attractive premiums to enrollees. By contrast, payment rates for Medicare+Choice plans are based on statutory formulas that have not kept up with plans’ rising costs (even though those payment rates have often exceeded the costs of providing services in the traditional fee-for-service program, with its administered pricing systems for providers). As a result, many private plans have withdrawn from the Medicare+Choice program in recent years.

Gross Drug Savings. The shares of beneficiaries expected to enroll in differing types of plans affected CBO’s cost estimate because the agency assumed that plans bearing more financial risk would have stronger incentives to control drug spending (but would also incur other administrative costs in doing so). Having established the probability that beneficiaries would enroll in different types of plans, CBO then analyzed the degree of financial risk and competition that those plans would face, took into account any constraints that the MMA placed on their efforts to control costs, and generated a summary statistic for the gross level of savings that the program would yield relative to current spending levels. That summary statistic was designed to encompass all of the dynamics that would occur as beneficiaries sorted themselves among the available drug plans and was applied in a manner that accounted for the degree of cost management already reflected in beneficiaries’ current spending levels.21

21. For additional discussion of the effects of different delivery mechanisms on cost containment, see Congressional Budget Office, Issues in Designing a Prescription Drug Benefit for Medicare, pp. 22-29.
Incentives for Cost Management. To assess the relative risk that full-risk drug plans would face under the MMA, CBO analyzed the extent to which their actual costs might deviate from the levels they assumed when submitting their bids the previous year. Such deviations could arise from unanticipated changes in drug spending growth generally—such as faster or slower adoption of new brand-name drugs or generic competitors—or from unexpectedly favorable or adverse selection in specific drug plans. In the initial years of the drug benefit, there would be additional uncertainty about what level of spending to assume for an average enrollee. CBO’s modeling took into account the random fluctuations that could occur in each of those variables. The degree to which the resulting deviations between actual and expected costs would generate higher or lower reinsurance payments or would yield payments to or from drug plans via the risk corridor system was then factored into the analysis. CBO’s assessment of the incentives for cost management also took into account the extent to which beneficiaries would be exposed to the cost differences among drug plans—as expressed through premium levels and cost-sharing requirements. Those differences would affect the degree and nature of competition among plans and their resulting systemic incentives to control costs.22

Tools for Cost Management. How effectively PDPs could control Medicare drug costs would also depend on whether and to what extent they were allowed to use the various tools at their disposal, such as:

- Enforceable limits on the number and types of drugs included in their “formulary,” or list of covered drugs;

- Limits on the number and types of pharmacies through which coverage for prescriptions could be obtained.

In general, drug plans can obtain the greatest price discounts for drugs that have close substitutes by giving one of them “preferred” status—thereby allowing that drug’s manufacturer to increase its sales volume (at the expense of its competitors) to offset a lower price per unit.23 Similarly, drug plans can obtain discounts from pharmacies included in their network by steering customers to those pharmacies. Another way they can often lower their costs and achieve greater compliance with their formulary is through the use of mail-order pharmacies. As a result, the prices of drugs used by individuals with drug coverage (combining what they pay out of pocket with the costs covered by their health plan) are usually less than the prices faced by comparable but uninsured individuals paying full retail prices. At the same time, a trade-off generally exists between the ease with which enrollees can obtain the drugs of their choice and a plan’s effectiveness in managing drug spending.

The MMA included a number of rules about how drug benefits would be provided, several of which could restrict plans’ use of cost-management tools. One set of requirements would primarily affect whether and how beneficiaries could get coverage for specific drugs:

- Plans would have to include in their formulary at least two drugs within each “therapeutic class” (set of medications) that could be substituted in the treatment of a condition or disease (but they would not have to cover all drugs in each class).

The MMA established a standard set of therapeutic classes, drug plans could deviate from that system, but if they did, they would be more vulnerable to rejection by HHS on the grounds that they had designed their benefit to discourage sicker beneficiaries from enrolling.

- After an outside entity (U.S. Pharmacopeia) had established a standard set of therapeutic classes, drug plans could deviate from that system, but if they did, they would be more vulnerable to rejection by HHS on the grounds that they had designed their benefit to discourage sicker beneficiaries from enrolling.

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22. For example, if beneficiaries had been given a choice of drug plans but their premiums did not reflect the overall costliness of the plan they joined and if they faced low coinsurance rates that largely insulated them from drug price levels, then competition among plans would probably focus on offering more generous benefits and would not encourage the use of cost-saving mechanisms.

23. In dollar terms, discounts are often largest for brand-name drugs that have brand-name competitors. In percentage terms, discounts are often largest for generic drugs and brand-name drugs with generic competitors, but such drugs are generally less expensive and constitute a smaller share of total drug spending.
Subject to certain rules regarding their development, plans could establish formularies that not only limited coverage to certain drugs but also designated some drugs as preferred (and thus subject to lower cost sharing) or even instituted various tiers of coverage (subject to the overall constraints on beneficiary cost sharing for covered drugs).

Before beneficiaries satisfied the deductible and while they were in the benefit's doughnut hole, they would have to be able to buy their drugs at the same negotiated prices on which plan costs for providing covered benefits were based.

Beneficiaries could request coverage of a noncovered or nonpreferred drug on the terms applicable to a covered or preferred drug if their doctor determined that the covered or preferred drug would not be as effective or would have adverse side effects. If the use of such nonformulary drugs was not successfully appealed, however, spending on them would not count toward the benefit’s deductible, initial coverage limit, or catastrophic threshold.

A second set of MMA requirements regarding how benefits would be provided would primarily affect which pharmacies enrollees could use to get their prescriptions filled.

Drug plans could establish a network of preferred pharmacies and could use differential cost sharing to encourage beneficiaries to use those pharmacies, but that network would have to meet certain requirements regarding accessibility. (For example, 90 percent of urban Medicare beneficiaries would have to have a network pharmacy available within two miles of their home.)

At the same time, plans would have to allow “any willing pharmacy” to serve their enrollees (though not necessarily as a preferred or network pharmacy), so long as those pharmacies accepted the terms and conditions specified by the drug plan.

Beneficiaries would have to be allowed to fill prescriptions at a retail pharmacy instead of a mail-order pharmacy, but they could be charged more for doing so.

Taken as a whole, the provisions of the MMA would place some limits on the ability of drug plans to use cost-management tools, CBO concluded. For example, the requirement that cost sharing average about 25 percent for a substantial portion of the benefit would constrain to some extent the price differences that beneficiaries would be likely to see between preferred and nonpreferred drugs, which in turn would limit the ability of plans to steer usage toward lower-cost preferred drugs and to get commensurate discounts for those drugs. Furthermore, CBO judged that the external review process—under which requests to cover excluded drugs or to purchase nonpreferred drugs at the cost-sharing rate for preferred drugs would be automatically reviewed when denied—would make it more costly for drug plans to enforce (and thus less likely to impose) a strict formulary. Plans would also have to cover at least two drugs in each class of similar therapies, but their ability to define those classes broadly (so as to limit coverage to selected drugs) would be circumscribed.

At the same time, CBO assumed that the MMA’s pharmacy network provisions would not substantially impede plans’ efforts to control costs. Even though the MMA would require drug plans to allow any willing pharmacy to fill enrollees’ prescriptions, it would give drug plans broad authority to vary reimbursement rates and beneficiaries’ out-of-pocket payments between network and other participating pharmacies in order to discourage participation by and use of nonnetwork pharmacies.24 Similarly, the requirement that beneficiaries be allowed to use retail rather than mail-order pharmacies would also provide considerable latitude for plans to use differences in cost sharing to steer beneficiaries toward the distribution channel that was least costly for the plans.25

24. Specifically, paragraph (c)(1) of section 1860D–4 of the Social Security Act, as amended, specifies that nothing in that section “shall be construed as impairing a PDP sponsor from utilizing cost management tools (including differential payments) under all methods of operation.”

25. Paragraph (b)(1)(D) of section 1860D–4 allows beneficiaries to fill any prescription at a retail pharmacy rather than a mail-order pharmacy but also allows drug plans to impose “any differential in charge” in such cases. CBO interpreted the language to mean that drug plans could impose an additional charge for using a retail pharmacy that exceeded the strict difference in transaction costs between retail and mail-order pharmacy services in order to encourage beneficiaries to use mail-order pharmacies.
Overall Impact. To summarize the effects of incentives and tools on cost management, CBO sought to estimate the gross drug savings that would result on average.\(^{26}\)

Those gross drug savings represent the degree to which costs would be reduced relative to an unmanaged benefit in which drugs were purchased at full retail price, such as a traditional indemnity insurance plan—a hypothetical but useful reference point. Those savings would result from three types of cost management: negotiating price discounts or rebates from drug manufacturers and pharmacies (net of pharmacy dispensing fees and other claims processing costs); controlling overall drug use; and changing the mix of drugs used.

Following its analysis of the available literature on cost-management techniques as well as discussions with industry and other health care experts, CBO assumed that the maximum level of gross drug savings that could be achieved on average under any circumstances was 30 percent. Achieving that level of savings would require a highly competitive environment, meaningful risk bearing by plans, and substantial freedom to use cost-management techniques. Beyond that point, though, CBO concluded that an average beneficiary would probably not value the savings from joining a lower-cost plan enough to accept the restrictions it would have to impose, nor would additional increments of financial risk elicit further cost control efforts by drug plans. By comparison, CBO estimated that Medicare beneficiaries with employer-sponsored drug coverage experienced gross drug savings of 15 percent, on average, in the 1999-2000 period (the latest years for which detailed spending data on Medicare beneficiaries were available in 2003).\(^{27}\) While those employer plans ultimately bear substantial financial risk in providing drug benefits, they must also balance their interest in limiting costs with their need to provide competitive compensation and to maintain productive relationships with their employees (some of whom are union members covered by collective bargaining agreements). Furthermore, retirees generally are not offered a choice of a drug plan that is separate from their overall choice of a health plan, so the degree of price competition that occurs is limited.

For the MMA, CBO estimated that the gross drug savings for plans that bore the statutory level of risk would rise gradually from an average of 20 percent in 2006 to an average of 25 percent by 2013, an increase that primarily reflected the evolution of the MMA’s risk-sharing arrangements over the budget window. CBO determined that the MMA’s risk corridor provisions for the initial years of the benefit would have a meaningful impact on plans’ incentives to control spending. By contrast, the ultimate risk corridors provided in the law would have only a negligible effect on cost-management efforts—so gross drug savings estimated for those years primarily reflected the effects of the limits that the MMA would place on the use of cost-management tools. Another key consideration was that, to the extent they arose, full-risk plans would face a highly competitive environment that encouraged beneficiaries to join the lowest-cost plan that met their needs (as discussed further in the section on beneficiaries’ premiums). It is important to note, however, that CBO’s estimate of gross savings represents savings from managing the drug benefit but not the costs of the mechanisms used to achieve them. It also does not capture the effect that the legislation will have on trends in drug prices, changes in drug use by beneficiaries as a result of changes in their own out-of-pocket costs under the program, or the impact of any exemption from Medicaid’s best-price provisions for prescription drugs—each of which was modeled separately.

For many beneficiaries, the effect of cost management on their drug spending will be smaller than the 20 percent to 25 percent savings assumed for individuals who now pay full retail prices and who will enroll in full-risk drug plans. For Part D enrollees whose current drug costs are being managed in some way—primarily those with employer-sponsored or Medicaid coverage—that spending already reflects some degree of gross savings. CBO’s estimates took that fact into account and also assumed that any incremental savings would be further attenuated to the extent that those enrollees retained relatively generous supplemental coverage (which would make their spending more difficult to manage). Furthermore, for beneficiaries enrolled in reduced-risk and fallback plans, CBO estimated gross savings averaging 12.5 percent throughout the budget window (somewhat smaller than the 15 percent savings seen for current employer-sponsored drug coverage). In part that estimate reflected the reduced fi-

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26. That summary statistic was often referred to as a cost-management factor, or CMF.

27. Any increases in the average level of gross drug savings since that time or in the future—to reflect additional efforts by employers to control growth in drug spending—would be reflected in the growth rates that CBO applied to drug spending in the 2004-2013 base period.
financial incentives to control costs that such plans would have, and in part it reflected the less competitive environment in which they would operate. Finally, CBO assumed that the gross savings would be offset somewhat by difficulties in allocating and auditing drug discounts and other expenditures (for example, to determine which costs were subject to reinsurance payments or risk corridor transfers).

Other Effects on Drug Prices. CBO’s analysis also sought to account separately for various effects that the Medicare drug benefit’s provisions could have on drug prices, including responses of drug manufacturers, interactions with the Medicaid best-price provisions regarding prescription drugs, and restrictions on the role that HHS could play in setting drug prices or establishing a drug formulary.

First, CBO assumed that even the most aggressive use of cost-management tools by drug plans would be unlikely to keep prices for some drugs from rising as a result of a Medicare drug benefit. By reducing the cost to consumers of obtaining covered drugs, the new Medicare drug benefit would correspondingly make Medicare enrollees—particularly those who currently do not have prescription drug coverage—less sensitive to drug prices. For instance, if a drug’s target population consisted mainly of Medicare beneficiaries and close substitutes for that drug did not exist, the manufacturer could raise the drug’s price—or, in the case of a new drug, could enter the market with a higher launch price. The loss in sales resulting from that price hike would not be large enough to reduce the manufacturer’s profit, however, because beneficiaries would pay only a portion of that higher price. Preventing such price hikes would be difficult without imposing direct price controls or threatening to deny or delay coverage of the drug. Most drugs, however, face competition from close substitutes, and the most likely effect of a Medicare drug benefit would be modest price increases for the subset of drugs that had patent protection or exclusive marketing rights. CBO modeled that “price effect” as a function of drug spending by enrollees who previously did not have prescription drug coverage, because those who already had generous coverage would have been insulated from full prices even in the absence of legislation.

At the same time, CBO estimated that the cost-sharing requirements of the MMA would limit the extent of that price effect. Beneficiaries who did not receive the low-income subsidies would still face the full negotiated price of the drugs they purchased before they reached their deductible and when their spending fell between their initial coverage limit and the catastrophic threshold. Even after they reached the catastrophic threshold, beneficiaries would generally face some coinsurance and thus would not be completely insulated from price increases. In light of those factors, CBO estimated that drug costs for Medicare beneficiaries would ultimately be 3.5 percent higher, on average, because of the price effect, with the impact phasing in over the first 10 years of the benefit. The extent to which the entities delivering the drug benefit would offset those price increases through negotiated discounts or would design cost-sharing requirements to encourage price sensitivity is already reflected in the estimated average level of gross drug savings.

Second, CBO considered the fact that prices negotiated under the Medicare drug benefit would be exempt from Medicaid’s best-price provisions. Those provisions essentially require drug manufacturers to charge Medicaid the lowest price paid by any private purchaser for a brand-name drug (after taking into account rebates, discounts, and other adjustments). As a CBO paper on that topic noted, “Medicaid constitutes between 10 and 15 percent of the market for outpatient prescription drugs, [so] pharmaceutical manufacturers are much less willing to give large private purchasers steep discounts off the wholesale price when they also have to give Medicaid access to the same low price.” That report and others have shown that private discounts declined after the Medicaid best-price provisions were implemented in the early 1990s.

On the basis of that evidence, CBO assumed that the price discounts that Medicare drug plans could negotiate would be greater if they were exempt from the best-price requirements. CBO further assumed that the extent of the additional savings would depend on the gross savings level that the drug plans achieved—because the greater the incentives and tools that a drug plan had to control

28. Those plans would still have to compete to be selected by HHS as a reduced-risk or fallback plan.

costs, the more constraining the best-price provisions would be. CBO also modeled the extent of the savings as a function of Medicaid's remaining market share for prescription drugs (once the Medicare benefit was in place); in the absence of an exemption from the best-price provisions, that market share would also have affected the willingness of manufacturers to provide discounts to Medicare drug plans. For the MMA, CBO assumed that—when averaged across all drugs—Medicare drug plans would be able to obtain an additional 1.6 percent price discount in the initial years of the benefit because of the best-price exemption, increasing to an ultimate level of 2.5 percent.

Third, the MMA also included a provision specifying that HHS “may not interfere with the negotiations between drug manufacturers and pharmacies” and prescription drug plans and “may not require a particular formula or institute a price structure” for covered Part D drugs. For a variety of reasons, CBO assumed that including that “noninterference” provision would neither raise nor lower federal costs significantly. It is not clear that HHS would have taken such steps in the absence of those restrictions. And even if it had, it is not clear that those steps would have appreciably raised or lowered drug spending relative to the levels that prescription drug plans would secure.

Underlying that uncertainty is CBO's assumption that risk-bearing drug plans will obtain substantial savings on their own and in particular will probably do so by establishing relatively narrow lists of lower-cost preferred drugs and steering beneficiaries’ use toward those drugs. For HHS to use the greater market share of the entire Medicare population as a source of leverage to secure deeper price discounts and greater cost savings, it would probably have to threaten similar exclusions and limitations on coverage for that entire population—a threat that could be difficult to make credible given the potential impact on stakeholders. (Other policy objectives, such as encouraging the development of new drugs, also could be adversely affected as a result of securing deeper discounts.) Alternatively, HHS could encourage or require preferred status for a larger number of drugs than private drug plans would otherwise offer. Although that approach could help meet other objectives (such as enhancing beneficiaries’ access to those additional drugs), it would increase the cost of providing the drug benefit. On balance, then, CBO concluded that retaining the noninterference provision (or by the same token, striking it) would have a negligible effect on the expected level of federal spending.

Other Effects on Drug Use. CBO also assumed that enrollees’ total spending on prescription drugs would change as a result of the insurance coverage provided by the new Medicare benefit, depending on the relative generosity of pre- and postpolicy drug coverage for each enrollee. In other words, enrollees’ overall drug use under the MMA would rise or fall along with changes in their out-of-pocket costs. That “use effect” took into account all of the factors discussed above that would affect enrollees’ out-of-pocket costs—those that changed enrollees’ total spending on drugs (such as the price effect or gross savings from cost management) and those that simply changed the share of that spending for which enrollees themselves paid (because of the benefit’s design or any supplemental coverage they had).

Specifically, CBO assumed that enrollees’ spending for prescription drugs would rise by as much as 3 percent for every 10 percent drop in their out-of-pocket costs. The estimated change in enrollees’ out-of-pocket costs took into account their current coverage and whether they would enroll only in the basic Medicare benefit or would participate in the low-income subsidy program as well (as described below). Among enrollees in stand-alone prescription drug plans and Medicare Advantage drug plans, that assumption about the induced demand for drugs increased CBO’s estimate of drug spending by approximately 9 percent. That is, total drug consumption was

30. Although Medicaid's share of total U.S. drug spending will decline under the MMA because spending on dual eligibles will shift to Medicare, Medicaid will still purchase a significant amount of drugs on behalf of its other enrollees.

31. In the process, drug plans could secure deeper price discounts for those preferred drugs in exchange for the increase in their sales volume. Even without such discounts, though, simply shifting use to lower-priced drugs—including generic drugs—would probably constitute an important source of savings.

32. For additional discussion of this issue, see Congressional Budget Office, Letter to the Honorable William H. Frist, M.D., regarding CBO's estimate of the effect of striking the "noninterference" provision as added by P.L. 108-173, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (January 2004); and Congressional Budget Office, Letter to the Honorable Ron Wyden regarding the authority to negotiate prices for single-source drugs for Medicare beneficiaries (March 2004).
projected to be about 9 percent higher each year than it would have been in the absence of a demand response.

**Other Administrative Costs.** CBO’s estimate of covered drug costs included certain costs that could be considered purely administrative (such as dispensing fees paid to pharmacies and other costs of processing claims), but the agency accounted separately for expenses that drug plans would incur for marketing, member acquisition, and member retention as well. In addition, CBO assumed that plans would incur costs as a result of having to bear financial risk—whether to offset the costs of purchasing private reinsurance policies or to build up their own reserves in case their costs exceeded expectations. Specifically, CBO estimated that plans bearing the statutory level of risk would require a premium in proportion to the degree of risk they faced; that premium would be higher in the initial years of the benefit (when there was greater uncertainty about its costs) than in later years. For reduced-risk and fallback plans, however, such costs would be cut or absent. Overall, CBO estimated that drug plans’ other administrative costs would add about 11 percent to the costs of providing covered drug benefits in 2006, with that increment declining to about 6 percent in 2013.34 (Those percentages represent weighted averages of the administrative costs for full-risk drug plans and for reduced-risk and fallback drug plans.)

**Summary of Effects on Gross Benefit Costs.** As discussed above, CBO applied several key factors to estimate gross benefit costs (see Table 3). The net effect of those assumptions can be seen in levels of average drug spending under the MMA as well as the average gross costs of providing the standard drug benefit (see Table 4). Overall, the various adjustments that CBO made to baseline drug spending reduced the amount of spending that would be subject to coverage by about 0.5 percent in 2006 and about 5 percent in 2013.35 Applying the MMA’s benefit design to that spending generated an average cost for covered benefits of $1,482 in 2006, rising to $2,568 in 2013. Including administrative costs and multiplying by the number of participants in each year yielded estimates of total calendar year obligations that would be incurred. CBO then converted those estimates to outlays made during the fiscal year, projecting that payments to prescription drug plans and Medicare Advantage plans for providing the basic Medicare drug benefit would total $507 billion for the 2006-2013 period (see Table 1 on page 2).

CBO’s estimates of average cost-sharing obligations and average out-of-pocket costs for Part D enrollees are also shown in Table 4. The estimate of average liability for cost sharing is simply the difference between average spending under the benefit ($2,878 in 2006) and average covered benefits ($1,482 in 2006). That liability figure does not take into account any supplemental coverage that enrollees might have (through the low-income subsidies or a former employer, for instance). Beneficiaries’

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33. In economic terms, CBO started with the assumption that the arc elasticity of demand for prescription drugs was -0.3 (in which the denominator used to calculate the percentage change in drug spending and out-of-pocket costs was the average of the pre- and postpolicy levels). That elasticity estimate reflected a review of the available studies on drug spending as well as CBO’s own internal analysis using MCBS data on drug spending by Medicare beneficiaries. Although demand elasticities usually relate a percentage change in quantity to a percentage change in price, total spending and out-of-pocket costs were used instead, both to reflect the results of the literature and to comport more closely with CBO’s focus on spending (which could change if an individual switched to a more or less expensive medicine even though the quantity consumed was held constant). At the same time, estimates based on the responses of individuals with less generous drug coverage might not be applicable for beneficiaries with very generous drug coverage. CBO thus applied an adjustment factor based on the portion of an individual’s cost-sharing liabilities that was covered by third parties, which ranged from 1 (for beneficiaries with no additional drug coverage beyond the basic Medicare benefit) to zero (for beneficiaries who would face no cost sharing before or after the Medicare benefit was implemented). In other words, the effective arc elasticity used was -0.3 for otherwise uninsured enrollees and a smaller amount for those with some form of supplemental drug coverage. For a recent summary of elasticity estimates for drug spending, see Mark Pauly, “Medicare Drug Coverage and Moral Hazard,” *Health Affairs*, vol. 23, no. 1 (January/February 2004), p. 117.

34. Whether those costs offset administrative costs that would have been incurred in providing drug coverage in the absence of a Medicare benefit or instead represented added costs was not a significant consideration in the cost estimate but could affect estimates of total U.S. spending in the health or drug sectors.

35. To generate a cost estimate, CBO focused on drug spending that would be covered under the Medicare benefit. To the extent that drug plans reduced costs by limiting coverage to preferred drugs but beneficiaries continued to purchase drugs that were not covered, average drug spending for participants would be greater than the amount shown here.
average out-of-pocket costs—accounting for such other drug coverage but excluding their Part D premiums—are also relevant to the cost estimate because of the use effect described earlier. CBO estimated that for 2006, average out-of-pocket costs would fall from $1,257 in the absence of a Medicare drug benefit (43 percent of average drug spending) to $792 under the MMA (28 percent of average drug spending).

**Beneficiaries’ Premiums**
The share of gross benefit costs that will be covered by beneficiaries’ premiums and the corresponding subsidies will have a large effect on the federal costs of providing a drug benefit under Medicare. Not only will the premium subsidies determine how gross costs are allocated between enrollees and the government, but they will also affect participation in such a voluntary program. This section examines how those premiums and the corresponding federal subsidies are established under the MMA and then shows how CBO estimated and accounted for total premium payments.

Under the MMA, the premium that an individual beneficiary pays for Part D benefits is not set in law and will depend on which drug plan he or she joins. Drug plans will submit bids to reflect their expected costs per beneficiary of providing basic drug coverage, and HHS will calculate a national average of those bids. HHS will then set an average beneficiary premium to cover 25.5 percent of expected average costs per enrollee. Plans with bids below the national average will see a corresponding reduction in their enrollees’ premiums, whereas plans bidding above the national average will see a commensurate increase. Under that mechanism, drug plans will have strong incentives to keep their bids low to attract enrollees, and beneficiaries will have to consider whether the extra premium of a more costly plan is worth paying—two factors that affected CBO’s assumption about the gross savings that drug plans would achieve on average.

Once beneficiaries’ premiums for each drug plan are set, the remaining portion of a drug plan’s expected costs will be covered by federal subsidies, which will come in two forms. As discussed above, reinsurance payments will

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**Table 3.**

**Key Factors Used in CBO’s Estimate of Gross Drug Costs per Drug Benefit Participant, Calendar Years 2006 and 2013**

<table>
<thead>
<tr>
<th>(Percent)</th>
<th>2006</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors Reducing Gross Costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross Drug Savings Relative to Spending for an Unmanaged Drug Benefit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average for full-risk drug plans</td>
<td>20.0</td>
<td>25.0</td>
</tr>
<tr>
<td>Average for reduced-risk or fallback drug plans</td>
<td>12.5</td>
<td>12.5</td>
</tr>
<tr>
<td>Average Reduction in Spending as a Result of Exemption from Medicaid’s Best-Price Provision</td>
<td>1.6</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Factors Increasing Gross Costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average “Price Effect”</td>
<td>0.3</td>
<td>2.8</td>
</tr>
<tr>
<td>Average “Use Effect”</td>
<td>9.0</td>
<td>9.3</td>
</tr>
<tr>
<td>Administrative Costs as a Share of Benefit Costs</td>
<td>10.7</td>
<td>5.6</td>
</tr>
</tbody>
</table>

**Memorandum:**

<table>
<thead>
<tr>
<th>Probability of Enrollment</th>
<th>2006</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-risk drug plans</td>
<td>82</td>
<td>95</td>
</tr>
<tr>
<td>Reduced-risk or fallback drug plans</td>
<td>18</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Congressional Budget Office.

Note: See the text for an explanation of the terms used here.
cover 80 percent of drug spending incurred once an individual enrollee reaches the benefit’s catastrophic threshold. In total, those payments will cover about 27 percent of gross costs for benefits and administrative expenses in 2006, CBO estimated. The remaining subsidy (referred to as the “direct” subsidy) will be set prospectively so that the two subsidies together cover 74.5 percent of the average expected costs for all enrollees in the basic Medicare benefit. In other words, the direct subsidy will cover about 47.5 percent of average costs in 2006, in CBO’s estimation—but if in the future the share of costs expected to be covered by reinsurance differs from 27 percent, HHS will be required to adjust the direct subsidy correspondingly to keep the sum of the two subsidies at 74.5 percent. (That adjustment will be made on a purely prospective basis; the direct subsidy is a capitated payment that will not be changed midyear or retroactively if actual reinsurance payments differ from the projections.) The direct subsidy will also be essentially the same regardless of which drug plan enrollees join, which is why their premium will vary with the total cost of each plan.  

Using CBO’s estimates for 2006, costs for an average plan of about $137 per month would translate into federal subsidies of about $102 per month and beneficiaries’ premiums of about $35 per month (see Table 5). To illustrate the impact on beneficiaries’ premiums, the table also presents hypothetical submissions by plans that have benefit costs per member per month that are $10 higher or lower. (CBO did not estimate the likely range of premiums that beneficiaries would actually face across drug plans.) Each plan’s expected level of reinsurance pay-

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36. The direct subsidy will be adjusted for risk to reflect expected differences in drug costs stemming from differences in health status among enrollees in different plans; it could also be adjusted to account for differences in drug prices in different regions of the country (if HHS determined that such differences were more than minimal). For those reasons, the actual direct subsidy payment per enrollee could differ among drug plans and enrollees.
A DETAILED DESCRIPTION OF CBO’S COST ESTIMATE FOR THE MEDICARE PRESCRIPTION DRUG BENEFIT

Table 5.

Total Costs, Federal Subsidies, and Beneficiaries’ Premiums for Calendar Year 2006 Under Three Illustrative Plans

(Average amount in dollars per enrollee per month)

<table>
<thead>
<tr>
<th></th>
<th>Lower-Cost Plan</th>
<th>Average-Cost Plan</th>
<th>Higher-Cost Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected Total Costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Benefits plus administrative costs)</td>
<td>127</td>
<td>137</td>
<td>147</td>
</tr>
<tr>
<td>Minus Expected Federal Reinsurance Paymentsa</td>
<td>-34</td>
<td>-37</td>
<td>-40</td>
</tr>
<tr>
<td>Plan’s Bid for Providing Coverage</td>
<td>93</td>
<td>100</td>
<td>107</td>
</tr>
<tr>
<td>Minus “Direct” Federal Subsidy</td>
<td>-65</td>
<td>-65</td>
<td>-65</td>
</tr>
<tr>
<td>Beneficiary’s Premium</td>
<td>28</td>
<td>35</td>
<td>42</td>
</tr>
<tr>
<td>Memorandum:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Premium as a Share of Total Costs (Percent)</td>
<td>22.0</td>
<td>25.5</td>
<td>28.5</td>
</tr>
</tbody>
</table>

Source: Congressional Budget Office.

a. Figures shown here assume that reinsurance payments are a constant percentage of each plan’s total costs and represent an average monthly level of such payments (even if actual reinsurance payments are likely to be concentrated toward the end of the calendar year).

The examples in the table also show that total payments to drug plans are expected to equal the amount that the plans specify in their submissions to HHS (although those amounts are subject to review by and negotiation with HHS). That is, the sum of the expected reinsurance payment, the direct subsidy, and the beneficiary premium for each plan equals its total expected costs.38

Although beneficiaries’ premiums will vary as a result of this subsidy system, CBO did not have to estimate the extent of that variation because, on average, the higher premium payments made by beneficiaries joining higher-cost plans would be offset exactly by reduced premium payments from beneficiaries who join lower-cost plans. Applying the 74.5 percent subsidy to the average costs of providing covered benefits of $1,640 thus yielded average annual premiums of $418 in 2006 (about $35 per month, as shown above); the net federal subsidy would thus average $1,221. By 2013, when the average cost of providing the basic drug benefit is projected to be $2,713, the average beneficiary’s premium would total $692 for the year (about $58 per month); the net federal subsidy would thus be $2,021 per enrollee. (Premiums grow somewhat more slowly than the benefit’s parameters—by about 7.5 percent per year, on average—because

37. Since a lower plan bid will translate into a lower beneficiary premium, this system could appear to provide an incentive for plans to overstate their expected reinsurance payments. If they did, however, their total payments for the year (including the reinsurance payments they actually received) would not cover their costs. Similarly, drug plans would not want to understate their expected reinsurance payments because (if total costs were held constant) the enrollee’s premium would be commensurately higher as well, which would discourage enrollment. Thus, plans will have strong incentives to estimate their expected reinsurance payments accurately.

38. To the extent that plans’ actual costs diverged from expectations, that difference could yield higher or lower federal reinsurance payments and could trigger transfers under the risk corridor system.
they reflect administrative costs as well as benefit costs.) Multiplying those figures by the projected number of enrollees in prescription drug plans and Medicare Advantage plans, and then converting to fiscal year receipts, yielded the overall estimate of $131 billion for the 2006-2013 period (see Table 1 on page 2).

Two accounting matters are relevant to the calculation of CBO’s estimate for premium collections. First, the MMA will permit beneficiaries to pay the premium for the basic drug benefit either by having it withheld from their Social Security benefit (as is generally done for the Part B premium) or by arranging to pay their drug plan directly. The estimate for premium collections in Table 1, however, is presented as if all participants in the drug benefit chose to have premiums withheld from their Social Security benefits (in which case Medicare would transfer those payments to the drug plans). To the extent that beneficiaries chose to pay plans directly, federal spending for benefits and premium collections would be reduced dollar for dollar and there would be no change in the estimate of the net cost of the Medicare benefit. Second, the figures for premium collections also include the portion of premiums paid by Medicare on behalf of participants in the low-income subsidy system (with those payments also appearing below as a cost of providing the low-income subsidies). Displayed in that way, the difference shown in Table 1 between the payments to drug plans for benefits and administrative costs, on the one hand, and premium liabilities, on the other, represents the net cost for Part D enrollees of the federal subsidies for the basic Medicare benefit—a total of $377 billion through 2013.

The Employer Subsidy System
Former employers are the single largest source of drug coverage for Medicare beneficiaries today. The extent to which those employers will supplement the Medicare benefit in the future can have important effects on federal costs because of the MMA’s true-out-of-pocket provision. (As discussed above, that provision lowers the federal cost of providing the basic drug benefit for enrollees with additional drug coverage because that supplemental coverage delays the point at which enrollees reach the catastrophic threshold for out-of-pocket costs.) Another potential factor that could affect federal costs is the number of employer and union plans that choose to provide Medicare-eligible retirees with qualified drug coverage and receive a subsidy directly from Medicare. In light of those considerations, CBO had to project the prevalence of coverage from employers in the absence of a Medicare drug benefit and then estimate both the degree to which that coverage would change as a result of the legislation and the mechanism through which it would be subsidized. CBO also had to account for any indirect impacts of the drug benefit on federal tax revenues.

Background. About 30 percent of the enrollees in Medicare Part B are nonfederal retirees who currently receive prescription drug coverage through a former employer, CBO estimated. Their retiree health coverage generally supplements Medicare’s benefits for Parts A and B as well. Because Medicare covers a large share of acute medical costs but has not provided an outpatient drug benefit, a sizable share of the current cost of retiree health plans consists of prescription drug spending—as much as 40 percent to 60 percent, by some estimates.39 Although employer-sponsored drug coverage is typically rather generous—providing relatively low cost sharing as well as limits on retirees’ out-of-pocket costs—recent growth in drug spending has led employers to take measures to control their health costs, such as raising cost-sharing obligations, requiring retirees to shoulder a larger share of supplemental premiums, or dropping coverage for future retirees. However, CBO did not see strong evidence that current beneficiaries or those who will soon enroll in Medicare have been losing retiree drug coverage in ways that would substantially affect the overall share of beneficiaries with such coverage in the near term.40 Thus, CBO


40. For example, one recent study found that the share of Medicare beneficiaries ages 65 to 69 with drug coverage through a former employer declined in the late 1990s. However, that share was still greater than or equal to the share of older Medicare beneficiaries with retiree drug coverage, so the total share of Medicare beneficiaries with such coverage—combining younger and older cohorts—remained virtually constant. See Bruce Stuart and others, “Employer-Sponsored Health Insurance and Prescription Drug Coverage for New Retirees: Dramatic Declines in Five Years,” Health Affairs Web Exclusive (July 23, 2003), available at http://content.healthaffairs.org/cgi/reprint/hlthaff.w3.334v1. A more recent study indicated that declines in the coverage offered to future retirees over the past few years have applied almost exclusively to newly hired employees and thus would not be likely to affect the share of Medicare beneficiaries with such coverage in the near term. See Henry J. Kaiser Family Foundation and Hewitt Associates, Retiree Health Benefits Now and in the Future: Findings from the Kaiser/Hewitt 2003 Survey on Retiree Health Benefits (Washington, D.C.: Kaiser Family Foundation, January 2004).
assumed that the share of beneficiaries with such retiree coverage would remain at about 30 percent through 2013 in the absence of a Medicare drug benefit, but it also assumed that average cost-sharing liabilities for those beneficiaries would increase at nearly the same rate as overall drug spending.

Options for Employers. Under the MMA, employers would have three broad options from which to choose in determining the extent of the drug coverage they would provide, the mechanism they would use to do so, and the subsidies that would be generated as a result.

Option 1: Wrap Around a Medicare Drug Plan. An employer could have its retirees enroll in a prescription drug plan or Medicare Advantage plan to obtain the basic drug benefit and then contract with that plan to provide supplemental drug coverage to those retirees.41 If that supplemental coverage was generous, though, even individuals with very high drug costs might never reach the Medicare benefit’s catastrophic threshold because they would not incur sufficient out-of-pocket costs themselves. As a result, the costs of providing catastrophic drug coverage would have to be covered by the employer, at least initially (with some portion of those costs passed on to retirees through their premium payments). Even so, a portion of retirees’ drug costs would be shifted to Medicare under this option.

Option 2: Provide Drug Coverage Directly and Receive a Subsidy from Medicare. An employer could continue to provide drug coverage itself (or through a health plan or other subcontractor of its own choosing). So long as that coverage was at least as valuable overall as the basic Medicare benefit, the employer could then receive a payment from Medicare to cover 28 percent of each retiree’s total drug spending in a specified range. (For 2006, that range would extend from $250 to $5,000; in future years, its endpoints would be indexed to per capita drug spending for Medicare beneficiaries.) In addition, that Medicare subsidy payment would receive preferential tax treatment, and such employer plans would be subject to less scrutiny and fewer regulatory requirements than Medicare drug plans would be.

Option 3: Drop Drug Coverage for Retirees. An employer could decide not to provide drug coverage for its Medicare-eligible retirees once the Medicare benefit became available (meaning that the employer would neither provide the benefit directly nor supplement the basic benefit offered by a Medicare drug plan).42 In that case, affected retirees would presumably enroll in a Medicare drug plan. Assuming that they did not purchase supplemental drug coverage on their own (for reasons discussed above), retirees with high drug spending would probably reach the benefit’s catastrophic threshold and thus would trigger federal subsidies to cover most of those catastrophic costs.

Given that employers would reduce their drug costs the most under the third option, it might seem reasonable to conclude that all employers would drop drug coverage for their Medicare-eligible retirees once the Medicare benefit was in place. If employers were seeking only to minimize their drug costs, however, they would probably have dropped drug coverage already, even in the absence of a Medicare drug benefit. Presumably, then, firms that provide drug coverage for retirees today see reasons for doing so and may continue providing such coverage once the Part D benefit is in place. Some firms may have little choice but to continue providing coverage, either because they did not retain the right to modify the health benefits they provide to current retirees or because they must bargain with unions that have been loath to see those benefits reduced. Even without those constraints, employers operating in competitive labor markets must offer a total compensation package that is attractive to workers and may judge that covering health care costs for retirees allows them to reduce their wage bills. The fact that employers’ health spending already receives preferential tax treatment also favors that decision.

41. That approach would be analogous to the way that employer coverage currently wraps around Medicare’s other benefits. Employers could even function as the prescription drug plan for their retirees (and could serve them exclusively) but they would have to be approved by HHS in the same manner as other PDPs were.  
42. A court decision in 2000 involving retired government workers in Erie County, Pennsylvania, had been interpreted as potentially preventing employers from varying the health coverage they offered to Medicare-eligible retirees and younger retirees. However, the Equal Employment Opportunity Commission has more recently issued draft regulations allowing employers to drop drug coverage only for Medicare-eligible retirees without violating age discrimination laws. (See Robert Pear, “Agency to Allow Insurance Cuts for the Retired,” New York Times, April 23, 2004.) Had employers been precluded from varying their benefits, that outcome could have discouraged some of them from dropping coverage for Medicare-eligible retirees and could have led others to drop drug coverage for all their retirees once the Medicare benefit was in place.
A DETAILED DESCRIPTION OF CBO’S COST ESTIMATE FOR THE MEDICARE PRESCRIPTION DRUG BENEFIT

Table 6.

Employers’ Options for Providing Drug Coverage Under the MMA and Resulting Net Medicare Subsidies per Enrollee, Calendar Years 2006 and 2013

<table>
<thead>
<tr>
<th>Option</th>
<th>Average Net Medicare Subsidy per Enrollee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006</td>
</tr>
<tr>
<td>Option 1: Employer’s Coverage Wraps Around a Medicare Drug Plan</td>
<td>692</td>
</tr>
<tr>
<td>Option 2: Employer Provides Qualified Coverage Directly and Receives a 28 Percent Subsidy Payment from Medicare</td>
<td>766</td>
</tr>
<tr>
<td>Option 3: Employer Drops Drug Coverage</td>
<td>1,201</td>
</tr>
</tbody>
</table>

Source: Congressional Budget Office.

Notes: The net Medicare subsidy reflects covered drug costs minus beneficiaries’ premiums (if any) and excludes payments to drug plans for their administrative costs. Figures for Option 2 represent Medicare payments only and exclude the effective tax subsidy that applies to those payments.


In general, then, CBO modeled employers’ behavior under a Medicare drug benefit as a function of the benefit’s overall generosity, any differential in subsidies between the available options (taking into account their effects on tax liabilities), and the degree of administrative complexity involved in each option. That analysis also accounted for the average effect of each option on premium liabilities and cost sharing for retirees. As an example of the role that the benefit’s generosity could play, CBO assumed that if the Medicare drug benefit was as generous as the coverage that employers offered to their retirees, then employers would be strongly inclined not to supplement that benefit (in part because dropping coverage in that case would not leave retirees worse off). Although dropping drug coverage might seem like an extreme response if the Medicare benefit was less generous, one recent survey indicated that nearly one-quarter of large employers would take that approach if Medicare offered drug coverage that included a deductible, coinsurance, and catastrophic protection above $4,000 in out-of-pocket spending—and that response did not factor in any penalty for supplemental coverage.43

Effects on Coverage and Outlays. After analyzing the three basic options available to employers under the MMA, CBO concluded that average Medicare subsidy payments on behalf of retirees would be greatest if employers dropped drug coverage (Option 3). For example, CBO estimated that in 2006, those retirees would receive an average of $1,619 in covered benefits if they enrolled in a Medicare drug plan and were provided the basic drug benefit with no supplemental coverage. (That estimate took into account the effect on their out-of-pocket costs.) Subtracting the average beneficiary’s premium of $418 for that year would yield an estimated net subsidy from Medicare of $1,201 under Option 3 (see Table 6). By 2013, the net Medicare subsidy would grow to an average of $2,320 for retirees whose former employers had dropped drug coverage.

If those retirees were instead provided generous wrap-around coverage by their former employer (Option 1), Medicare’s average subsidy payment would fall. (In that case, enrollees would pay essentially the same premium but receive less coverage through Medicare.) Specifically, the net Medicare subsidy would average $692 in 2006 under that option, CBO estimated, or about half of the subsidy that would be generated if employers dropped their drug coverage altogether. CBO further estimated that the 28 percent subsidy payments from Medicare (Option 2) would be comparable, on average, to the net

subsidies that retirees would generate if they enrolled in a Medicare drug plan and retained a generous wraparound policy from their employer (Option 1).\textsuperscript{44} In other words, those Medicare payments to employer and union plans would also be substantially lower, on average, than the net subsidies for retirees whose employers dropped drug coverage (Option 3). Those payments to employer and union plans would be accorded favorable tax treatment, increasing the attractiveness of that option somewhat. Even so, the disparity in Medicare subsidies between Option 3 and the other two options would grow over time.

On the basis of that analysis, CBO concluded that the difference in subsidies under the MMA would give employers a new financial incentive to drop prescription drug coverage for their Medicare-eligible retirees once the drug benefit became available. In essence, the MMA’s true out-of-pocket provision would reduce the extent to which federal spending substituted for, or “crowded out,” employers’ spending on drugs, but it also would penalize supplemental drug coverage sponsored by employers.\textsuperscript{45} CBO further assumed that some employers would respond to that incentive to drop coverage. As a result, CBO estimated that 2.7 million Medicare-eligible retirees who would have had relatively generous employer drug coverage in 2006 in the absence of a Medicare drug benefit would enroll in Part D but would see their former employer decide not to supplement its basic benefits. That figure represents about 23 percent of projected participants in the drug benefit who would have had such coverage from a nonfederal source, or about 17 percent of all Part B enrollees who CBO projected would have had some form of employer-sponsored drug coverage in the absence of a Medicare drug benefit.\textsuperscript{46} CBO assumed that the affected retirees would enroll in a Medicare drug plan, with their former employer potentially “cashing them out” or at least choosing to pay their Part D premium as a means of compensation. (Federal costs for those enrollees were included above in the estimate of payments to Medicare drug plans.)

At the same time, CBO assumed that nearly all of the remaining retirees with relatively generous employer-sponsored drug coverage from a nonfederal source would see their employer take the 28 percent subsidy payment from Medicare, both because of its tax advantages and for reasons of administrative simplicity.\textsuperscript{47} The number of beneficiaries covered by the 28 percent subsidy would thus rise from 8.2 million in calendar year 2006 to 9.5 million by 2013, CBO estimated. The estimate of $71 billion in subsidy payments to qualified employer and union drug plans over 10 years (see Table 1 on page 2) reflects both the number of participants and the share of those retirees’ drug spending that is projected to fall in the covered range.\textsuperscript{48}

**Effects on Revenues.** Although employers can deduct as a business expense the costs that they incur in providing health benefits to their employees and retirees, those costs are not included in those individuals’ taxable income—which results in a considerable “tax expenditure” for employer-sponsored health benefits. Any legislation that affects employers’ health costs thus has the potential to change federal revenue collections. In general, CBO as-

\textsuperscript{44} For a further discussion of the denominators used to calculate those percentages, which differ primarily in their treatment of active workers and federal retirees enrolled in Part B, see Congressional Budget Office, _Letter to the Honorable William “Bill” M. Thomas regarding Medicare beneficiaries who receive health insurance provided by employers_ (November 2003) and _Letter to the Honorable Don Nickles._

\textsuperscript{45} CBO assumed that a very small percentage of employers would find it advantageous to have some or all of their retirees enroll in a prescription drug plan or Medicare Advantage drug plan and wrap around the basic Medicare drug benefit that those plans would provide. CBO also assumed that beneficiaries with employer coverage who were eligible for the low-income subsidies and wanted to enroll in them would also choose to enroll in a prescription drug plan or Medicare Advantage drug plan to receive the low-income subsidy benefits. The MMA does not include a provision allowing low-income subsidy payments to be made to employers that are receiving the 28 percent subsidy payments.

\textsuperscript{46} Because participants in the employer subsidy system would pay no premium to Medicare, the figures for the net Medicare subsidy under Option 2 also represent CBO’s estimate of the average payment to employer and union plans under that system.

\textsuperscript{47} CBO assumed that a very small percentage of employers would find it advantageous to have some or all of their retirees enroll in a prescription drug plan or Medicare Advantage drug plan and wrap around the basic Medicare drug benefit that those plans would provide. CBO also assumed that beneficiaries with employer coverage who were eligible for the low-income subsidies and wanted to enroll in them would also choose to enroll in a prescription drug plan or Medicare Advantage drug plan to receive the low-income subsidy benefits. The MMA does not include a provision allowing low-income subsidy payments to be made to employers that are receiving the 28 percent subsidy payments.

\textsuperscript{48} Because the net costs to Medicare are similar whether employers receive the 28 percent subsidy payment or instead wrap around the basic drug benefit provided by a Medicare drug plan, net federal outlays (including payments to Medicare drug plans for their administrative costs) would be comparable if the majority of employers chose Option 1 instead of Option 2.
sumed that savings to employer-sponsored plans on their health costs would raise federal revenues by shifting the composition of total compensation packages for employees and retirees toward taxable forms of income (wages and pensions) and away from nontaxable health benefits. That assumption again reflects the view that employers must provide compensation that is commensurate with workers’ output in order to attract and retain workers.

Under the MMA, employers that dropped drug coverage would see their health costs decline substantially, whereas employers that received subsidy payments directly from Medicare or wrapped around a Medicare drug plan would see a partial reduction. By themselves, those effects would have led CBO to estimate an increase in federal revenues of about $25 billion over the 2004-2013 period. However, the MMA also excluded the payments under the 28 percent subsidy system from income taxation, while still allowing employers a tax deduction for the entire portion of retirees’ drug costs that they bear (an approach that is sometimes referred to as a “super-credit,” in that it essentially provides both a partial tax credit and a deduction for the same expenditures). Accordingly, CBO estimated that those tax preferences would reduce revenue collections by about $18 billion over the same period. The $18 billion figure thus represents CBO’s estimate of the tax expenditure that would result from the MMA’s preferential tax treatment of those subsidy payments. On balance, then, CBO estimated that the MMA’s prescription drug provisions would result in an increase of $7 billion in federal revenues through 2013.

There are two reasons why it would be inappropriate to add together the $18 billion tax expenditure and the $71 billion in direct payments to generate a total figure of $89 billion for subsidies to employers. First, the tax expenditure represents the extent to which that $71 billion in payments would ultimately have been recaptured through the tax system had it not been for the income-tax exclusion; the tax expenditure can thus be thought of as maintaining the value of those payments but not augmenting it. Second, that approach does not take into account the subsidy payments that would be made on behalf of retirees who would otherwise have had employer-sponsored drug coverage and who enrolled in a prescription drug plan or Medicare Advantage drug plan (whether as their only source of drug coverage, in conjunction with an employer wraparound policy, or to take advantage of the low-income subsidies). Those indirect subsidy payments also cover spending that employers would have borne in the absence of a Medicare drug benefit, and they are made in addition to the $71 billion in direct subsidy payments.

Summary of Basic Benefit Costs
CBO’s estimate of overall costs per participant for the basic Medicare drug benefit reflected both the number of participants and average cost per participant in the two subsidy systems contained in the MMA (see Table 7). Average drug spending for participants in qualified employer and union drug plans was projected to be substantially higher than average spending for Part D enrollees (primarily reflecting differences in their projected spending under prior law), but Medicare’s net payments were estimated to cover a smaller share of that spending. For all enrollees, the average net Medicare cost per participant is the weighted average of net costs for beneficiaries projected to receive coverage through a qualified employer or union plan and net costs for beneficiaries projected to enroll in Part D and receive coverage through a prescription drug plan or a Medicare Advantage drug plan. As Table 7 indicates, the basic Medicare benefit is projected to pay for one-third of participants’ covered drug spending, on average (once beneficiaries’ premiums and plans’ administrative costs are netted out). Combined, net federal payments to all of those plans will total $448 billion over the fiscal year 2006-2013 period—which represents CBO’s estimate of the net federal outlays involved in providing the basic Medicare drug benefit.

49. Increased Social Security payroll tax receipts, which are off-budget, would account for about $2 billion of that total. The figures shown in Table 1 also include the estimated effect on revenues (an increase of $0.2 billion over the 2004-2013 period) of the MMA’s provisions that would modify the Hatch-Waxman Act. Those provisions would modestly reduce employers’ drug costs, and CBO assumed that taxable compensation would increase slightly as a result.

50. With plans’ administrative costs included, the net cost per participant for enrollees in prescription drug plans and Medicare Advantage drug plans is simply the gross cost per participant from Table 4 minus the average annual premium. When plans’ administrative costs are excluded, the calculation is somewhat more complicated; in that case, the amount that is subtracted from gross benefit costs is only the portion of the average beneficiary premium that is attributable to those benefit costs. The differences between the gross amounts shown in Table 4 and the net amounts shown in Table 7 are thus slightly smaller when plans’ administrative costs are excluded.
Table 7.

Estimated Spending by and Costs for Drug Benefit Participants, Calendar Years 2006 and 2013

<table>
<thead>
<tr>
<th>(Dollars)</th>
<th>2006</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participants in Qualified Employer and Union Drug Plans</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of participants (Millions)</td>
<td>8.2</td>
<td>9.5</td>
</tr>
<tr>
<td>Average drug spending by projected participants</td>
<td>3,815</td>
<td>6,689</td>
</tr>
<tr>
<td>Average Medicare costs per participant</td>
<td>766</td>
<td>1,369</td>
</tr>
<tr>
<td><strong>Participants in Prescription Drug Plans and Medicare Advantage Drug Plans</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of participants (Millions)</td>
<td>29.0</td>
<td>33.9</td>
</tr>
<tr>
<td>Average drug spending by projected participants</td>
<td>2,878</td>
<td>5,017</td>
</tr>
<tr>
<td>Average net Medicare costs per participant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excluding plans’ administrative costs</td>
<td>1,104</td>
<td>1,913</td>
</tr>
<tr>
<td>Including plans’ administrative costs</td>
<td>1,221</td>
<td>2,021</td>
</tr>
<tr>
<td><strong>All Participants</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of participants (Millions)</td>
<td>37.2</td>
<td>43.4</td>
</tr>
<tr>
<td>Average drug spending by projected participants</td>
<td>3,084</td>
<td>5,420</td>
</tr>
<tr>
<td>Average net Medicare costs per participant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excluding plans’ administrative costs</td>
<td>1,029</td>
<td>1,795</td>
</tr>
<tr>
<td>Including plans’ administrative costs</td>
<td>1,121</td>
<td>1,879</td>
</tr>
<tr>
<td><strong>Memorandum:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare Enrollment (Millions)</td>
<td>42.6</td>
<td>49.6</td>
</tr>
<tr>
<td>Medicare Part B Enrollment (Millions)</td>
<td>39.9</td>
<td>46.6</td>
</tr>
</tbody>
</table>

Source: Congressional Budget Office.

Note: Average net subsidies reflect Medicare payments minus Part D premiums. Net figures that exclude plans’ administrative costs equal gross benefit costs minus the portion of beneficiaries’ premiums that is attributable to those benefit costs.

a. These figures differ from comparable figures that CBO released in November 2003 because of subsequent refinements in the calculation of spending and costs per participant that do not affect the cost estimate. See Congressional Budget Office, Letter to the Honorable Don Nickles providing additional information about CBO’s cost estimate for the conference agreement on H.R. 1 (November 2003).

Costs of the Low-Income Drug Subsidies and Effects on Medicaid and Other Direct Spending

The low-income drug subsidies provided under the MMA will total $192 billion for fiscal years 2004 to 2013, CBO estimated. That figure includes spending under the transitional drug assistance program that will be in effect during fiscal years 2004 to 2006 as well as the costs of the additional low-income subsidies that will supplement the basic Medicare drug benefit starting on January 1, 2006. This section reviews the basis for those estimates and also examines offsetting savings and costs for other federal programs—primarily Medicaid—that CBO estimated would result from the implementation of the MMA’s drug benefit provisions.

Transitional Drug Assistance

Before the Medicare prescription drug program is implemented in 2006, a prescription drug discount card program will go into effect under the MMA. That program, which was designed to help participants obtain their prescriptions at reduced prices, will provide limited government subsidies to low-income beneficiaries. Specifically,
it will pay the enrollment fee (which cannot exceed $30 per year) and cover up to $600 in annual drug spending for Medicare beneficiaries with income below 135 percent of the federal poverty level who have no other form of drug coverage. Beneficiaries with income below the federal poverty level will be required to pay 5 percent of their drug costs; those with income between 100 percent and 135 percent of the federal poverty level will face a co-insurance rate of 10 percent.

About 15 percent of Medicare beneficiaries will be eligible for such transitional benefits under the MMA, CBO estimated, and about 20 percent of those eligible (or nearly 1 million individuals in 2005) will ultimately enroll. Participation was projected to be quite low because the discount card program will operate for only a short time (about 18 months) and will offer limited benefits. Combining the projected number of participants in the program and the cost per participant, CBO estimated that spending on transitional benefits would total about $0.8 billion over the fiscal year 2004-2006 period. The bulk of that spending would occur in 2005.

Low-Income Drug Subsidies
In conjunction with the basic Medicare prescription drug benefit that begins in 2006, the MMA will cover some or all of the prescription drug premiums and required cost-sharing amounts for beneficiaries with low income and assets. Overall, the cost of providing those low-income subsidies would be $191 billion over the 2006-2013 period, in CBO’s estimation. That estimate was derived by projecting the number of beneficiaries who would be eligible for the subsidies, determining a participation rate for those beneficiaries, and multiplying the resulting number of participants by an estimate of their average subsidy costs.

Eligibility. The MMA will provide subsidies to two groups of individuals who are enrolled in the Medicare drug benefit. The first group (which will be referred to here as eligible for “Subsidy A”) consists of individuals with income below 135 percent of the poverty level and assets below $6,000 for an individual or $9,000 for a couple. That group also includes Medicare beneficiaries who receive full Medicaid benefits regardless of their income or assets. The second group (eligible for “Subsidy B”) consists of all other individuals with income below 150 percent of the poverty level and assets below $10,000 for an individual or $20,000 for a couple. (All of those limits on assets will be adjusted for general inflation in later years.)

After analyzing data from Medicaid, the Medicare Current Beneficiary Survey, and the Census Bureau’s Survey of Income and Program Participation, CBO estimated that about 35 percent of the enrollees in Medicare Part B—or about 14 million people in 2006, rising to 16 million by 2013—would be eligible for low-income subsidy benefits under the MMA (see Table 8). About 30 percent of those Medicare beneficiaries would be eligible for Subsidy A, with the other 5 percent qualifying for Subsidy B. Of the beneficiaries who would otherwise qualify for one of the subsidies in 2006, CBO estimated that about 1.8 million would be deemed ineligible on the basis of their assets.

Benefits. The MMA is slated to provide different benefits to the two groups of individuals described above.

Subsidy A. For individuals in this first group, the MMA will eliminate the basic drug benefit’s deductible and will reduce other cost sharing to nominal amounts that will depend on income and whether a person is a dual eligible. For all enrollees in this group, those nominal copayments will apply to all spending below the catastrophic threshold, thus filling in the doughnut hole in the standard Medicare drug benefit. Dual eligibles residing in nursing homes will not face any cost sharing, whereas other dual eligibles with income below the poverty level will pay $1 for a generic drug or preferred brand-name drug with a generic competitor and $3 for other covered drugs in 2006 (those amounts will be indexed to general inflation in later years). Other enrollees in Subsidy A will

51. CBO did not have to make an assumption about enrollment in the prescription drug discount card program as a whole because that factor did not affect the estimate of mandatory outlays. Even so, the experience of the drug discount card program to date may not be indicative of the full drug benefit’s likely prospects, for two reasons. First, although a large number of card sponsors are participating in the discount card program, that program does not require sponsors to bear much financial risk. Second, eligible beneficiaries may not be strongly motivated to enroll in the program because of its limited benefits and temporary nature.

52. For reasons discussed above in the section on enrollment in the basic drug benefit, CBO based its estimates of participation on the number of Medicare beneficiaries who had chosen to enroll in Part B of Medicare.
Table 8.
Number of Enrollees in Medicare Part B Who Are Eligible for Low-Income Drug Subsidies in Calendar Year 2006

(Millions of enrollees)

<table>
<thead>
<tr>
<th>Income as a Percentage of the Federal Poverty Level</th>
<th>Below 100</th>
<th>100-120</th>
<th>120-135</th>
<th>135-150</th>
<th>150-175</th>
<th>175-200</th>
<th>Above 200</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beneficiaries Eligible for Subsidy A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dual eligibles</td>
<td>4.4</td>
<td>0.9</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.1</td>
<td>0.3</td>
<td>6.4</td>
</tr>
<tr>
<td>Other beneficiaries</td>
<td>2.8</td>
<td>2.1</td>
<td>1.1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5.9</td>
</tr>
<tr>
<td>Subtotal</td>
<td>7.1</td>
<td>3.0</td>
<td>1.4</td>
<td>0.2</td>
<td>0.2</td>
<td>0.1</td>
<td>0.3</td>
<td>12.3</td>
</tr>
<tr>
<td>Beneficiaries Eligible for Subsidy B</td>
<td>0.2</td>
<td>0.3</td>
<td>0.2</td>
<td>1.2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1.9</td>
</tr>
<tr>
<td>Total Eligible Beneficiaries</td>
<td>7.4</td>
<td>3.2</td>
<td>1.6</td>
<td>1.4</td>
<td>0.2</td>
<td>0.1</td>
<td>0.3</td>
<td>14.2</td>
</tr>
<tr>
<td>Beneficiaries Not Eligible for Subsidies</td>
<td>0.4</td>
<td>0.4</td>
<td>0.5</td>
<td>0.5</td>
<td>2.4</td>
<td>2.4</td>
<td>19.2</td>
<td>25.7</td>
</tr>
<tr>
<td>Total Medicare Part B Enrollment</td>
<td>7.8</td>
<td>3.7</td>
<td>2.1</td>
<td>1.8</td>
<td>2.6</td>
<td>2.5</td>
<td>19.5</td>
<td>39.9</td>
</tr>
</tbody>
</table>

Source: Congressional Budget Office.

Notes: Some of the figures in this table differ slightly from comparable figures CBO released in November 2003 because of the correction of a calculation error not affecting the cost estimate. See Congressional Budget Office, Letter to the Honorable Don Nickles providing additional information about CBO’s cost estimate for the conference agreement on H.R. 1 (November 2003). See the text for an explanation of Subsidies A and B.

pay either $2 or $5 per prescription in 2006, with those amounts increased each year at the projected rate of growth in per capita drug expenditures for the Medicare population. Once any of those beneficiaries reaches the Medicare benefit’s catastrophic threshold ($5,100 in total covered drug spending in 2006), they will be not liable for any further cost sharing. And depending on which drug plan they join, they will pay either no premium or a reduced premium.53

Subsidy B. For individuals in this second group, the subsidy will lower the basic benefit’s deductible (to $50 in 2006) and will limit cost sharing to 15 percent for all other spending below the catastrophic threshold. Beneficiaries’ cost sharing for spending above that threshold will equal $2 or $5 in 2006 (depending on the type of drug purchased), and those amounts as well as the deductible will be indexed to growth in per capita drug expenditures for the Medicare population. Beneficiaries also will receive the same premium subsidy as the first group if their income is less than or equal to 135 percent of the poverty level, with the premium subsidy declining to zero for individuals with income equal to 150 percent of the poverty level. (Beneficiaries with income below 135 percent of the poverty level can be in this group if they are not dual eligibles and their assets are too high to qualify for the substantially higher subsidy.)

Participation. CBO projected that all dual-eligible beneficiaries would participate in the low-income drug subsidy program but that a significant proportion of the remaining eligible population would not apply for those

53. For beneficiaries in this group, a full premium subsidy is provided up to the national average premium. Beneficiaries who join a more expensive drug plan will thus pay the difference between that plan’s premium and the national average. (If no plan is available in an area for a premium at or below the national average, the subsidy will fully cover the premium for the lowest-cost plan in that area, with beneficiaries paying the difference to join another plan.) In that system, subsidized beneficiaries would have an incentive to join plans with premiums close to the national average, but CBO assumed that some of them would join plans costing less than that average. As a result, the average payment for premium subsidies for this group was projected to be slightly below the national average premium amount.
subsidies. For those beneficiaries, CBO’s estimate of the number of people who would enroll was based on several factors, including the value of the subsidies and historical participation in the qualified Medicare beneficiary (QMB) and specified low-income Medicare beneficiary (SLMB) programs. (Those programs pay some or all of the premiums and cost sharing under Parts A and B of Medicare for beneficiaries with income below 120 percent of the poverty level and limited assets.) In those programs, many beneficiaries who are eligible do not enroll. Specifically, about one-third of eligible beneficiaries are currently estimated to enroll in the QMB program, which covers Medicare’s premiums and all cost-sharing requirements (and thus is projected to have an average value of nearly $3,000 for participants in 2006). The take-up rate for the SLMB program, which covers the Part B premium and thus would be worth about $900 to each enrollee in 2006, is approximately 13 percent.54

CBO also estimated that the share of eligible beneficiaries receiving low-income subsidies would rise gradually after the implementation of the Medicare drug benefit. (Unlike the basic drug benefit, which penalizes individuals for late enrollment, the additional low-income subsidies are available to Part D enrollees at any time and with no penalty.) For 2006, CBO projected that there would be about 8.7 million recipients of the low-income subsidies, or about 60 percent of those eligible. Ultimately, CBO assumed, almost 70 percent of those eligible would receive low-income subsidies under the MMA, which translates into 11.2 million enrollees in 2013. About 75 percent of those eligible for the substantially higher subsidy would ultimately receive it, while about 35 percent of those eligible for the somewhat higher subsidy would receive that benefit. Participation rates for the substantially higher subsidy program would be much greater because they would include all dual eligibles—about 6.4 million individuals in 2006, rising to 7.4 million by 2013. Excluding dual eligibles, about 45 percent of eligible beneficiaries would ultimately enroll in the low-income subsidy program, CBO assumed. Although the average value of the low-income drug subsidy would be somewhat lower than the savings typically available through the QMB program, CBO assumed that participation in the low-income drug subsidy program would be somewhat greater than that for other welfare-related programs because individuals are allowed to enroll at offices of the Social Security Administration—which is easier for enrollees and carries less stigma.

**Costs per Participant.** In estimating the costs of the subsidy payments per participant, CBO started with the average cost-sharing liabilities that those beneficiaries would incur under the standard Medicare benefit. (That calculation as well as the average cost of providing the standard benefit took into account any increase in drug use that would occur for beneficiaries newly receiving the relatively generous coverage provided by the low-income drug subsidies.) Those averages were then adjusted to reflect the assumption that Medicare beneficiaries who chose to enroll would generally have higher average drug costs than beneficiaries who were eligible for those subsidies but chose not to participate—that is, that some adverse selection would occur because those with the highest drug costs would gain the most by enrolling. In part as a result of that adverse selection, the difference between the average cost of providing the two types of benefits outlined above would be relatively small despite the differences in their overall generosity, CBO estimated. For 2006, average payments for cost sharing were estimated to be about $1,400 for beneficiaries in the first group (Subsidy A), rising to about $2,500 in 2013; for the second group (Subsidy B), average payments for cost sharing would climb from roughly $1,300 in 2006 to about $2,300 in 2013. (Under the MMA, drug plans would be reimbursed for those expenses on a cost basis.) Average premium payments made on behalf of enrollees would also be somewhat greater for the first group owing to the substantially higher premium subsidy (with a maximum value of $418 in 2006 and $692 in 2013, according to CBO’s estimates of average premiums).

**Interactions with Medicaid**

Because of the large number of low-income Medicare beneficiaries who are enrolled in or eligible for various benefits through the Medicaid program, the Medicare drug benefit and low-income drug subsidies also have substantial implications for Medicaid spending on behalf of those beneficiaries—including but not limited to drug spending. Those implications, along with an additional provision of the MMA, not only affect federal spending but also have important impacts on states’ Medicaid costs.

54. Those participation rates exclude beneficiaries who are also eligible for full Medicaid benefits. Those beneficiaries receive more benefits and have higher take-up rates than beneficiaries not dually eligible and were assumed to enroll in the low-income drug subsidy program.
Federal Drug Spending Under Medicaid. CBO estimated that under prior law, about 7.5 million Medicare beneficiaries would have had some type of drug coverage through Medicaid in 2006. (That figure is higher than the number of dual eligibles given above because it includes beneficiaries who would have received limited drug coverage through special Medicaid waiver programs.) Because the MMA will replace Medicaid’s coverage for prescription drugs for individuals who enroll in the Medicare drug benefit, it will lead to substantial savings in the Medicaid program. By formula, those savings will be split between the federal government and the states at the regular federal matching rate (57 percent, on average).

CBO estimated that direct federal spending on prescription drugs by Medicaid would decline by $152 billion under the MMA over the 2006-2013 period. As part of its estimate, CBO assumed that states currently providing limited drug coverage to certain Medicare beneficiaries through special Medicaid waiver programs would discontinue those programs and instead provide coverage using state funds only. States will have a strong incentive to do so because spending by state pharmacy programs counts toward the catastrophic threshold in the Medicare drug benefit, whereas Medicaid spending does not (and, indeed, federal matching funds would not be allowed for purposes of supplementing the Part D benefit). CBO’s estimate of federal Medicaid spending under prior law included $18 billion in costs related to those special waiver programs for the 2006-2013 period. As a result of the MMA, CBO assumed that that spending would cease (with the resulting savings included in the $152 billion estimate).

Other Federal Medicaid Costs. The prescription drug benefit and low-income subsidy programs would affect Medicaid spending in several other ways. In particular, CBO estimated that the MMA would cause an increase in Medicaid spending for individuals newly enrolled in the QMB and SLMB programs. Because that additional enrollment would be induced by the drug benefit’s new low-income subsidies, CBO attributed those costs to the MMA’s drug benefit provisions.

By 2013, about 1.3 million beneficiaries enrolled in the low-income drug subsidy program would also become new enrollees in some form of Medicaid coverage, in CBO’s estimation. For all of those beneficiaries, Medicaid would pay their Medicare Part B premium. About half of those beneficiaries would also qualify for and enroll in Medicaid coverage of all cost-sharing obligations under Medicare (through the QMB program). That coverage would generate direct costs for Medicaid of about $900 per enrollee. A small share of the new QMB participants (roughly 100,000 individuals) would also qualify for full Medicaid benefits, at an additional cost of about $900 per person in 2013. CBO assumed that coverage for those new dual eligibles would, on average, be much less costly than coverage for current dual eligibles—particularly for nursing home care, because beneficiaries who could have qualified for Medicaid coverage of their nursing home costs would almost certainly be enrolled in the program already. Of the total costs incurred by Medicaid, about 57 percent would represent federal spending.

Medicaid would incur additional costs to provide prescription drug benefits to its non-Medicare populations, CBO estimated. Such costs would rise slightly over the budget window because the advent of Medicare prescription drug coverage would increase demand for prescription drugs and thus have a price effect, as discussed above. There would also be additional spending for the administrative costs to states’ Medicaid programs for the low-income subsidy program. (Medicaid’s administrative costs are counted as direct spending.) In total, those other effects would cost the federal government $10 billion through 2013, CBO estimated. Combined with the estimate of $152 billion in federal savings on Medicaid drug costs, that $10 billion in costs would yield a net estimate of $142 billion in federal Medicaid savings over that period (see Table 1 on page 2).

Reduction in Federal Medicaid Payments. Under the MMA, the federal government would also recover some of the savings that states would otherwise realize in their Medicaid programs from having dual eligibles covered by the Medicare prescription drug benefit and low-income

55. The costs of providing QMB benefits are somewhat lower than the savings that enrollees see because costs are based on Medicaid’s payment rates, which are often lower than Medicare’s payment rates. CBO also assumed that full coverage of Medicare’s cost-sharing liabilities would lead enrollees to use more Medicare services, increasing Medicare’s costs by about $1,000 for each of those beneficiaries in 2013. In the figures provided here, however, the effects of the interaction between Part D and Medicare spending for benefits under Parts A and B were included in the estimated cost for the MMA’s other provisions rather than in the estimated cost for the drug benefit provisions.
Table 9.
Impact of the Medicare Prescription Drug Benefit on States’ Medicaid Outlays, Fiscal Years 2004 to 2013

(Billions of dollars)

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Spending for Prescription Drugs</td>
<td>0</td>
<td>0</td>
<td>-5.2</td>
<td>-11.2</td>
<td>-12.4</td>
<td>-13.8</td>
<td>-15.3</td>
<td>-16.9</td>
<td>-18.8</td>
<td>-20.9</td>
<td>-28.9</td>
<td>-114.6</td>
</tr>
<tr>
<td>Spending for Newly Enrolled Dual Eligibles, QMBs, and SLMBs</td>
<td>0</td>
<td>0.1</td>
<td>0.2</td>
<td>0.5</td>
<td>0.6</td>
<td>0.7</td>
<td>0.8</td>
<td>0.9</td>
<td>0.9</td>
<td>1.0</td>
<td>1.5</td>
<td>5.8</td>
</tr>
<tr>
<td>Reduction in Federal Medicaid Payments (“Clawback” Mechanism)</td>
<td>0</td>
<td>0</td>
<td>5.7</td>
<td>9.1</td>
<td>10.0</td>
<td>10.8</td>
<td>11.7</td>
<td>12.6</td>
<td>13.7</td>
<td>14.9</td>
<td>24.8</td>
<td>88.5</td>
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<tr>
<td>Administrative Costs and Other Spending</td>
<td>0.1</td>
<td>0.1</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.5</td>
<td>1.1</td>
<td>3.1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.1</td>
<td>0.2</td>
<td>0.9</td>
<td>-1.3</td>
<td>-1.5</td>
<td>-1.9</td>
<td>-2.4</td>
<td>-3.1</td>
<td>-3.7</td>
<td>-4.4</td>
<td>-1.5</td>
<td>-17.2</td>
</tr>
</tbody>
</table>

Source: Congressional Budget Office.

Notes: Estimates do not include the effects of the Medicaid provisions in Title X of the Medicare Modernization Act or the effects of the prescription drug benefit on other state spending.

QMB = qualified Medicare beneficiary; SLMB = specified low-income Medicare beneficiary.

drug subsidies. (That provision in the law is often referred to as the “clawback” mechanism.) Starting in January 2006, each state will make a monthly payment equal to one-twelfth of the product of the following factors:

■ Average per capita spending by Medicaid on prescription drugs for dual eligibles in that state in 2003 (adjusted to the current year using a national average growth rate for drug spending);

■ The state’s Medicaid matching rate;

■ The number of dual eligibles in the state; and

■ A percentage specified by the law that will equal 90 percent in 2006, gradually decline to 75 percent by 2015, and remain constant after that.

Those payments will total $88 billion over the 2006-2013 period, CBO estimated. Under the MMA, the payments will be credited to the new Medicare prescription drug account in the Part B trust fund.

Impact on States’ Medicaid Costs. CBO estimated that, on net, states’ Medicaid programs as a group would save $17 billion through 2013 as a result of the MMA’s drug benefit provisions (see Table 9). Savings for individual states may not be proportional to the overall amount, but CBO did not estimate effects for individual states. States would save $115 billion in prescription drug costs through 2013, an amount that corresponds to the $152 billion in federal savings on Medicaid drug costs discussed above. (That is, total savings to the Medicaid program were projected to be $267 billion, of which the states’ share would be 43 percent, or $115 billion.) Similarly, the spending for new enrollees and administrative costs shown in Table 9 represents states’ shares of payments that generated those $10 billion in federal costs. The figures in Table 9 are for Medicaid outlays only and do not include any estimate of the impact of the drug benefit on other state expenditures. (For example, a portion of the federal subsidies to former employers providing drug coverage to their retirees would go to the states that are a source of retiree drug coverage for Medicare beneficiaries today.)
Other Effects on Direct Spending

Effects on Outlays for Federal Retirees. Some federal retirees would enroll in a Medicare drug plan, CBO estimated, in which case that plan would pay first for their drugs and then their current health plan would supplement that coverage. As a result, a portion of their prescription drug costs would be indirectly shifted to Medicare (that portion is included in the costs of providing the Medicare benefit). CBO’s estimate reflected that impact, as well as small effects on other federal programs that pay for prescription drugs, and showed the Medicare law’s drug benefit provisions as reducing mandatory federal spending by about $3 billion through 2013. However, the MMA also provided $1.5 billion in mandatory spending for the federal administrative costs of implementing the drug benefit in 2004 and 2005, so the net impact on other direct spending would be a reduction of $1.5 billion over 10 years. CBO did not estimate whether federal retirees would generate payments under the employer subsidy system because even if they did, those payments would be considered intragovernmental transfers and would not count as outlays.

Other Effects on Medicare Outlays. Adding a prescription drug benefit to Medicare could also have ripple effects on the rest of the program, but little conclusive evidence exists as to the expected direction or magnitude of those effects. For some seniors, greater access to outpatient prescription drugs would improve their health, reducing their use of hospitals and other services that Medicare now covers under Parts A and B. For other seniors, however, use of health care would increase. For example, using a greater number of drugs raises the probability of adverse events—such as harmful drug interactions or side effects—that could lead to new or longer visits to hospitals, emergency rooms, and other health care providers. While such adverse reactions would probably be impossible to prevent altogether, Medicare spending could increase even without them as beneficiaries used more ancillary services (such as additional lab tests) in conjunction with their drug treatment regimens. As discussed above, however, the MMA’s net impact on drug use is likely to be modest; in part, that is because many beneficiaries already have some form of coverage for their drug costs, and in part because beneficiaries with no drug coverage nonetheless fill a substantial number of prescriptions. Overall, CBO assumed that costs for other Medicare services would not change significantly because of the drug benefit.\footnote{For a more detailed discussion of the potential effects of drug coverage on the use of other health services, see Congressional Budget Office, Issues in Designing a Prescription Drug Benefit for Medicare, pp. 31-34 and 49-52.}

Another aspect of Medicare that could be affected by the availability of a drug benefit is the rate of participation in integrated private health plans—which could in turn have an important impact on spending under Part C for Medicare’s other benefits. Those pressures would go in conflicting directions, however. On the one hand, the managed care plans that take part in Medicare have historically attracted beneficiaries by offering benefits beyond the basic Medicare package—the most desirable of which has been prescription drug coverage. Once drug coverage became available to beneficiaries in the traditional fee-for-service Medicare program, such plans might lose one of their principal competitive advantages. That effect would be muted, though, to the extent that the Medicare beneficiaries remaining in private health plans today did so for reasons other than drug coverage. Also, the scope of that drug coverage has declined substantially in recent years.\footnote{See Lori Achman and Marsha Gold, Trends in Medicare+Choice Benefits and Premiums, 1999-2002 (report prepared by Mathematica Policy Research for the Commonwealth Fund, November 2002).} Instead, those enrollees might be attracted by the coverage of Medicare’s cost sharing that private health plans typically provide or by other, extra benefits they offer (which would largely continue).

On the other hand, integrated private plans that offered drug coverage would now be paid for the value of that coverage, rather than having to finance it from what they save in providing (relative to the statutory payment rate) Medicare’s other benefits. Private health plans would thus be able to use a portion of those savings to give beneficiaries partial rebates on their Part B or Part D premiums or to provide additional benefits. By offering a more integrated delivery system, such private plans might also be able to provide a slightly less restrictive benefit for the same cost as that offered by a stand-alone prescription drug plan (they could have fewer limits on the drugs included in their formulary, for instance) so as to attract enrollees. On balance, then, CBO assumed that adding a drug benefit under the MMA would neither increase nor decrease enrollment in Medicare’s private health plans.
Uncertainty and Conclusions
It is always difficult to predict the outcome when a complex and substantially new program is created, particularly in the case of an entitlement program with a large number of potential enrollees. Actual program costs for the Medicare drug benefit could differ from CBO’s projections, for several reasons.

- Current drug spending by the Medicare population and its future rate of increase could be higher or lower than CBO estimated;

- The take-up rate among eligible beneficiaries for the basic drug benefit could be higher or lower than CBO projected (with the impact on costs depending significantly on whether those who declined coverage were representative of the Medicare population);

- Risk-bearing private drug plans could have more difficulty forming than CBO assumed, or, alternatively, they could succeed in limiting drug costs to a greater extent;

- The rate at which employers dropped retiree drug coverage could differ from CBO’s projections;

- Beneficiaries’ enrollment in the low-income subsidy program or the costs of those subsidies per enrollee could exceed or fall short of CBO’s estimates;

- The impact on federal Medicaid spending (relative to the amounts that would have been spent without the MMA) could be larger or smaller than CBO anticipated; and

- CMS, in promulgating regulations to implement the program, could interpret the law in ways that differ from the assumptions used by CBO in estimating its costs.

As a result of such differences, the actual number of participants and the average cost per participant could vary—in either direction—from CBO’s projections.\(^5\) Until such information becomes available, the cost estimate presented here represents the agency’s best judgment about the net budgetary impact of the Medicare drug benefit that was established by the MMA.

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\(^5\) For a discussion and explanation of the main differences between CBO’s cost estimate for the MMA and the estimate developed by CMS, see the statement of Douglas Holtz-Eakin, March 24, 2004.
The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) established a system of “risk corridors” for prescription drug plans and Medicare Advantage drug plans. That system would limit to some extent the profits or losses those plans would incur if their costs of providing the basic Medicare drug benefit turned out to be lower or higher than they had estimated in their bid submission. The system would work in the following way. At the end of the calendar year, the Department of Health and Human Services (HHS) would compare each plan’s expected and actual benefit costs (excluding federal reinsurance payments and administrative costs). Drug plans incurring benefit costs that exceeded their expected levels by a sufficient degree would then be partially compensated by additional federal payments, whereas drug plans with benefit costs that fell far enough below their expectations would generally have to reimburse Medicare at the same rate. (Because plans’ expected costs would determine the total amount they were paid up front, the risk corridor system also would help keep payments in line with actual costs while giving plans a residual incentive to control those costs.)

The thresholds for triggering risk corridor payments and the share of the difference between actual and expected costs that those payments covered would vary under the statute.

- For 2006 and 2007, drug plans would bear all gains and losses that fell within 2.5 percent of their expected costs. If costs differed from expectations by more than 2.5 percent but less than 5 percent, the risk corridor payment would cover 75 percent of the amount in that range. If actual and expected costs differed by more than 5 percent, the risk corridor payment would cover 75 percent of the amount between 2.5 percent and 5 percent, and 80 percent of the amount in excess of 5 percent. In addition, if a sufficient number of plans serving a substantial majority of enrollees received risk corridor payments for the year, then the MMA would increase the share of costs covered in the initial range from 75 percent to 90 percent for that year.

- For the 2008-2011 period, plans would face more risk as the risk corridor thresholds doubled—from 2.5 percent to 5 percent and from 5 percent to 10 percent, respectively—and the share of costs covered by the risk corridor payment in the initial range dropped from 75 percent to 50 percent (with no provision for a higher rate if most plans missed their targets). Above the second threshold (that is, for deviations exceeding 10 percent), the payment rate would remain at 80 percent.

- After 2011, HHS could increase the first threshold above 5 percent and the second threshold above 10 percent.

The corridors would be structured symmetrically. Thus, a plan whose costs exceeded the expected level by 10 percent would receive a risk corridor payment from Medicare, but that plan would have to pay the same amount to the government if its costs fell below expectations by 10 percent.

How the Risk Corridor System Would Work: An Illustrative Example
The effects of the MMA’s risk corridor system can be illustrated using three hypothetical drug plans in 2006 with the same expected benefit costs but differing actual benefit costs in 2006 (see Table A-1). To keep the example relatively simple, costs and payments are expressed as per-enrollee averages, and the reinsurance payments are assumed to cover exactly one-third of total benefit costs in all three plans (both in expectation and in actuality). In the example, the costs for covered benefits in Plan 1 fall below the expected level by $75 per enrollee. By assump-
A DETAILED DESCRIPTION OF CBO’S COST ESTIMATE FOR THE MEDICARE PRESCRIPTION DRUG BENEFIT

Table A-1.
Example of How the Drug Benefit’s Risk Corridors Would Operate in 2006
(Average amount in dollars per enrollee per year)

<table>
<thead>
<tr>
<th></th>
<th>Plan 1</th>
<th>Plan 2</th>
<th>Plan 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected Benefit Costs</td>
<td>1,500</td>
<td>1,500</td>
<td>1,500</td>
</tr>
<tr>
<td>Expected Federal Reinsurance Payments</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Net Expected Benefit Costs</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Actual Benefit Costs</td>
<td>1,425</td>
<td>1,485</td>
<td>1,650</td>
</tr>
<tr>
<td>Actual Federal Reinsurance Payments</td>
<td>475</td>
<td>495</td>
<td>550</td>
</tr>
<tr>
<td>Net Actual Benefit Costs</td>
<td>950</td>
<td>990</td>
<td>1,100</td>
</tr>
<tr>
<td>Initial Gain (+) or Loss (-)</td>
<td>50</td>
<td>10</td>
<td>-100</td>
</tr>
</tbody>
</table>

Risk Corridor Payment to Plan (+) or from Plan (-)

- For costs between 2.5 percent and 5 percent
  - Plan 1: -18.75
  - Plan 2: 0
  - Plan 3: 18.75

- For costs above 5 percent
  - Plan 1: 0
  - Plan 2: 0
  - Plan 3: 40.00

Total

- Plan 1: -18.75
- Plan 2: 0
- Plan 3: 58.75

Final Gain or Loss

- Plan 1: 31.25
- Plan 2: 10.00
- Plan 3: -41.25

Memorandum:

Percentage Difference Between Expected Benefit Costs and Actual Benefit Costs

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>1</th>
<th>-10</th>
</tr>
</thead>
</table>

Source: Congressional Budget Office.

Note: The examples used here assume that the test for triggering a higher payment rate in the initial range (between 2.5 percent and 5 percent) is not met. They also ignore any effects of risk adjustment.

...tion, one-third of that difference is effectively recouped via a lower-than-anticipated reinsurance payment from the government. In the absence of any risk corridor provisions, Plan 1 would have seen a gain of $50 per enrollee (beyond any normal profits it had built into its bid submission). But because that gain constitutes more than 2.5 percent of its expected benefit costs (net of individual reinsurance), it must make a risk corridor payment to Medicare of $18.75 per enrollee (75 percent of the amount by which its gain exceeds $25). Its final gain is thus reduced to $31.25 per person.

Plan 2 also experiences a small gain in this example, but because that gain represents only 1 percent of its expected net costs, it does not have to make a risk corridor payment. By contrast, Plan 3 incurs total benefit costs of $150 per enrollee more than it had anticipated; although a portion of that excess is covered by greater-than-expected federal reinsurance payments, that plan would (but for the risk corridors) face a loss of $100 per person. The risk corridor payment from Medicare covers nearly 60 percent of Plan 3’s remaining losses, though, reducing its actual net loss to $41.25 per enrollee.

Risk Corridors and the MMA’s Other Risk-Mitigation Measures

The MMA incorporates three methods of risk mitigation: risk corridor payments, federal reinsurance payments, and a risk adjustment. Although they have some similarities, each method would address somewhat different risks in somewhat different ways.

Risk adjustment would account for differences in beneficiaries’ expected drug spending based on their health status or other individual factors. HHS would thus pay more to plans with sicker enrollees (who would be expected to incur higher drug costs) and less to plans with healthier enrollees. Those payment adjustments would be made prospectively. If designed well, the risk-adjustment
system would vary payments to take into account factors that predictably affected an individual’s future drug use but that were beyond the control of a drug plan. Therefore, it would be targeted primarily at plans’ risk of experiencing adverse selection and would not address other sources of financial risk. For example, if drug costs generally turned out to be higher in a given year than had been expected, risk adjustment of Medicare’s payments would not offset the resulting higher costs. By the same token, if a risk-adjustment system was truly prospective over time—and the adjustment made for an individual did not depend on steps taken by his or her plan, such as the number or type of prescriptions that the plan had approved—it could keep payments in line with costs without distorting plans’ incentives to control those costs. (By adjusting federal subsidies, it would also help keep beneficiaries from paying higher premiums simply because they joined a plan with sicker enrollees.) Even so, trade-offs could arise between assuring payment accuracy in the short run and encouraging cost control in the longer term.

Federal reinsurance payments would be made retrospectively on the basis of actual drug spending for individuals who reached the drug benefit’s catastrophic threshold. Those payments would limit the risk that plans faced in attracting the highest-cost enrollees but would not address the financial risks involved in providing the front-end portion of the benefit. Reinsurance payments would also provide some protection against general uncertainty about future drug costs—because if average drug prices or utilization was higher or lower than expected, the costs of providing benefits above the catastrophic threshold would probably vary in a corresponding manner. If overall drug costs proved to be lower than projected, the reinsurance payment system would also allow the government to share in the savings.

Risk corridor payments would also be made retrospectively (and would be applied after risk adjustment and federal reinsurance payments), but they would limit more directly the overall level of profits or losses that a drug plan experienced. As structured in the MMA, the risk corridors would provide plans with strong incentives to control costs below the first risk corridor threshold but then generally would share more risk the greater the deviation between actual and expected costs—perhaps reflecting the assumption that deviations of such magnitude would have to result from forces beyond the plan’s control. Thus, the risk corridors would primarily protect against large shocks in drug spending growth rates and against misestimates of average drug costs per enrollee (particularly in the initial years of the benefit, when uncertainty about that average would be greatest and when the risk corridors were narrower). Risk corridor payments would address the risks of favorable or adverse selection only in the event that risk adjustment of payments did not account well for the variation in plans’ costs for providing the front-end portion of the benefit—and even then the residual deviation between actual and expected costs would have to be rather large before risk corridor payments kicked in.

The Impact of Risk Corridors on Program Costs
In principle, the expected value of risk corridor payments would be zero. As discussed in the body of this report, drug plans would have strong incentives to submit accurate bids (in part because they would be reviewed by HHS). On average, cost overruns by some plans or in some years would thus offset lower-than-expected costs by other plans or in other years. In practice, however, the Congressional Budget Office (CBO) assumed that plans would be slightly more likely to reveal losses than gains under the risk corridor system and that HHS would not be able to audit costs perfectly (given the potential for reasonable differences in interpretation about which benefit costs were allowable and which were administrative).1

The risk corridor system mainly affected CBO’s estimate of program costs through its impact on plans’ incentives to control costs. Precisely because plans would be partially insulated from any resulting losses and would reap only a portion of any resulting gains, CBO assumed that they would be somewhat less aggressive in managing drug costs. To quantify that effect, CBO modeled the impact of the risk corridor system on the variability of plans’ net costs. Among other factors, that modeling took into account the number of regions that might be established for drug plans to serve, because variability in costs is a function of plan size and average plan size depends in turn on the number of regions. Overall, CBO concluded that the risk corridor provisions specified in the MMA would yield a modest increase in the costs of providing the Medicare drug benefit (but primarily in the initial years of the benefit, when the corridors were relatively narrow).

1. CBO also assumed that drug plans bearing less risk would have lower administrative costs, so the MMA’s risk corridor system somewhat reduced the agency’s estimate of those costs.