

This executive summary provides an overview of work that is described in more detail in *The Costs of a Medicare Prescription Drug Benefit: A Comparison of Alternatives*, RAND MR-1529.0-NIA, by Dana P. Goldman, Geoffrey F. Joyce, and Jesse D. Malkin (available in [HTML](#) or [PDF](#)).

The Costs of a Medicare Prescription Drug Benefit: A Comparison of Alternatives

Executive Summary

Introduction

Medicare is the only large health insurance carrier that does not include an outpatient prescription drug benefit. This exclusion is particularly important because the elderly are among the biggest consumers of pharmaceuticals. Medicare beneficiaries comprise 13 percent of the U.S. population, yet account for over 36 percent of total outpatient drug expenditures. Private arrangements often fill this gap, and about 65 percent of Medicare beneficiaries have some type of prescription drug insurance. The principal source of that coverage is employer-sponsored insurance, but additional coverage comes from Medicaid, individually purchased private plans like Medigap, and health maintenance organizations (HMOs).¹ In addition, many states currently offer some type of prescription drug benefit to the elderly and disabled.

Numerous plans have been proposed to add such a benefit to Medicare, although none has been implemented to date. The principal concern is the cost of providing access to expensive medications for a rapidly growing elderly population. Average drug

¹ Poisal JA, Murray LA, Chulis GS, Cooper BS. Prescription drug coverage and spending for Medicare beneficiaries. *Health Care Financing Rev* 1999;20(3):15-27.

expenditures among Medicare enrollees are estimated to exceed \$1,450 in 2001, with out-of-pocket expenditures of almost \$650 per beneficiary. Further, the distribution of expenditures is highly skewed. More than 13 percent of Medicare enrollees have no prescription drug expenses in a year, while nearly 24 percent spend \$2,000 or more annually.

To provide information that could inform policy decisions, RAND Health staff constructed a microsimulation model to predict drug expenditures in 2001 for a representative cohort of Medicare beneficiaries under the status quo and three different plans:

1. A catastrophic plan modeled on the Medicare Catastrophic Coverage Act (PL 100-360), which was passed in 1988 but repealed one year later after higher-income Medicare beneficiaries protested new premiums.
2. A zero-deductible plan that caps out-of-pocket expenses at \$4,000 per year.
3. A zero-deductible plan that does not cap out-of-pocket expenses.

Approach

Defining Features of the Plans

Table 1 summarizes the features of the plans we compared.

Table 1. Comparison of Features of the Plans

	Zero-deductible with no cap on out-of-pocket expenses	Zero-deductible with \$4,000 cap on out-of-pocket expenses	Catastrophic
Premiums	\$25/month	\$25/month	\$10/month
Benefits			
Deductible	\$0	\$0	\$1,000 to \$3,000 ^a
Coinsurance rate^b	50%	50%	0%
Maximum annual benefit	\$1,000	No maximum	No maximum
Subsidies			
Medicaid-eligible	Premiums and copayments paid by Medicaid ^c	Premiums and copayments paid by Medicaid ^c	Status quo
Non-Medicaid eligible with income:			
Below 135% of FPL	Medicare pays Part D premium and copayments	Medicare pays Part D premium and copayments	Medicare pays Part D premium
Between 135% and 150% of FPL	Medicare pays part of Part D premium ^d	Medicare pays part of Part D premium ^d	Medicare pays Part D premium
Above 150% of FPL	No subsidies	No subsidies	No subsidies

Note: FPL = Federal poverty level.

^aDeductible is \$1,000 for those with incomes less than 150% of FPL; otherwise it is 10% of income up to a maximum of \$3,000.

^bPercentage paid by beneficiary after deductible has been met.

^cMedicaid shares part of these costs based on federal/state matching rates.

^dMedicare pays 100% of the premium at 135% of the FPL, phasing out to zero at 150% FPL.

The two zero-deductible plans pay half the cost of prescription drugs up to \$2,000. One of the plans adds additional catastrophic protection by capping out-of-pocket expenses at \$4,000. Both zero-deductible plans have a monthly premium of \$25.

Under the catastrophic plan, Medicare beneficiaries pay 100 percent of the cost of drugs up to a deductible that depends on the beneficiary's income, and beneficiaries are

fully covered for drug expenditures above the deductible. The deductible is \$1,000 for those with incomes less than 150 percent of the federal poverty level (FPL); otherwise it is 10 percent of income up to a maximum of \$3,000. The plan has no premium for beneficiaries with household income up to 150 percent of the FPL; all other beneficiaries pay a \$10 monthly premium reflecting 25 percent of the plan's actuarial value, similar to premiums charged for Part B of Medicare.

All three plans would be included as a voluntary outpatient prescription drug benefit under Medicare, denoted as Medicare Part D.

We make several other assumptions about the three drug plans.

- The plans are administered by a pharmaceutical benefits management program to reduce expenditures.
- The plans offer subsidies to low-income beneficiaries according to the schedule shown in Table 1.
- The plans provide subsidies to employers to encourage them to retain employer-sponsored drug coverage for working or retired beneficiaries (henceforth "retirees").
- To reduce adverse selection, all three plans would require one-time enrollment at age 65 to prevent people from enrolling after they get sick.

Estimating Costs of Prescription Drug Coverage and Coinsurance

Our estimates of the cost of prescription drug coverage come from the 1995 Medicare Current Beneficiary Survey (MCBS), a rotating panel survey of about 12,000 aged and disabled beneficiaries. The MCBS data contain expenditures for prescription drugs in 1995. We have inflated these expenditures to 2001 based on National Health Expenditure projections from the Centers for Medicare and Medicaid Services (CMS) Office of the Actuary. Based on other studies, we believe that total drug expenses are underreported by 15 percent, and we have adjusted for that assumption in all our analyses.

To compute the average coinsurance rate under a Medicare prescription drug benefit, we estimate drug expenditures, Medicare payments, and out-of-pocket spending given the benefit structure of each plan and status quo levels of spending. We then use these estimates to compute the average coinsurance rate by type of supplemental coverage. As shown in Table 2, the average coinsurance rate ranges from 0.17 for

beneficiaries enrolled in Medicaid to 0.79 for enrollees who have Medigap insurance without drug coverage. Not surprisingly, average coinsurance rates exhibit a strong inverse relationship with prescription drug coverage. Medicaid enrollees and beneficiaries with employer-provided insurance covering prescription drugs have higher drug expenditures but lower out-of-pocket costs than those with little or no drug coverage.

Table 2. Type of Insurance Coverage and Drug Expenditures for Medicare Part B Enrollees

Type of Insurance	Percent with No Annual Drug Expenses	Mean Expenses, Prescription Drugs (2001\$)	Mean Out-of-Pocket Expenses, Prescription Drugs (2001\$)	Average Coinsurance Rate
Without R _x coverage				
Parts A & B only ^a	19	1,187	\$750	0.67
Medigap	13	1,229	974	0.79
Employer-sponsored	9	1,126	736	0.65
With R _x coverage				
Medicaid	11	1,851	312	0.17
Medigap	14	1,430	761	0.53
Employer-sponsored	11	1,756	499	0.28
Medicare HMO	13	1,070	397	0.38
All types	13	1,459	646	0.44

^aIncludes approximately 368,000 Medicare HMO recipients without prescription drug coverage.

Results

Table 3 summarizes overall costs, cost per beneficiary and catastrophic coverage—defined as out-of-pocket expenses above \$2,000—for each of the three plans.

Table 3. Costs and Benefits Under Alternative Medicare Prescription Drug Plans

	Status Quo	Zero-deductible with no cap on out-of-pocket expenses	Zero- deductible with \$4,000 cap on out-of-pocket expenses	Catastrophic
R_x Coverage Among Part B recipients				
% with private	45.2	21.5	19.2	25.5
% with public	<u>15.3</u>	<u>79.5</u>	<u>80.8</u>	<u>74.5</u>
% with any	60.5	100.0	100.0	100.0
Total Plan Costs (in millions; 2001 \$)				
Medicare payments	n/a	13,542	15,333	6,084
Employer premium subsidies	n/a	891	1,163	956
Medicaid adjustment ^a	n/a	<u>2,791</u>	<u>2,908</u>	<u>0</u>
Total federal outlays		17,224	19,404	7,040
Less: premium revenues	n/a	<u>-5,638</u>	<u>-5,772</u>	<u>-2,003</u>
Net federal cost		11,586	13,633	5,037
Per Beneficiary Costs (2001 \$)				
Total R _x expenses	\$1,459	\$1,395	\$1,414	\$1,344
Out-of-pocket R _x expenses	646	459	442	645
Out-of-pocket premiums	n/a	164	168	56
Distribution of Out-of-Pocket Drug Expenses				
% greater than \$1,000	20.6	11.8	12.1	21.7
% greater than \$2,000 ^b	8.2	5.3	5.5	6.8
% greater than \$3,000 ^b	3.6	2.5	2.7	0.6
% greater than \$5,000 ^b	0.8	0.7	0.0	0.2

^aIncrease in the Federal costs for providing Medicaid R_x coverage for existing Medicaid beneficiaries.

^bIncludes expenses incurred by beneficiaries with supplemental drug coverage from employers rather than the catastrophic plan. More beneficiaries have catastrophic expenses between \$1,000 and \$5,000 under the zero-deductible plan with a cap on out-of-pocket expenses because of a slightly larger overall demand response.

The two zero-deductible Medicare drug plans considered in our microsimulation model would cost between \$11.6 billion and \$13.6 billion in 2001. Under the zero-deductible plan with no cap on out-of-pocket expenses, some beneficiaries would still face potentially catastrophic costs. This is because payments by the plan are limited to \$1,000. Increasing this limit to \$2,500 as proposed in later years would increase

protection against catastrophic costs, but would increase the cost of the plan to \$15.4 billion in 2001.²

The zero-deductible plan that limits out-of-pocket expenses to \$4,000 has the lowest per-beneficiary out-of-pocket costs, and provides substantial insurance against expenses above \$5,000. However, this plan has the undesirable feature that the burden on beneficiaries increases between \$2,000 and \$5,000 in expenses. Eliminating this additional burden by allowing 50 percent coinsurance up to \$5,000 would raise the cost of this plan to \$16.9 billion in 2001.

The catastrophic drug plan would cost approximately \$5.0 billion in 2001. Removing the \$10 monthly premium from the catastrophic plan—making it free to everyone—would raise the cost to \$7.0 billion. The catastrophic plan would provide substantial protection against very high expenditures, but a substantial fraction of the population would face significant expenses up to \$3,000. Low-income beneficiaries are protected under all three plans (they would pay a maximum of \$1,000 in out-of-pocket expenditures).

Our findings are based on a static analysis of pharmaceutical prices. If pharmaceutical companies respond to enactment of a Part D plan by increasing the prices of their products, the cost of the Part D plan would exceed the estimates presented here. We also assume that all HMOs would drop their prescription drug coverage in response to Part D. As a consequence, some HMO enrollees might be faced with higher out-of-pocket expenses. A better strategy might be to require HMOs to offer coverage at least as generous as Part D, and then offer them premium subsidies as proposed for employers. More generally, the addition of a Part D benefit will crowd out some private plans, resulting in less comprehensive coverage for some beneficiaries.

² Our cost estimates for the zero-deductible plan with no cap on out-of-pocket expenses are slightly lower than those produced by CBO. Most of this difference can be explained by our lower estimate of premium revenue. Using the higher estimates of premium revenue that others have used would lower the total cost of both zero-deductible plans by \$2 billion. Simulated expenses for the catastrophic plan assume that beneficiaries with employer-sponsored coverage do not change their coverage. However, enactment of a catastrophic plan could prompt employers to offer wrap-around coverage. If so, many individuals with employer coverage would enroll in the catastrophic plan, raising its cost.

Conclusion

A Medicare prescription drug plan with no deductible would cost \$11–\$14 billion per year. However, if the plan does not cap beneficiaries' out-of-pocket expenses, beneficiaries would receive little protection against catastrophic drug expenditures. A catastrophic plan would be relatively inexpensive and could provide this protection.

The estimates presented here are for 2001. What is uncertain is how these cost estimates will change over time. Prescription drug expenses have been growing rapidly; the size of the Medicare population is increasing; and enactment of a prescription drug benefit could cause prices to rise. Thus, any prescription drug benefit could become quite costly. A catastrophic plan would be valuable to Medicare beneficiaries who do not now have prescription drug coverage and would be less costly than a zero-deductible plan. From a policy perspective, implementing a catastrophic prescription drug benefit would also allow policymakers to gauge future program costs before committing to more comprehensive coverage.