CRS Report for Congress

Received through the CRS Web

Medicare Prescription Drug Plans: Comparison of Actuarial Values

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Summary

On December 8, 2003, the "Medicare Prescription Drug and Modernization Act of 2003" was signed into law (H.R. 1, P.L. 108-173). The law adds Part D to Medicare, which establishes a new prescription drug benefit that begins in 2006. This report compares the actuarial values of the prescription drug benefit under the law's standard coverage and the coverage available to certain low-income beneficiaries. The actuarial values of private drug coverage presently available to seniors were also estimated. The actuarial values of the Part D coverage for low-income beneficiaries were greater than all of the private plans that were modeled. The actuarial value of the prescription drug benefit in the Part D standard coverage was greater than the prescription drug benefit in the individually purchased Medigap supplemental plans but was less than the typical prescription drug benefit in employment-based coverage and in the plan with the greatest enrollment among federal employees, retirees and dependents.

Generally, the "actuarial value" of a health insurance plan refers to the average amount that the plan would pay in benefits per person in one year for a particular population. Since the actuarial value reflects only what is paid out in benefits, it does not take into account any premiums paid. When comparing different plans, the actuarial value assesses the relative generosity of the benefits, holding constant other factors that may affect the amount actually paid in benefits. For example, a health insurance plan may happen to have enrollees who are sicker on average than those in another plan. The actuarial values should not make the first plan appear to be more generous because it has paid more in benefits simply because its enrollees are sicker and therefore more costly on average. Thus, plans' actuarial values are derived by modeling each plan's benefits and cost-sharing in a standardized population, using a standardized set of utilization and price factors, and without taking into account differences in coverage resulting from utilization or cost controls.

Model Description and Assumptions. The computer model used to produce the actuarial values in this report was created for the Congressional Research Service (CRS) by the Hay Group, an employee benefit and actuarial firm. The model is based on

the health care utilization and expenditure data from the 1998 Medicare Current Beneficiary Survey (MCBS), which is a nationally representative survey of beneficiaries in fee-for-service (FFS) Medicare.[1] For this report, expenditures on prescription drugs and all other health care services were each updated to 2006 levels of spending, accounting for changes in price and utilization.[2]

To compare the actuarial values of Medicare prescription drug plans, the standardized population used in the model is the FFS Medicare population. Thus, the actuarial values reflect only the benefits and population in FFS Medicare and not those in Medicare managed care plans. The values are estimates of what Medicare would pay per person in a year assuming 100% enrollment by the Medicare FFS population in the plans being valued. For comparative purposes, other factors that may affect the actual amount paid by a plan in benefits (e.g., use of pharmacy benefit managers (PBMs), which some plans in this report may use) are disregarded or held constant. Although expected enrollment, use of PBMs, the health status of enrollees, and other factors are used in calculating total expected costs — in cost estimates, for example — they are not factors in comparing the generosity of benefits using actuarial values.[3] With access to a prescription drug benefit, a beneficiary may also, for example, treat a condition with a long-term maintenance drug therapy. The model does not take account of changes in costs associated with such benefit substitution.

The actuarial values do not include out-of-pocket beneficiary cost-sharing (for example, deductibles and copayments), although the model does adjust for the impact of such cost-sharing on utilization. For example, one plan may pay for half of enrollees' prescription drug costs while another plan pays for 90% of those costs. If the coinsurance is the only difference in the plans, one would expect enrollees in the 90% plan to use more prescription drugs because the price they pay out of their own pocket is lower than for those in the 50% plan. In order to estimate how much more utilization of prescription drugs enrollees in the 90% plan would have compared to those in the 50% plan, assumptions must be made about the impact cost-sharing has on utilization in general. The standardized factors in the model that adjust health care utilization for changes in cost-sharing were developed by the Centers for Medicare and Medicaid Services (CMS) based on the RAND Health Insurance Experiment that took place in the 1970s and early 1980s. The RAND findings are still the best available data for evaluating how different levels of cost-sharing influence health care utilization.

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[1] According to the 2003 Medicare trustees' report, approximately 84% of Medicare beneficiaries were in the fee-for-service program in 1998; the rest were enrolled in private managed care plans.

[2] The data were trended based on projections in the 2003 Medicare trustees' report and the March 2003 baseline projections of the Congressional Budget Office (CBO). It must be noted that the trend used for "other health care services" is a single number applied to all the categories of non-prescription drug spending, which may not be reflective of increases in some categories of non-prescription drug spending.

[3] Although the actuarial values do not reflect expected enrollment, they are influenced by the standardized population chosen for the analysis. If it were possible, for example, to include beneficiaries in Medicare managed care plans, the results could differ, to the extent that the managed care population differs from the FFS population.

Proposed Medicare Prescription Drug Benefits and Estimated Actuarial Values

The model calculates the actuarial value of the current Medicare fee-for-service program as approximately $7,750 in 2006. This valuation includes all current Part A and Part B covered benefits and excludes most outpatient prescription drugs. As previously mentioned, this amount excludes beneficiary cost-sharing and any impact from premiums.

Standard coverage. Under P.L. 108-173, the Part D prescription drug benefit will be offered by private entities, either prescription drug plan sponsors or Medicare Advantage plans. The prescription drug benefit as modeled for the Medicare Part D standard coverage in 2006 is summarized in **Table 1**. For purposes of this report, Part D standard coverage was added to the current Medicare FFS program. This increases the actuarial value in 2006 by approximately $1,920. This value does not include beneficiary cost-sharing; thus, total spending on prescription drugs (that is, combined plan and beneficiary) would be higher.

Prescription drug cost-sharing covered by private health insurance does not count toward the Part D out-of-pocket maximum. The actuarial values presented in this report assume that all cost-sharing counts toward the out-of-pocket maximum.

Coverage for low-income individuals. The cost-sharing for prescription drugs is reduced for beneficiaries with low income and low resources, or assets. **Table 1** summarizes the provisions of the coverage for the beneficiaries who qualify based solely on their income and assets. "Dual eligibles," Medicare beneficiaries enrolled in their state's full Medicaid benefits, may qualify for cost-sharing reduced further than the levels shown in **Table 1**.[4] Provisions exclusively for dual eligibles were not modeled. Greater specificity on the eligibility criteria and cost-sharing provisions under Part D is provided in other CRS reports.[5]

The actuarial value in 2006 of Part D prescription drug coverage for beneficiaries with countable income below 135% of poverty and with countable assets below $6,000 for an individual and $9,000 for a married couple was estimated at $3,520.[6] This is

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[4] Dual eligibles who are institutionalized would pay no premium and have no cost-sharing whatsoever. Noninstitutionalized dual eligibles with countable income below 100% of poverty would pay no premium or deductible but would face a $1 copayment for each generic and preferred multiple-source drug, and a $3 copayment for all other covered drugs until reaching the $3,600 out-of-pocket protection threshold (which for this group includes payments made under the low-income subsidy provisions).

[5] See CRS Report RL31966, *Overview of the Medicare Prescription Drug and Reform Conference Agreement, H.R. 1*, by Jennifer O'Sullivan et al. An analysis of the cost-sharing in the law's low-income provisions is presented in CRS Report RL31525, *Beneficiary Cost-Sharing Under the Medicare Prescription Drug Benefit*, by Chris L. Peterson and Jim S. Hahn.

[6] "Countable income" and "countable assets" refer to the respective amounts counted for determining eligibility for Supplemental Security Income (SSI). "Poverty" refers to the federal poverty guidelines published by the Department of Health and Human Services. For additional

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approximately 83% greater than the actuarial value of the Part D standard coverage. The actuarial value of Part D prescription drug coverage for those who do not qualify in any other low-income category but have countable income below 150% of poverty and countable assets of no more than $10,000 for an individual or $20,000 for a married couple in 2006 was estimated at $3,090.[7] This is 12% less than the actuarial value of the coverage available to those who qualify in the under-135%-of-poverty category, but is 61% greater than the actuarial value of the Part D standard coverage.

Under the law's low-income provisions, individuals with certain levels of drug expenditures would pay a copayment rather than the typical coinsurance percentage. Because the MCBS does not contain enough information to model copayment prescription drug plans, the copayments for 2006 of $2 per generic drug and $5 per brand drug were converted to effective coinsurance percentages, based on information provided by the PBM Express Scripts on prescription drug utilization and spending by its members who are age 65 and older. A 6% average coinsurance was determined to best represent the 2006 copayments and was used in the model to estimate the actuarial value for the coverage for low-income Medicare beneficiaries.[8]

Selected private prescription drug benefits. Actuarial values were also estimated for prescription drug benefits available in private plans — specifically, the three Medigap plans that cover prescription drugs, the typical prescription drug benefit in employment-based coverage, and the prescription drug benefit in the standard option of the Blue Cross/Blue Shield plan available to federal employees through the Federal Employees Health Benefits program (FEHB).

In general, there are 10 standardized Medigap plans, which are private insurance plans that individual beneficiaries may purchase to cover costs not covered by Medicare. Of those 10 plans, only 3 cover prescription drugs. Between 2% and 3% of Medicare beneficiaries are enrolled in these three plans, known as H, I and J.[9] Plans H and I have an identical benefit for prescription drugs: $250 annual deductible with 50% coinsurance until the plan's annual maximum benefit for prescription drugs is reached, which is $1,250. The prescription drug benefit in Plan J is the same as Plans H and I except that the annual maximum benefit for Plan J is $3,000. The actuarial value of the prescription drug benefit in Plans H and I was estimated to be $780 in 2006; for Plan J, the actuarial value was estimated at $1,260.

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[6] (...continued)
information, see CRS Report RS21675, *Medicare Prescription Drug Proposals: Estimates of Beneficiaries Who Fall Below Income Thresholds, by State*, by Chris L. Peterson.

[7] Plans may use a lower asset threshold for determining eligibility in this category.

[8] The law calls for a $2 copayment for plans' multiple-source preferred drugs. However, the data from Express Scripts could not provide any separate information on these prescription drugs. If this could be accounted for, the actuarial value of the low-income coverage could be higher.

[9] Calculated by CRS from information in the March 2003 report to Congress of the Medicare Payment Advisory Commission (MedPAC), http://www.medpac.gov/publications /congressional_reports/Mar03_Ch5.pdf. These prescription drug plans will not be available to new Medicare beneficiaries after December 31, 2005.

More than half of workers covered by their employer's health plan have three-tier prescription drug coverage. Three-tier coverage is where there are separate copayment amounts for generic drugs, the plan's preferred brand-name drugs, and non-preferred brand-name drugs. In 2002, the average copayments in these plans were $9 for generic drugs, $17 for preferred drugs, and $25 for non-preferred drugs. As previously discussed, for modeling purposes, it is necessary to transform the copayment amounts into average coinsurance rates. However, because the preferred and non-preferred designations for prescription drugs vary by plan, it is not possible to calculate a single coinsurance rate. Instead, minimum and maximum rates were calculated by assuming that (1) all brand-name drugs are preferred, and (2) all brand-name drugs are non-preferred. This yielded a coinsurance range of 32% to 43%. Also, most employment-based plans do not have a separate out-of-pocket maximum for prescription drugs. They do, however, have an out-of-pocket maximum for total health care spending — an average of $2,000 for individual coverage. This was entered into the model as the out-of-pocket maximum for prescription drugs. However, enrollees in these plans would probably have other health care spending and therefore reach the out-of-pocket maximum before spending $2,000 on prescription drugs. As a result, the actuarial value of a typical employment-based health plan, estimated to be between $2,070 and $2,470 in 2006, could be slightly underestimated.[10]

The FEHB plan in this analysis is the Blue Cross/Blue Shield (BCBS) standard option plan for 2004. Nearly half of all FEHB policyholders are enrolled in this plan, and about half of those enrollees are federal annuitants. The actuarial value of the prescription drug portion of the plan was estimated at $2,720 in 2006, assuming all prescription drugs are purchased through a preferred retail pharmacy, where the coinsurance is 25%. At non-preferred retail pharmacies, the coinsurance is 45%. Through mail order, there is a $10 copayment for generic drugs and a $35 copayment for brand-name drugs. If the use of non-preferred pharmacies and mail-order drugs were known and modeled, the actuarial value may be different. Like most employment-based plans, the BCBS standard option does not have a separate out-of-pocket maximum for drugs. Its overall out-of-pocket maximum is $4,000 for care through preferred providers. By simply using the plan's overall out-of-pocket maximum, the actuarial value could be slightly underestimated.

Discussion. The actuarial values reflect not only plans' benefits but also the assumptions used to trend to 2006. The trends can substantially change the dollar amounts of actuarial values but tend to have a smaller impact on the relative values of the plans. Thus, comparisons of the actuarial values are best represented by calculating the differences in percentage terms rather than dollar terms. For example, it is preferable to say that the actuarial value of the Part D standard coverage is approximately 52% greater than that in Medigap plan J, rather than to cite the $660 difference.

The actuarial value of prescription drugs in Part D standard coverage is higher than in Medigap Plan J. However, beneficiaries with total drugs expenses of $3,250 to $6,680 would pay less out of pocket in cost sharing in Plan J than in the Medicare standard option (excluding premium costs). Thus, enrollees with certain levels of drug spending may actually have lower out-of-pocket expenses in a plan with a lower actuarial value.

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[10] The information on employment-based health plans is based on the 2003 annual survey of employer health benefits published by the Kaiser Family Foundation and the Health Research and Educational Trust (http://dev.kff.org/insurance/ehbs2003-2-set.cfm).

Table 1. Summary of Prescription Drug Benefits As Modeled, Actuarial Values for Medicare Beneficiaries, 2006

	Selected Part D prescription drug benefits (P.L. 108-173)			Selected private prescription drug benefits			
	Standard benefit	Those ineligible for other low-income assistance[a] with countable income below 150% of poverty plus assets test	Benefit for beneficiaries with countable income below 135% of poverty plus assets test	Prescription drug benefit in standardized Medigap plans H and I	Prescription drug benefit in standardized Medigap plan J	Typical prescription drug benefit in employment-based coverage[b]	Prescription drug benefit in FEHBP's Blue Cross/Blue Shield standard option
Annual deductible	$250	$50	$0	$250	$250	$0	$0
Cost-sharing once deductible is met	25%	15%	$2/generic, $5/brand[c]	50%	50%	32%-43%	25%
Coverage limit	$2,250	None	None	None	None	None	None
From coverage limit to out-of-pocket maximum	100%	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Out-of-pocket threshold	$3,600	$3,600	$3,600	None	None	$2,000	$4,000
Beyond out-of-pocket threshold	5%	$2/generic, $5/brand[c]	0%	Not applicable	Not applicable	0%	0%
Maximum benefit	None	None	None	$1,250	$3,000	None	None
Estimated actuarial value	$1,920	$3,090	$3,520	$780	$1,260	$2,070-$2,470	$2,720

Source: Congressional Research Service

Note: Actuarial values assess relative generosity of insured benefits. Factors that may affect the actual amount paid by a plan in benefits (e.g., use of pharmacy benefit managers, which some of these plans may use) are disregarded or held constant. Comparisons of actuarial values are best represented by calculating differences in percentages.

[a] Individuals would qualify for this category if they had countable income below 135% of poverty but did not meet the assets test for the 135% of poverty category but did for the 150% of poverty category. Beneficiaries who are also eligible for Medicaid may be eligible for further-reduced cost-sharing; those actuarial values were not modeled.

[b] Based on data from "Employer Health Benefits: 2003 Annual Survey," from the Kaiser Family Foundation and Health Research and Educational Trust. The coinsurance rates are averages based on the 2002 prescription drug copayments reported in the survey and adjusted using data from Express Scripts, a pharmacy benefits manager (PBM).

[c] Also using data from Express Scripts, these copayments were transformed to an average 6% coinsurance rate. The law also calls for a $2 copayment for plans' multiple-source preferred drugs. However, the data from Express Scripts could not provide any separate information on these prescription drugs.