

Estimated Impact of Medicare Part D On Retiree Prescription Drug Costs

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I. Description and Purpose

On January 1, 2006, prescription drug coverage became available to Medicare-eligible individuals. Employer and union drug costs were impacted by the new Medicare drug (Part D) coverage. Those sponsors currently providing prescription drug benefits for their retirees had the potential to reduce their expenditures in 2006 and beyond.

The Health Section Council (HSC) of the Society of Actuaries approved and funded a project to study the cost impact on plan sponsor retiree pharmacy costs when Medicare Part D was implemented in 2006. Actuarial & Health Care Solutions, LLC (AHCS) was retained by HSC to perform the project.

This report provides estimated savings for several of the options that are available to plan sponsors after implementation of the Medicare prescription drug program. These options include:

1. Maintaining the current drug benefit program and receiving the 28 percent government subsidy.
2. Offering a plan that wraps around or integrates with the new Part D benefit.
3. Terminating the current drug coverage for their Medicare-eligible retirees.

Plan sponsors may also decide to replace their current drug benefit with a Medicare-approved prescription drug plan. Under this option, the plan sponsor may elect to pay all or a portion of the premium. This study does not include estimates of the plan sponsor savings for this option. At this time, the design and premium for plans that will be available is unknown.

Cost changes were measured over a 50-year time frame in order to provide results that may be useful to those preparing retiree health valuations required by the Financial Accounting Standards Board (FASB) and Governmental Accounting Standards Board (GASB).

The remainder of this report describes the methodology used to arrive at the estimated cost savings for options one, two and three above, as well as the key assumptions and limitations of the data being used. Estimated cost changes reflect the change in total costs (plan sponsor plus retiree contributions). The Exhibits following the report provide detailed information regarding the study inputs as well as the cost impact of the three outlined options under a range of conditions. Appendices A and B provide additional information that was a by-product of the study.

Readers of this report are cautioned to review the underlying methodology and any limitations of the analysis as outlined in this report.

II. Data and Methodology

A prescription drug pricing model for the Medicare-eligible population was developed to perform this analysis. This model uses a claim probability distribution that is based on the Medicare Current Beneficiary Survey (MCBS). The MCBS survey data was developed as follows:

- 1998 prescription drug claims for a subset of Medicare-eligibles were obtained by a survey.
- The claims were projected to 2006 using the following annual trend rates.

Year	Trend
1999	15.5%
2000	16.5%
2001	15.1%
2002	13.3%
2003	12.5%
2004	11.2%
2005	10.7%
2006	10.7%

- The data was adjusted for price levels that vary by insurance status to reflect assumed drug plan discount and cost management savings of 15.0 percent from “full retail.”
- The data was adjusted for induced utilization due to the effect of insurance. The insurance effect can be described as an increase in utilization due to a reduction in out-of-pocket expenses covered by insurance.

The distribution was further refined to reflect cost differences by member claims ranges as shown in the Society of Actuaries study “Projected Cost Analysis of Potential Medicare Pharmacy Plan Designs” published on July 9, 2003. A summary of the claims distribution used for this study is shown in Exhibit A. The utilization rates were adjusted to reflect prescription fills up to a 30-day supply, (where a 90-day supply is counted as three fills).

The model was used to estimate costs under a number of different options and plan designs for the next 50 years. The long time frame was modeled in order to make the results more useful to those preparing retiree health valuations. The model includes adjustments for anticipated utilization differences caused by varying member cost sharing provisions in each plan

The following plan sponsor options were modeled for this study:

- A. Subsidy option – Under this option, the plan sponsors would maintain their current drug benefit plan for Medicare-eligible retirees and receive government subsidy payments.

- B. Coordinate with Medicare, plan sponsor pays Part D premium – For this option, the plan sponsor’s Medicare-eligible retirees will enroll in Medicare Part D through a prescription Drug plan (PDP). The plan sponsor’s benefit plan will provide coverage in excess of Part D such that, from the retiree’s perspective, the current drug benefits are preserved. The plan sponsor will pay the Part D monthly premium for the retiree (and spouse).
- C. Coordinate with Medicare, retiree pays Part D premium – Same as previous option, but the retiree pays the Part D monthly premium.
- D. The plan sponsor drops its current Drug plan for Medicare-eligible retirees and pays the Part D premium for these retirees (and spouses).

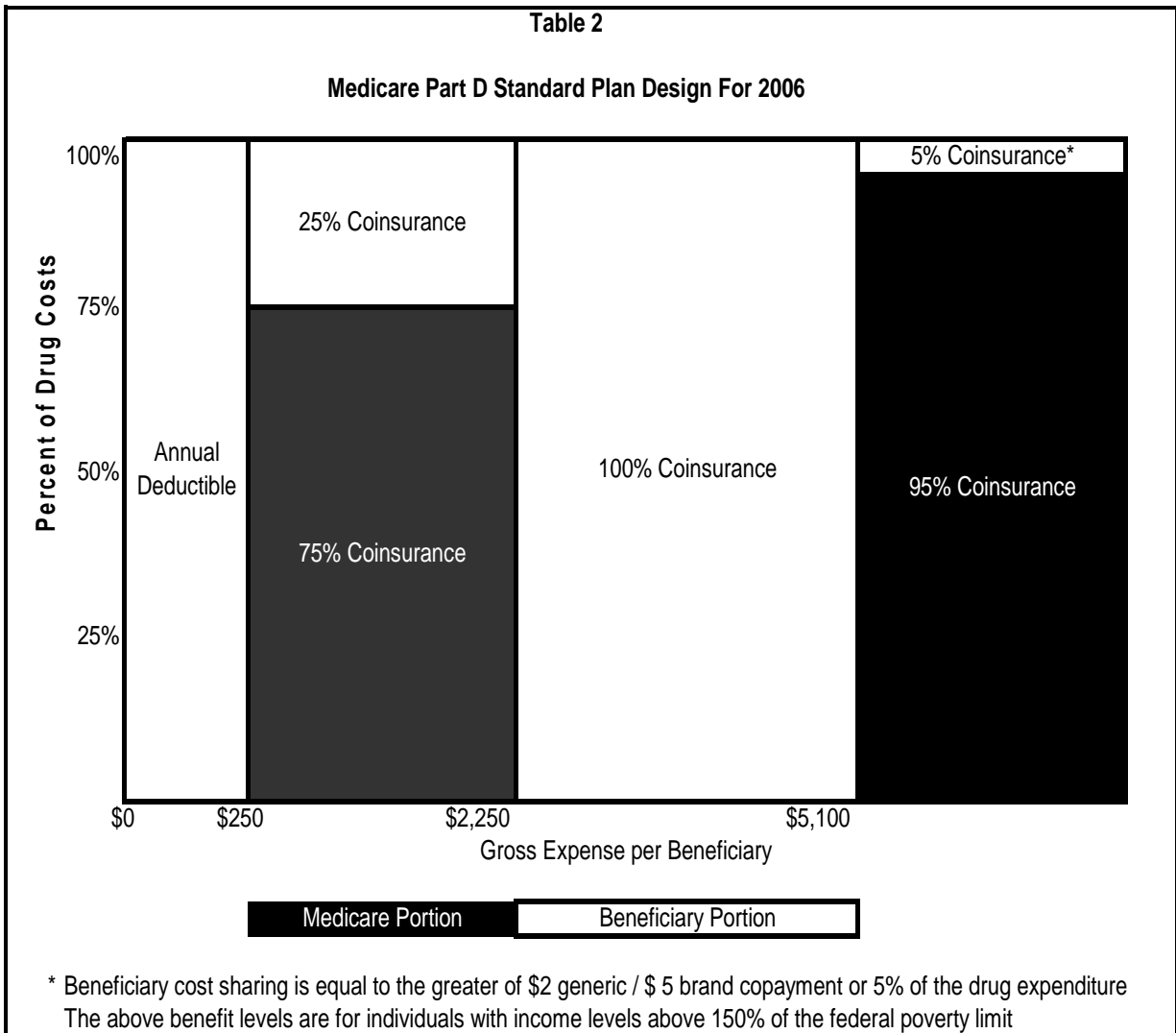
Twelve different benefit plans were modeled for this study. These plans are representative of the range of benefit plans currently available to retirees covered by plan sponsors. Table 1 below provides a summary description of each of the plans modeled.

Table 1	
Description of Plans Used In Model	
Plan	Plan Description
1	\$2 Generic / \$5 Brand Formulary / \$5 Brand Non-Formulary Copays
2	\$250 deductible, 100% coinsurance
3	\$5 Generic / \$10 Brand Formulary / \$15 Brand Non-Formulary Copays
4	\$0 deductible, 80% plan coinsurance
5	\$5 Generic / \$20 Brand Formulary / \$40 Brand Non-Formulary Copays
6	\$10 Generic / \$20 Brand Formulary / \$40 Brand Non-Formulary Copays
7	\$250 deductible, 75% plan coinsurance
8	\$5 Generic / \$30 Brand Formulary / \$60 Brand Non-Formulary Copays
9	\$10 Generic / \$30 Brand Formulary / \$60 Brand Non-Formulary Copays
10	\$10 Generic / \$40 Brand Formulary / \$80 Brand Non-Formulary Copays
11	\$20 Generic / \$40 Brand Formulary / \$60 Brand Non-Formulary Copays
12	\$15 Generic / \$50 Brand Formulary / \$100 Brand Non-Formulary Copays

The model also estimates the impact of different plan sponsor choices for low, medium, and high cost plans. It is anticipated that a plan sponsor's current cost level for retiree prescription drugs will impact expected savings under the various options. Sample calculations demonstrate how the user of this report can estimate cost changes for different plan designs, sponsor cost and contribution levels.

III. Assumptions

Medicare Part D Benefit Design. The design of the Medicare prescription drug plan, Medicare beneficiary premiums, and thresholds for subsidy payments will have an impact on plan sponsor costs under each of the options. Table 2 below illustrates the Standard Benefit Design for Medicare Part D in 2006.



Deductibles and Coinsurance. Deductibles and coinsurance limits for the Standard Plan will increase each year by the per capita outpatient drug expenditure increases. This study uses Congressional Budget Office projected values for these limits in years 2006 through 2015. A constant rate of increase in these parameters was assumed for the years after 2015. Table 3 below summarizes the values used in this study.

Table 3					
Medicare Standard Drug Benefit Features					
Year	Annual Deductible	Coinsurance Limit Including Deductible	Catastrophic Threshold	Total Spending At Threshold	Part D Monthly Premium
2006	\$250	\$2,250	\$3,600	\$5,100	\$32.20
2007	\$275	\$2,470	\$3,950	\$5,596	\$34.60
2008	\$300	\$2,710	\$4,350	\$6,158	\$37.20
2009	\$325	\$2,920	\$4,650	\$6,596	\$40.00
2010	\$350	\$3,170	\$5,050	\$7,165	\$43.00
2011	\$380	\$3,400	\$5,450	\$7,715	\$46.20
2012	\$410	\$3,690	\$5,900	\$8,360	\$49.70
2013	\$445	\$4,000	\$6,400	\$9,066	\$53.40
2014	\$475	\$4,340	\$6,950	\$9,849	\$57.40
2015	\$515	\$4,710	\$7,550	\$10,696	\$61.70

For years after 2015, the annual deductible, coinsurance limit, and catastrophic threshold limits are expected to increase at an annual rate of 8.5%.

The Part D monthly premium is expected to increase at an annual rate of 7.5% for years after 2015.

Subsidy Limits. The subsidy payment will be based on annual claims per Medicare-eligible retirees and spouses that fall between a lower and an upper limit. The subsidy will be 28 percent of these claims. This study uses Congressional Budget Office projected values for these limits in years 2006 through 2015. A constant rate of increase in these parameters was assumed for the years after 2015. Table 4 below summarizes the values used in this study.

Table 4					
Medicare Drug Subsidy Payment Thresholds					
Year	Subsidy Lower Limit	Subsidy Upper Limit	Year	Subsidy Deductible	Subsidy Maximum
2006	\$250	\$5,000	2011	\$380	\$7,520
2007	\$275	\$5,425	2012	\$410	\$8,160
2008	\$300	\$5,890	2013	\$445	\$8,850
2009	\$325	\$6,390	2014	\$475	\$9,600
2010	\$350	\$6,930	2015	\$515	\$10,420

For years after 2015, the subsidy lower and upper limit amounts are expected to increase at an annual rate of 8.5%.

Pharmacy Trend. A key assumption in the model is pharmacy trend. This study assumes an annual increase in prescription drug costs of 8.5 percent per year for each year in the projection period. Pharmacy utilization trend is assumed to be 3.33 percent per year. Pharmacy cost trend is assumed to be 5.0 percent per year. Trends for brand and generic were assumed to be the same throughout the period.

Eligibility for Subsidy. For the subsidy option being modeled (Option A), an assumption is made that the sponsor's plan passes the actuarial equivalence test required to receive the subsidy. For sponsor plans that do not pass this test, there will be no subsidy payments and therefore no plan sponsor savings for Option A.

IV. Limitations

Following is a list of some of the key limitations of the analysis:

Data Used to Develop Continuance Table. As noted earlier, the calculations in this study are based on data from the Medicare Current Beneficiary Survey (1998 data trended and adjusted to 2006). The MCBS data may not be representative of an individual group's data. However, cost change results (Exhibits E.1-3) were tested with alternate underlying data and the results were similar. The use of the cost levels provided in Table 5 allow matching study results to a group's cost level.

Medicare Benefit (Part D) Plan Design. The Part D plan design features (deductibles, out-of-pocket spending limits, beneficiary premiums) will have a significant impact on estimated plan sponsor savings. In 2006, Medicare is expected to cover about 50 percent of the average beneficiary's total prescription drugs costs. This study assumes that the level of program support (in terms of total pharmacy costs paid by Medicare), will remain constant over the time frame of the study.

Plan Design. A limited number of plan designs were modeled for this study. The plans chosen are representative of those currently available to retirees and cover a spectrum of high cost to low cost plans. The sponsor plan is not expected to change over the time frame of this study. Interpolation methods can be used to approximate savings for other plan designs, as shown in Exhibit C.

Trend. Pharmacy trend will have a material impact on expected plan sponsor savings. If the Part D design features do not change at the same rate as the underlying drug costs, the results of this study could be materially different than shown. For example, if the subsidy payment thresholds, as shown in Table 4 above, are increased 5 percent per year and the pharmacy costs increase 8.5 percent per year, the plan sponsor savings under the subsidy option will be less than those shown in this report.

This study assumes that the trend in underlying pharmacy costs will be the same as the change in the Part D design features. Other trend scenarios may also be reasonable. It is beyond the scope of this project to model a large number of trend scenarios. Two alternate trend scenarios (one with higher trend and the other with lower trend) were tested for sensitivity. Expected plan sponsor savings were similar under all three scenarios tested.

Utilization. The model used in this study assumes utilization differences corresponding to the ratio of member out-of-pocket costs to total drug costs—the lower this ratio, the higher the expected utilization. These adjustments ranged from -18 percent for the lowest cost plans to +10 percent for the richest plans. This study assumes that the value of the utilization adjustments for the sponsor plan will change over time, as the level of member costs compared to total drug costs changes.

Brand/Generic Utilization. The level of generic versus brand usage will impact overall plan costs. This underlying claims distribution for this study is based on approximately 47 percent of total prescriptions being generic. This study assumes that the 47 percent generic substitution rate is constant over time and does not vary by plan.

Initial Claim Cost Level. The initial claim cost level will impact the expected savings for a given plan sponsor. Three cost levels were modeled for each plan in this study. Average claims cost levels for each plan are shown in Table 5. Shown are expected pharmacy costs per member per month for Medicare-eligible retirees and dependents in 2006. The high cost level reflects gross claims pmpm at 150 percent of the average. The low cost level reflects gross claims pmpm at 50 percent of the average.

Plan	Low Cost Cost Level	Average Cost Level	High Cost Level
1	\$129.97	\$259.94	\$389.92
2	\$114.57	\$253.92	\$393.85
3	\$115.87	\$231.73	\$347.60
4	\$103.49	\$206.99	\$310.48
5	\$97.63	\$195.26	\$292.89
6	\$92.81	\$185.63	\$278.44
7	\$76.52	\$168.45	\$261.58
8	\$84.04	\$168.07	\$252.11
9	\$79.67	\$159.34	\$239.01
10	\$70.13	\$140.26	\$210.39
11	\$65.80	\$131.60	\$197.40
12	\$60.72	\$121.45	\$182.17

Subsidy Option. For the subsidy option being modeled (Option A), an assumption is made that the sponsor’s plan passes the actuarial equivalence tests required to receive the subsidy. The equivalence test compares gross and net costs of the sponsor plan and the Medicare Standard plan. Readers of this report are cautioned that actuarial equivalence must be determined prior to using the Option A results as shown in Exhibits E.1, E.2 and E.3.

Medicare Integration. In general, most plans that coordinate benefits with Medicare use one of three methods—standard coordination of benefits (COB), exclusion or carveout, with the carveout method being the most prevalent. This study assumes that the carveout method of integration will be used. Plan sponsor savings using either the

exclusion or COB method would most likely be lower, as both of these methods result in higher costs, in general.

Uses. This report is intended as a reference guide and resource for actuaries estimating the impact of Medicare D on plan sponsor costs, including the application to retiree valuations. It is not intended as a substitute for an analysis of available claim and exposure data nor should it be inferred as providing standard valuation tables or values.

V. Results

The results of the projections can be seen in Exhibits E.1, E.2, and E.3. These Exhibits provide the cost change estimates for each of the four options with each of the 12 plan designs and for the three different plan cost levels. Further detail of the calculations used to determine the cost changes in these tables is shown in Exhibit B.

The subsidy option (Option A) generally results in the lowest plan sponsor savings, from 18 percent to 41 percent for the plans modeled. In most cases, the savings are slightly higher when the sponsor plan coordinates with Medicare and the plan sponsor pays the Part D premium for the retiree (Option B). Still greater savings result under Option C, where the sponsor plan coordinates with Medicare but the retiree pays the Part D premium. As expected, the greatest savings occur under Option D.

There are special tax benefits that will apply to Option A that will increase savings for taxable entities. Assuming the plan sponsor is in a position to realize these tax benefits, the cost reductions shown in Exhibit E (Option A) should be divided by $(1 - \text{marginal tax rate})$. For example, if a sponsor's marginal tax rate is 30 percent, and the cost change from Exhibit E is 25 percent, the tax-adjusted savings would be 36 percent, calculated as $(25 \text{ percent} / (1 - 30 \text{ percent}))$.

The savings generally decrease over time for options A, B, and C. For Option D, plan sponsor savings increase over time. This is due to the sponsor plan costs increasing at a higher rate than underlying drug costs and Medicare Part D premium.

Exhibits E.1, E.2, and E.3 can also be used to estimate cost savings for other pharmacy benefit plan designs and/or plans with expected costs falling between the cost levels shown on Table 5 and in Exhibits F.1, F.2 and F.3. Exhibit C provides an example of how one would estimate the cost change for other plans and/or cost levels.

The values in Exhibits F.1, F.2, and F.3 can be used to estimate cost savings for various sponsor contribution levels. Exhibit D demonstrates the calculation of sponsor cost changes for Plan 6 in 2006. Calculations are shown for sponsor contribution rates of 100 percent, 70 percent, and 50. percent.