



---

**PhRMA**  
**Reducing Part D Beneficiary Costs through**  
**Point-of-Sale Rebates**

Prepared by:  
**Milliman, Inc.**

**Katie M. Holcomb, FSA, MAAA**  
Consulting Actuary

**Troy M. Filipek, FSA, MAAA**  
Principal and Consulting Actuary

15800 Bluemound Road  
Suite 100  
Brookfield, WI 53005  
USA  
Tel +1 262 784 2250  
Fax +1 262 923 3680

[milliman.com](http://milliman.com)

## TABLE OF CONTENTS

I. EXECUTIVE SUMMARY .....	1
II. BACKGROUND .....	4
III. IMPACT OF REFLECTING REBATES AT POS .....	6
IV. METHODOLOGY AND ASSUMPTIONS.....	13
V. CAVEATS, LIMITATIONS, AND QUALIFICATIONS.....	14

## I. EXECUTIVE SUMMARY

In November 2017, CMS issued a Request for Information (RFI) in the “Proposed Policy Changes and Updates for Medicare Advantage and the Prescription Drug Benefit Program for Contract Year 2019” soliciting comment on the application of direct and indirect remuneration (DIR), or rebates, at the point-of-sale (POS). The RFI requested potential policy approaches for applying a minimum percentage of manufacturer rebates and all pharmacy price concessions to the POS. PhRMA engaged Milliman to examine the effect of this change to Part D stakeholder costs and potential behavioral impacts.

Currently, plans keep a majority of rebates and use them to reduce premiums for all members, but moving rebates to the POS could provide relief specifically to certain members by reducing their cost sharing. CMS, Milliman, and others have projected the impact of moving rebates to the POS under various scenarios. This report contributes to the dialogue by exploring possible implementation scenarios and market responses.

We analyzed the effect of transferring 50% of manufacturer rebates and 100% of pharmacy rebates to the POS. Key findings from our analysis regarding the impacts to member and government costs are:

- **Total member costs are expected to decrease from shifting rebates to the POS, with savings over ten years of \$4 to \$28 billion.**
- **On average, non-low income members, who account for about 70% of total Part D plan enrollment, would benefit from shifting rebates to the POS**, due to a reduction in average member cost sharing, only partially offset by a small increase in member premium. In particular, non-low income members with spending at or above the ICL would benefit the most (especially those using highly rebated brand medications), while a large number of non-low income members using non-rebated products would see less change, and could have a small overall cost increase due to the premium increase, depending on the degree of behavioral changes. Low income members would see less change, since their cost sharing and premiums are largely subsidized.
- **Shifting rebates to the POS more closely aligns rebate savings with members generating those savings, and reduces the difference between member cost sharing as a percent of gross versus net costs.** We estimate that in 2017, member cost sharing was approximately 34% of gross allowed costs (across all benefit phases), but 42% of net allowed costs after rebates. Absent policy change and assuming modest growth of rebates, we project members will continue to pay an increasingly high share of net allowed costs.
- **Absent any behavioral changes, our analysis indicates total government costs could increase by \$6 billion (about 0.5%) over ten years to make up for the savings seen by members.** However, total government costs will be shaped by market responses to the shift in incentives.
- **Over time, the net impact of potential behavioral changes and market responses could be to reduce spending for all stakeholders, with federal government savings of \$8 to \$73 billion over ten years.**
- **The proposed policy change would result in a redistribution of government spending.** Federal reinsurance would decrease, as fewer beneficiaries will reach the catastrophic phase due to lower overall POS spending and the reinsurance amount will be based on a lower value. On the other hand, the direct subsidy increases, as plans cover a greater proportion of claim costs for members and have higher Part D bids. Low income cost sharing subsidies (LICS) would be lower, correlating to the lower overall member cost sharing, and low income premium subsidies (LIPS) would increase proportionately to the increase in member premiums.
- **If rebates were shifted to the POS, formulary and contracting strategies would likely focus more on targeting medications with the lowest net costs to plans and beneficiaries at the POS.** Stakeholders may react to the changing dynamics by negotiating additional price concessions and plan sponsors may steer utilization to medicines with less frequent price increases or lower list prices.

Table 1 below illustrates the projected ten-year impact of shifting rebates to the POS, assuming a 50% pass-through of manufacturer rebates to the POS and 100% pass-through of pharmacy rebates. These assumptions are consistent with CMS’s RFI, which considered passing through only a portion of manufacturer rebates, but all pharmacy rebates. Given this policy change would result in a significant redistribution of program spending and intensify pressures to adopt medicines with the lowest costs at the POS, it may create changes in stakeholder behavior. Our results consider the potential behavioral changes that may result from this policy.

Table 1 shows the results under three different scenarios – each scenario incorporates an increasing degree of behavioral shifts:

<b>Table 1 Estimated 10-Year Impact of Moving Rebates to POS (2017-2026)</b>						
	<b>Total Cost Impact (in billions)</b>			<b>% Change from Baseline</b>		
	<b>Scenario 1</b>	<b>Scenario 2</b>	<b>Scenario 3</b>	<b>Scenario 1</b>	<b>Scenario 2</b>	<b>Scenario 3</b>
<b>Total Member Costs</b>	<b>(4.1)</b>	<b>(7.7)</b>	<b>(27.7)</b>	<b>-0.9%</b>	<b>-1.8%</b>	<b>-6.4%</b>
Member Cost Sharing	(12.5)	(13.9)	(24.8)	-4.8%	-5.3%	-9.6%
Member Premium	8.4	6.1	(2.9)	4.8%	3.5%	-1.6%
<b>Total Government Costs</b>	<b>5.8</b>	<b>(8.4)</b>	<b>(72.8)</b>	<b>0.5%</b>	<b>-0.7%</b>	<b>-6.0%</b>
NADS	81.6	80.4	58.5	58.0%	57.1%	41.6%
Federal Reinsurance	(44.4)	(53.3)	(71.1)	-7.0%	-8.4%	-11.2%
LICS	(35.6)	(38.6)	(58.7)	-10.0%	-10.8%	-16.5%
LIPS	4.3	3.1	(1.5)	4.8%	3.5%	-1.6%

*\*Scenario 1 assumes no behavioral impacts, Scenario 2 assumes modest growth in price concessions, and Scenario 3 assumes a stronger market response with additional savings due to formulary strategies driving greater generic / low-cost medication utilization.*

**The net impact of potential behavioral changes is a decrease in overall Part D spending, which reduces spending for all stakeholders.** CMS acknowledged in their RFI that “requiring rebates to be applied at the point of sale might induce changes in sponsor behavior related to drug pricing that would further reduce the cost of the Part D program for beneficiaries and taxpayers.”<sup>1</sup> Consistent with CMS’s commentary, our modeling reflects plan strategies to reduce POS costs through contracting and / or formulary management.

- In Scenario 1, which reflects no shifts in behavior in response to changed incentives, total government costs would increase to make up for the savings seen by members.
- In Scenario 2, which assumes a modest response in which plans seek to preserve their contracting economics, both members and the government save as price concessions become a greater portion of overall spending (at the cost of the manufacturers and / or pharmacies providing the additional price concessions).
- In Scenario 3, which assumes a stronger market response, including tighter formularies in reaction to competition based on net prices rather than list and an increase in generic dispensing rate (GDR), total program costs decrease and there are increased savings relative to a baseline in which no changes are made.

<sup>1</sup> Medicare Program; Contract Year 2019 Policy and Technical Changes to the Medicare Advantage, Medicare Cost Plan, Medicare Fee-for-Service, the Medicare Prescription Drug Benefit Programs, and the PACE Program – Proposed Rule by the Centers for Medicare & Medicaid Services. November 28, 2017. <https://www.federalregister.gov/documents/2017/11/28/2017-25068/medicare-program-contract-year-2019-policy-and-technical-changes-to-the-medicare-advantage-medicare>

While our report focuses on the impact to members and government, other stakeholders would be affected as well. The portion of claims paid by plan sponsors would increase, resulting in the increase in NADS noted above. Coverage gap discount program (CGDP) payments would decrease as fewer members reach the coverage gap. In Scenarios 2 and 3, this manufacturer impact is offset by increases in rebate payments.

As compared to numerous other publications and projections on this topic<sup>2</sup>, this report adds important contributions to the discussion while recognizing valid projections can vary under different assumptions and available information at the time of publication. Some of the key differences included in this analysis include:

- **Rebate Pass-Through Amount:** As noted above, our projections assume 50% of manufacturer rebates and 100% of pharmacy rebates are passed through to the POS. CMS's RFI does not select which pass-through percentage would be required for manufacturer rebates, but shows examples for 33%, 66%, and 90%. We selected 50% as a middle option, with half of rebates being passed through. Our assumption of 100% pass-through of pharmacy rebates is consistent with what CMS suggests in the RFI.
- **Future Trends:** Trend assumptions have an important impact on overall gross costs as well as bid components such as the direct subsidy and federal reinsurance – the impact of the change in future years is very sensitive to the magnitude of these components. Our results are based on 2015 Part D claims data projected to future years. We calibrated to the 2017 and 2018 Part D national averages and applied aggregate trends for 2019 through 2026 from the 2017 Medicare Trustees Report. Note, the 2017 Medicare Trustees Report trends were significantly lower than those projected in the 2016 Medicare Trustees Report, particularly through the year 2020.
- **Application of Rebates at the POS:** In their RFI, CMS suggests several ways in which rebates could be applied at the POS, but has not yet codified the details on how this would be done. Our analysis assumes rebates would be used to reduce POS costs only for the products with which they are associated – in other words, rebates are assumed to be passed through at a product level. We believe this to be a reasonable expectation of how CMS would structure the POS application of rebates, although other valid approaches exist. Results could vary significantly if the rebate savings was used to reduce POS costs for generic medications. [add notes on still being able to preserve confidentiality through product-level rebates]
- **Behavioral Changes:** As noted above, the impact of moving rebates to the POS is greatly affected by possible corresponding changes to stakeholder behaviors. Scenarios 2 and 3 reflect modest and strong market responses to the change as detailed further in the report.

---

<sup>2</sup> Medicare Program; Contract Year 2019 Policy and Technical Changes to the Medicare Advantage, Medicare Cost Plan, Medicare Fee-for-Service, the Medicare Prescription Drug Benefit Programs, and the PACE Program – Proposed Rule by the Centers for Medicare & Medicaid Services. November 28, 2017. <https://www.federalregister.gov/documents/2017/11/28/2017-25068/medicare-program-contract-year-2019-policy-and-technical-changes-to-the-medicare-advantage-medicare>

## II. BACKGROUND

PhRMA engaged Milliman to assess the impact of changing pharmacy and manufacturer rebates to the POS. CMS proposed moving a portion of manufacturer rebates and all pharmacy rebates to the POS in a recent RFI. We analyzed the financial impact of this kind of change, which is intended to align rebate savings with the members generating those savings.

### BACKGROUND ON MEDICARE PART D

Medicare Part D includes pharmacy coverage for Medicare-eligible beneficiaries who choose to enroll in one of two plan types individually or through their employer for retiree-based coverage:

- **Medicare Advantage Part D (MAPD) plans**, which provide beneficiaries both medical and pharmacy coverage, and
- **Stand-alone Prescription Drug Plans (PDPs)**, which provide only pharmacy coverage.

The statutorily-defined standard Part D benefit has multiple phases. Plan sponsors are allowed to vary their benefits (with some limitations), as long as the design results in the same or better value to the member, on average. The benefit phases and standard cost sharing for 2017 are as follows:

- **Deductible Phase:** A \$400 deductible during which members pay 100% of allowed claim costs.
- **Initial Coverage Phase:** Members pay 25% of allowed claim costs with plan sponsors paying the remaining 75% until the initial coverage limit of \$3,700 in total allowed costs is reached.
- **Coverage Gap Phase:** In this phase, members pay 51% of generic costs and 40% of brand costs. As part of the Affordable Care Act (ACA), pharmaceutical manufacturers provide a discount of 50% for most brand medications filled by non-low income (NLI) members during the coverage gap phase. This is known as the Coverage Gap Discount Program (CGDP). In 2017, plan sponsors pay 49% of generic costs and the remaining 10% of brand costs within this phase. LICs eligible members are not eligible for the CGDP because they receive federal cost sharing subsidies in the coverage gap and all other phases of the benefit. Also as part of the ACA, the coverage gap is gradually closing, such that by 2020, members will pay 25% of both brand and generic costs, similar to the initial coverage phase. The CGDP is likely to remain in place, leaving plan sponsors to pay 75% of generic costs and 25% of brand costs in 2020 and future years.
- **Catastrophic Phase:** Once a member's spending reaches the true out-of-pocket (TrOOP) catastrophic threshold (\$4,950 in combined member and CGDP spending), they enter the final phase, known as the catastrophic or reinsurance phase. After this point, members pay roughly 5% coinsurance, plan sponsors pay approximately 15%, and the federal government pays the remaining 80% of claims costs as federal reinsurance.

In addition to varying the standard benefit parameters, plans also may offer enhanced coverage beyond the standard benefit (e.g., by reducing or eliminating the deductible, reducing cost sharing during the initial coverage phase, providing additional coverage in the coverage gap, and / or covering medications not typically covered by Part D). CMS reviews the bids submitted by plan sponsors to make sure they adhere to plan design and formulary structure requirements, are developed according to actuarial modeling guidelines, and do not discourage enrollment by certain types of Part D members.

### RECENT DYNAMICS IN PART D

Since the inception of Part D, the national average member premium (NAMP) increased from \$32.20 PMPM in 2006 to \$35.02 PMPM in 2018. Premium is an important tool for gaining both NLI members (premium is a top consideration for NLI beneficiaries shopping for a Part D plan) and low income (LI) members (premiums must be below a regional benchmark for a plan to gain auto-assigned LI members), so plans are always looking for new ways to keep premiums low each year.

While several factors contribute to plans' ability to mitigate premium increases, two of the primary strategies used by plans to reduce premium increases in recent years are as follows:

- **Preferred Pharmacy Networks:** Most PDPs (as well as some MAPDs) currently use retail pharmacy networks as a way to attract members and keep premiums low. Under a typical retail pharmacy network arrangement, members pay lower cost sharing at preferred pharmacy chains, with preferred pharmacy chains paying a price concession to the plan sponsor in exchange for attracting members to their stores. The price concessions are treated as rebates, which means they are settled after the POS and thus are not shared directly with members or other stakeholders at the POS. This rebate is more valuable to the plan than a POS discount, given the plan keeps the majority of it (a portion is shared with the government) to reduce member premiums.
- **Increases in Manufacturer Rebates:** The financial mechanics of manufacturer rebates function in the same way as retail pharmacy rebates and thus, rebates are equally valuable (or more valuable given their larger magnitude) to the plan in keeping member premiums low. Plans collect rebates during all phases of the benefit, although most rebates are associated with claims in the coverage gap and catastrophic phases. Plans are only responsible for a small portion of claims in these phases (i.e., 10% liability in the coverage gap for brands and roughly 15% in the catastrophic phase in 2017). As such, rebates can be a tool for plans to achieve a more competitive bid.

While many plans have used one or both of these mechanisms to limit premium increases or even reduce premiums, certain NLI members still experienced an increase in total spending over the last few years. Overall price inflation and the increase in utilization of specialty products may place additional burdens on some members and widens the disparity in costs between NLI members using few or no medications and those whose costs are higher due to having multiple conditions or needing a specialty product for which a low-cost alternative is not available. For the latter individuals, increases in pharmacy or manufacturer rebates reduce premiums, but these members do not otherwise share the significant rebate savings generated from the products they use. The balance of this report explores the impact of sharing rebates at the POS to provide relief to NLI members with high out-of-pocket costs.

## CMS PROPOSED RULE

In November 2017, CMS issued an RFI in the "Proposed Policy Changes and Updates for Medicare Advantage and the Prescription Drug Benefit Program for Contract Year 2019" soliciting comment on the application of rebates at the POS. The RFI requested potential policy approaches for applying a minimum percentage of manufacturer rebates and all pharmacy price concessions to the POS. CMS stated they will use ideas and comments provided in responses to the RFI to evaluate and consider proposals for rulemaking.

CMS proposed requiring plan sponsors to reflect a minimum percentage of manufacturer rebates in the POS price. The POS rebate for a given therapeutic class would be determined by applying a specified minimum percentage to the average manufacturer rebates for products in that class. CMS is considering several different approaches, including different ways to apply rebates, different pass-through amounts, and whether to use a more targeted approach for only certain products or therapeutic classes.

CMS also proposed requiring plan sponsors to reflect the "lowest possible reimbursement" a network pharmacy could receive in the POS price. Under current guidance, Part D sponsors typically reflect pharmacy price concessions not reasonably determined at the POS as rebates. CMS proposed Part D sponsors reflect the known portion of the payment at the POS and any potential post-POS payment adjustments as rebates. Plans would be required to effectively reflect all possible pharmacy rebates in the negotiated price – only negative pharmacy DIR adjustments would be acceptable.



### III. IMPACT OF REFLECTING REBATES AT POS

#### CHANGES TO DISTRIBUTION OF PROGRAM SPENDING IN INITIAL IMPLEMENTATION YEAR

To illustrate how moving rebates to the POS would reallocate program spending, we show below in Table 2 the impact of such changes absent any behavioral response to changed incentives. If CMS were to require all types of rebates (retail pharmacy and manufacturer) to be reflected at the POS, fewer members would reach the catastrophic benefit phase due to lower POS costs for brand and specialty medications. As a result, plans would be responsible for a larger portion of claim costs, while beneficiary cost sharing and government federal reinsurance liability would decrease. While the government would pay a smaller portion of claims through federal reinsurance, the total government cost could increase in the first year, all else constant, as the NADS increase is expected to be greater than the decrease in federal reinsurance. These results are displayed in Table 2 below:

Table 2 Estimated 2017 Impact of Moving Rebates to POS (PMPM)								
Scenario	Member Cost Sharing	Member Premium	Total Member Costs	Federal Reinsurance	NADS	LICS	LIPS	Total Government Costs
2017 National Average Bid	\$40.95	\$23.63	<b>\$64.58</b>	\$78.65	\$25.45	\$49.28	\$12.00	<b>\$165.38</b>
100% of Rebates to POS	\$37.68	\$25.46	<b>\$63.14</b>	\$65.71	\$46.46	\$42.63	\$12.93	<b>\$167.73</b>
2017 % Impact	-8.0%	7.8%	<b>-2.2%</b>	-16.5%	82.6%	-13.5%	7.8%	<b>1.4%</b>
50% Manufacturer / 100% Pharmacy Rebates to POS	\$38.79	\$24.70	<b>\$63.49</b>	\$70.97	\$37.85	\$45.84	\$12.55	<b>\$167.21</b>
2017 % Impact	-5.3%	4.5%	<b>-1.7%</b>	-9.8%	48.7%	-7.0%	4.5%	<b>1.1%</b>

Table 2 shows the initial impact of moving both pharmacy and manufacturer rebates to the POS.

- When 100% of rebates are converted to POS discounts, the total beneficiary cost (the sum of member cost sharing and member premium) decreases by about 2.3% on average and federal government costs (including reinsurance, direct subsidy, and low income subsidies) increase by about 1.4%, absent any behavioral changes or market response.
- The impact is dampened when only a portion of manufacturer rebates (50%) are shifted to the POS, with a 1.7% reduction to member costs and a 1.1% increase to government costs. In this scenario, 100% of pharmacy rebates are shifted to the POS as suggested by CMS's RFI.

Total government costs increase in the first year, because all else constant, the increase in NADS and LIPS in the first year is expected to be greater than the savings from reduced claim payments through reinsurance and LICS. Given the multiple government payment streams in Part D, this policy change would result in a redistribution of government spending, with higher direct subsidy costs to cover all members and lower reinsurance costs for the smaller portion of high-cost members. The values in Table 2 assume no change in member or plan behavior, both of which could impact total government costs. Behavioral changes would likely reduce total costs, as discussed later in this report.

The LICS and member cost sharing savings in Table 2 reflects lower coinsurance amounts (a percentage of a lower POS cost). Note that there could also be additional savings due to lower copayments. Copayments may decrease because plans would need to reduce cost sharing in response to the lower POS costs such that the same average 25% coverage is maintained, as required by actuarial equivalence testing. Additionally, members paying either copayments or coinsurance would also typically benefit from a slowed progression through the benefit phases.



Table 2 assumes total rebates, from both retail pharmacies and manufacturers, account for about 20.5% of total allowed costs. We assumed the portion of rebates attributable to retail pharmacy networks would transfer to an additional POS discount on both brand and generic prescriptions. Manufacturer rebates, on the other hand, were converted to an additional POS discount on brand medications only, since manufacturer rebates do not apply to generic products. We assumed manufacturer rebates account for 85% of total rebates.

Absent behavioral changes, pharmaceutical manufacturers would still pay the same rebate dollars regardless of whether rebates flow through at the POS or after the POS. There would be a small reduction in CGDP payments as fewer members reach the coverage gap.

As noted previously, shifting rebates to the POS more closely aligns rebate savings with the members generating those savings, assuming rebates are applied to POS costs at a product level (or at least across rebated products only, as opposed to spread across all products). The change also has the effect of more closely aligning member cost sharing as a percentage of gross costs with member cost sharing as a percentage of net costs (after rebates). Over time, these two percentages have drifted apart:

- In 2017, we estimate member cost sharing is approximately 34% of gross allowed costs (across all benefit phases), but a higher percent, 42%, of net allowed costs after rebates.
- If rebates continue to grow but are not shifted to the POS, this difference would increase – assuming 1.5% growth of rebates per year, we project member cost sharing would be 31% of gross allowed costs and 46% of net allowed costs by 2026.

Hence, the value of the benefit on a net cost basis, as well as the premium, is less than it otherwise would be, due to increasing rebates. However, if rebates were fully shifted to the POS, there would be no difference between the gross and net member share percentages and the value of the benefit to the member would be more transparent.

## POTENTIAL BEHAVIORAL IMPACTS

Table 2 showed the impact of shifting rebates to the POS in the first year of implementation. We do not assume any kind of behavioral changes in the first year; but as we project longer-term impacts, behavioral changes have a greater role. The behavioral impact and corresponding financial effect is difficult to predict, but is an important consideration because there would certainly be strategic changes in reaction to this change. While we do not attempt to capture the entirety of potential behavioral changes, we discuss some of what may be the most likely changes here.

### Plan Shift to Focus on Lowest Cost Medications

If rebates were shifted to the POS, plans would likely be more focused on targeting medications with the lowest POS costs. If a brand product has a rebate, the plan sponsor can keep a large proportion of that rebate and can use it to reduce premiums (the benefit of a lower POS price, on the other hand, is shared with all stakeholders involved in paying claims and thus is less effective at reducing premium). The rebated brand product may give the plan the ability to more effectively reduce premiums than a non-rebated product, even if the non-rebated product has a lower POS cost.

This type of strategy may be less impactful if rebates were moved to the POS. Without the rebate's leverage in reducing premium, plan formulary strategies may become primarily focused on simply selecting products with the lowest POS cost. This change in formulary strategy could result in overall lower spending for all stakeholders and could potentially offset some of the increase in government costs expected to occur absent any behavioral or rebate changes. Plans may also place additional pressure on manufacturers and pharmacies for additional price concessions.

## Increased Formulary Management and Benefit Design Strategies

Beyond the strategy of favoring medications with the lowest POS costs, plan sponsors may also react by narrowing their formularies or implementing more strict utilization management criteria, such as prior authorizations and step therapies. While rebates can currently allow a member with high medication spending to be profitable to a plan sponsor, this financial dynamic would change when rebates are shifted to the POS.

Specialty medications in particular could be a focus when adjusting formulary strategies, because these products have the highest POS costs. While some specialty medications are required to be covered due to protected class requirements or a lack of non-specialty treatment alternatives, plans would focus on the lowest cost specialty treatments when possible.

If rebates were moved to the POS, members would move through the Part D benefit phases more slowly. In particular, members may spend more time in the initial coverage phase, making this phase more important, which could cause plans to incent use of lower cost medications (e.g., increasing the cost sharing differential between preferred and non-preferred medications, covering Tier 1 products at zero-dollar cost sharing).

Changes to benefit design strategies would need to be made within the confines of the cost sharing limits and actuarial equivalence testing requirements to which all Part D bids are subject. Many plans with copayment designs would need to reduce their copayments to meet the requirement that average cost sharing in the initial coverage phase is equivalent to no more than 25% of POS costs.

### Other Behavioral Impacts

The plan strategies discussed above have the overall intent of lowering costs, and in turn, premiums. As discussed previously, rebates can be an important tool for plan sponsors to maintain low premiums, and as many plans face premium pressure in the first year of this change, they may turn back to manufacturers and pharmacies and push for additional price concessions. Further, as formularies narrow, manufacturers may need to provide greater rebates. On the other hand, plan sponsors may be less focused on rebates given they will no longer provide the extra leverage for reducing premiums – plans could instead turn to other means to reduce costs, such as lower negotiated POS discounts or the formulary and benefit strategies discussed above.

Member behaviors might change as well – particularly in the first year of the change, when premium changes will be the greatest, many members may migrate across different carriers or even plan types (from PDP to MAPD). Additionally, with lower POS costs and lower cost sharing, members may be more adherent to medications. This effect would increase overall costs to the Part D program but could have offsetting medical savings, as discussed later. If members find it easier to remain adherent to medications, this could reduce the need for patient assistance programs.

## TEN-YEAR PROJECTIONS

Table 2 showed the impact in 2017 of moving rebates to the POS. While this would be a one-time change, it would have an impact to stakeholder costs over time. The long-term impact of this change is highly sensitive to assumptions about how costs and rebates are expected to grow over time, and in particular, how plan and other stakeholder behaviors are altered in reaction to the change. We analyzed the impact to member and government costs over the ten-year period from 2017 to 2026 under the following scenarios:

- **Baseline:** This scenario assumes no pass-through of rebates at the POS. We used assumptions for future cost trends and benefit parameter changes from the 2017 Medicare Trustees Report to project future costs for the Part D program as it exists today. This scenario was used as a baseline to compare the subsequent scenarios.

- **Scenario 1 – POS Rebates, No Behavioral Changes:** In this scenario, we shifted 50% of manufacturer rebates and 100% of pharmacy rebates to the POS in 2017 and modeled the resulting future costs holding all else constant. While it is unlikely that there would not be any changes to plan contracting or formulary strategies when rebates are shifted to the POS, this scenario serves as one potential outcome of what costs may be if rebates were moved to the POS.
- **Scenario 2 – POS Rebates, Modest Market Response:** This scenario is similar to Scenario 1, but we assume that plan sponsors seek to preserve their contracting economics by seeking greater price concessions. In this scenario, we assume price concessions grow gradually over time and that as costs grow and the mix of generic and brand products changes, rebates become a greater proportion of total costs.
- **Scenario 3 – POS Rebates, Strong Market Response:** Lastly, this scenario layers additional formulary changes onto the assumptions used in Scenario 2. We assumed that plans would have a stronger focus on formulary management, resulting in a gradual reduction in costs over time. This cost reduction could be materialized in a number of ways, including but not limited to increased generic utilization, lower trends in specialty utilization and cost, and greater price concessions. For simplicity, we modeled a 0.5% increase in GDR every year for 4 years, beginning in 2019.

In all three POS rebate scenarios, we assumed 50% pass-through of manufacturer rebates and 100% pass-through of pharmacy rebates. CMS’s RFI does not select which pass-through percentage would be required for manufacturer rebates, but shows examples for 33%, 66%, and 90%. We selected 50% as a middle option with half of rebates being shifted. Our assumption of 100% pass-through of pharmacy rebates is consistent with what CMS suggests in the RFI.

The results from each scenario are summarized in Table 3 below. These results all assume 50% of manufacturer rebates and 100% of pharmacy rebates are passed through at the POS. The table shows the total dollar difference from the baseline for each of the three scenarios:

<b>Table 3</b>						
<b>Estimated 10-Year Impact of Moving Rebates to POS (2017-2026)</b>						
	Total Cost Impact (in billions)			% Change from Baseline		
	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3
Total Member Costs	(4.1)	(7.7)	(27.7)	-0.9%	-1.8%	-6.4%
Member Cost Sharing	(12.5)	(13.9)	(24.8)	-4.8%	-5.3%	-9.6%
Member Premium	8.4	6.1	(2.9)	4.8%	3.5%	-1.6%
Total Government Costs	5.8	(8.4)	(72.8)	0.5%	-0.7%	-6.0%
NADS	81.6	80.4	58.5	58.0%	57.1%	41.6%
Federal Reinsurance	(44.4)	(53.3)	(71.1)	-7.0%	-8.4%	-11.2%
LICS	(35.6)	(38.6)	(58.7)	-10.0%	-10.8%	-16.5%
LIPS	4.3	3.1	(1.5)	4.8%	3.5%	-1.6%

Table 3 shows the average member savings relative to the baseline increases as additional behavioral impacts are layered on to each scenario. In particular, member premium in Scenario 3 is lower than in the baseline. While member premiums are expected to increase absent any behavioral shift, if plans are able to strengthen contracting and tighten formularies, total costs and in turn member premiums could decrease.

The impact to each component of government costs also increases with each scenario. Specifically, the following patterns are observed:

- Federal reinsurance savings relative to the baseline ranges from \$44 billion in Scenario 1 (no behavioral changes) to \$71 billion in Scenario 3 (full behavioral changes). The reinsurance savings surpasses the corresponding increase in NADS in Scenario 3.
- Similar to the change in member premium impact from an additional cost in Scenarios 1 and 2 to a premium savings in Scenario 3, LIPS also produces savings relative to the baseline in Scenario 3.
- In total, average government costs would increase moderately in Scenario 1, by about \$6 billion, which is the equivalent of about \$1 PMPM. But when anticipated behavioral changes are accounted for, average government costs over the ten-year period are lower than the baseline by over \$8 billion in Scenario 2 and nearly \$73 billion in Scenario 3. Under Scenario 1, total government costs are higher than the baseline in all years. In Scenarios 2 and 3, government costs are still higher than the baseline in 2017 (the first year of implementation), but the cumulative government impact turns to savings in future years. The turn to savings occurs in 2021 in Scenario 2 and in 2019 in Scenario 3.

## COST OFFSETS

While we believe the net impact of this policy change would most likely result in a reduction in total Part D spending, the policy would be likely to improve adherence among NLI members. Currently, a member taking one or more brand or specialty medications may choose to stop taking the medication when faced with higher cost sharing in the coverage gap phase of the benefit. But if rebates are reflected at the POS, this member might perhaps no longer reach the coverage gap or spend less time in that phase, which could impact the decision to continue taking the medication.

Improvements in adherence would increase overall Part D costs, though it is unlikely to have a significant impact given the relatively small number of members most impacted by this change. While better medication adherence increases total Part D spending, it would likely contribute to offsetting savings in medical spending. A CBO analysis estimated that “a 1 percent increase in the number of prescriptions filled by beneficiaries would cause Medicare’s spending on medical services to fall by roughly one-fifth of one percent.”<sup>3</sup> Another study found that adherence improvements among metformin diabetic treatments resulted in \$37 in medical savings for every additional \$1 spent on more medications<sup>4</sup>.

## ILLUSTRATIVE MEMBER COST SHARING EXAMPLES

Tables 2 and 3 estimated the impact of moving rebates to the POS at a national average level, across all plans and members. Because both pharmacy and manufacturer rebates vary by medication, individual members will be impacted differently depending on the mix of products they are taking. We looked at the impact of moving rebates to the POS for a few theoretical members taking different types of brand, generic, and specialty products. All numbers in the following tables are expressed on a per member per year (PMPY) basis and assume 100% pass-through of all rebates for simplicity.

For a hypothetical member taking two brands and two generics, we expect member cost sharing to decrease. This example is illustrated in Table 4 below:

---

<sup>3</sup> Congressional Budget Office. “Offsetting Effects of Prescription Drug Use on Medicare’s Spending for Medical Services.” November 2012.

<sup>4</sup> Patterson, Julie, et. al. “Cost-Benefit of Appointment-Based Medication Synchronization in Community Pharmacies.” *The American Journal of Managed Care*, Vol 22, No 9. September 2016.

**Table 4**  
**Estimated Annual Impact of Moving Rebates to POS - Member Taking 2 Brands, 2 Generics**

	<b>Deductible</b>	<b>ICL</b>	<b>Gap</b>	<b>Catastrophic</b>	<b>Total Cost Sharing</b>	<b>Annual Premium</b>	<b>Grand Total</b>
2017 Baseline	400	825	1,656	106	<b>2,987</b>	427	<b>3,414</b>
Rebates at POS	400	825	1,299	0	<b>2,524</b>	461	<b>2,985</b>
Difference	0	0	(357)	(106)	<b>(463)</b>	34	<b>(429)</b>

The table shows how claim costs are adjudicated to the member, assuming a defined standard benefit. In this example, rebates are assumed to be 30% of allowed costs for the two brands and \$5 per script for both brands and generics. When rebates are at the POS, the values are the same in the deductible and ICL phases because this member still reaches the coverage gap, but gap and catastrophic spending are different because total costs are lower.

As seen in Table 4, total annual member costs for this member are \$3,414 PMPY in the baseline. This includes the member's cost sharing as well as premium (assumed to be equal to the NAMP). This total is reduced to \$2,985 PMPY, for an annual savings of \$429, when rebates are reflected at the POS, despite the increase in member premium.

In the baseline of this example, the member would reach the catastrophic phase in October, at which point the federal government would pay reinsurance. When rebates are moved to the POS, the member no longer reaches TrOOP, eliminating all reinsurance claims. The NADS increases (as was seen previously in Table 2), but total government spending would be reduced by about half due to the elimination of reinsurance claims.

On the other hand, Table 5 shows how a very low-cost member is impacted by this change. In this case, we assumed a member taking a single generic medication with an average monthly cost of \$10 and filled through a mail order pharmacy (we assume no rebates for mail order prescriptions):

**Table 5**  
**Estimated Annual Impact of Moving Rebates to POS - Member Taking 1 Mail Order Generic**

	<b>Deductible</b>	<b>ICL</b>	<b>Gap</b>	<b>Catastrophic</b>	<b>Total Cost Sharing</b>	<b>Annual Premium</b>	<b>Grand Total</b>
2017 Baseline	120	0	0	0	<b>120</b>	427	<b>547</b>
Rebates at POS	120	0	0	0	<b>120</b>	461	<b>581</b>
Difference	0	0	0	0	<b>0</b>	34	<b>34</b>

This generic user remains in the deductible phase all year. As a result, the plan does not pay any claim costs. When rebates are shifted to the POS, total member costs increase since this member must pay higher premium without any reduction in cost sharing. Member cost sharing does not change because we assume a mail order generic medication would not have any pharmacy rebates or manufacturer rebates.

Very low cost members like the sample member in Table 5 are the primary types of members who are unlikely to benefit from this shift of rebates to POS absent a strong market response. In the above example, the illustrative low-cost member would be expected to have an average annual increase in premium of approximately \$34 in 2017. However, actual premium increases could vary widely by plan and some plans could experience a reduction in premium, so it is possible that not all low-utilizing members would experience premium increases with the change. Further, the negative impact to these low cost members is significantly less than the positive impact to many high cost beneficiaries from this potential change.

## TRANSITION CONSIDERATIONS

As discussed previously, there are many possible behavioral shifts that could result in reaction to rebates moving to the POS. In particular, over the long term, plan formulary strategies would likely evolve to add increased emphasis on targeting medications with the lowest POS costs. Long-term plan strategies could include tightened formularies, increased formulary management techniques, and additional pressures for greater price concessions.

Nevertheless, in the shorter term, as the market transitions to the new incentives created by the policy, other potential one-time market impacts could occur, depending on how the policy is implemented.

### Preserving Confidentiality of Data

Pharmaceutical industry stakeholders typically keep contractual details surrounding rebate agreements confidential, as they are an important tool used between competing manufacturer and competing plan sponsors. The CMS RFI recognizes the desire to preserve confidentiality of rebate contracting by proposing class-level rebate application. Manufacturers may not have as strong incentives to provide better rebates when the value is being shared with competitors in such a way as to potentially reduce their own market share. Our analysis assumes product-level, rather than class-level, application of rebates. Many product-level approaches can be structured in a way to preserve confidentiality, therefore maintaining the competitive advantages of rebates.

### Impact Across Different Plans

The impact of this change will certainly vary from plan to plan. Plans without any preferred pharmacy network rebate arrangements would benefit from the increase in NADS without necessarily having as large of a change to POS costs and plan liabilities as plans with preferred pharmacy networks that pay rebates. On the other hand, plans with higher rebates would experience larger increases in premiums, which could cause enrollment shifts towards plans with lower premiums. This type of varying impact also exists as manufacturer rebates are shifted to the POS, given different carriers have different levels of negotiated rebates. The disparity related to manufacturer rebates is likely to be less pronounced since presumably all carriers receive some level of manufacturer rebates, although they can vary significantly based on prescription volume and tier placements. On average, PDP plans with high rebate levels (both manufacturer and pharmacy) would be at risk of higher premium increases and losing membership, while MAPD plans, which tend to have lower rebates, may benefit from lower premium increases and enrollment gains.

Note, this counterintuitive premium impact would be a one-time event when the transition from rebates to POS discounts takes place. In future years, the playing field would be leveled and plans with higher rebates / discounts would be better positioned to reduce premiums than plans with lower rebates / discounts, because these plans have a lower plan liability.

### Risk Scores

The increase in direct subsidy puts more importance on risk scores, since the direct subsidy paid to the plan is risk-adjusted based on the average risk score across all members enrolled in the plan. As the direct subsidy increases in dollar value, the value of the multiplicative risk adjustment increases as well. As a result, it would be important for CMS to consider changes to the risk adjustment model in Part D and assure that lower POS costs are used to re-calibrate the risk adjuster (which now uses pre-rebate costs to set coefficient values). While it is hard to predict the exact changes resulting from risk adjuster updates (given other moving parts), one might expect to see lower risk adjustment factors for conditions associated with highly rebated products with this change. Any change to the CMS risk adjustment model could result in either higher or lower revenue for different plans.



## IV. METHODOLOGY AND ASSUMPTIONS

We used Milliman's 2017 Part D Analysis and Rating Tool (DART) to complete this analysis. This model is designed to project 2015 data to 2017 for the purpose of creating Medicare Part D bids. The model is loaded with Milliman manual rate data. The manual rates, adjustment factors, assumed demographics, and risk scores in the Milliman Medicare Part D pricing models are based on Medicare Part D experience including over 60 million member months across 34 U.S. regions and Puerto Rico. Our model relies on separate LI and NLI claim probability distributions providing allowed spend levels based on the average price for medications split by product type and distribution channel.

For 2017 values, we relied on the 2015 manual rate data described above and applied 2 years of trend and generic pipeline changes. Average GDR, contracting, and non-benefit expense assumptions were taken from a Milliman study (the 2017 Medicare Part D PBM Survey), which polled Part D plan sponsors on the assumptions underlying their 2017 Part D bid development. We assumed the 2017 defined standard benefit. We projected allowed costs and risk scores to 2017 using our best average estimates of trends. We also applied additional improvement in GDR and contracting terms to calibrate to the 2017 national average amounts.

For 2018 values, we used a similar approach as for 2017, with an additional year of trend, the 2018 defined standard benefit, and calibration to the 2018 national average amounts. In all future years, we applied annual trends to gross costs and the Part D benefit parameters using information from the 2017 Medicare Trustees report.

We used public enrollment files from CMS to estimate the proportion of LI and NLI members nationwide. To estimate LIPS, we assumed that on average, 95% of LI premiums are paid by the government through premium subsidies.

To convert rebates to the POS, we calculated the average wholesale price (AWP) discount required to achieve the same allowed cost net of rebates as in the baseline scenario. Manufacturer rebates were assumed to apply to specialty and brand prescriptions only whereas pharmacy rebate payments were assumed to apply to all prescription types. Brand and specialty tiers were assumed to be associated with a majority of rebate dollars, so we modeled a greater proportion of the total POS savings on brand and specialty tiers when converting rebates to the POS. In our 2017 baseline scenario, we assumed total rebates (manufacturer and pharmacy) were equal to about 20.5% of allowed costs, and that 15% of total rebates were attributable to pharmacy rebates. In future years, we held the 2017 AWP discount constant.

In Scenario 2, we allowed rebates as a percentage of total costs to increase in each future year of the 10-year projection. This resulted in an ending rebate of about 23% of allowed costs by 2026. In Scenario 3, we used this same rebate growth assumption, and also assumed increases in GDR. We assumed a 0.5% increase in GDR in 2019, 2020, 2021, and 2022.

In the individual member examples, we assumed preferred retail pharmacy rebates of \$5 per prescription and manufacturer rebates of 30% of allowed costs.



## V. CAVEATS, LIMITATIONS, AND QUALIFICATIONS

This report was developed to help PhRMA better understand the impact of measures to provide cost relief to certain Medicare Part D beneficiaries. This information may not be appropriate, and should not be used, for other purposes.

The information presented in this report is provided for PhRMA. PhRMA may share this information with outside entities with Milliman's permission. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work product. Any third party recipient of this work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs. Any releases of this report to a third party should be in its entirety. Milliman does not endorse any public policy or advocacy position on matters discussed in this report.

Please note that in preparing our estimates, we relied upon a Milliman database of 2015 national Medicare Part D claims and public information from CMS and the Medicare Trustees Report. Actual results will certainly vary for specific health plans due to differences in trends, discount arrangements, formulary, utilization patterns, and rebate arrangements, among other factors.

Note that we did not attempt to evaluate every possible change in stakeholder behavior resulting from these program changes. Results will vary based on how members and other stakeholders react to the changes if implemented.

Katie Holcomb and Troy Filipek are actuaries for Milliman, members of the American Academy of Actuaries, and meet the Qualification Standards of the Academy to render the actuarial opinion contained herein. To the best of our knowledge and belief, this information is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices.

This report outlines the review and opinions of the author and not necessarily that of Milliman. The terms of Milliman's Master Services Agreement with PhRMA, effective January 19, 2016 apply to this information and its use.