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GLENN GIESE

KELLY BACKES



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# SAVINGS GENERATED BY PHARMACY BENEFIT MANAGERS IN THE MEDICARE PART D PROGRAM

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GLENN GIESE  
FSA, MAAA

RANDALL FITZPATRICK  
FSA, MAAA

KEVIN MEYER  
FSA, MAAA



# CONTENTS

Findings ..... 1

Introduction ..... 2

Analysis ..... 3

Results..... 5

Considerations and Limitations ..... 7

## Background and Findings

More than 39 million seniors receive coverage for prescription drugs through the Medicare Part D program. As of 2014, aggregate Part D costs reached \$80.5 billion and are expected to reach \$215.1 billion, covering 55 million seniors by 2025.<sup>1</sup> Health plans and pharmacy benefit managers (PBMs) play a significant role in controlling costs in the Part D program. Specifically, PBMs negotiate price concessions with drug manufacturers, create pharmacy networks and negotiate price discounts with pharmacies, create formularies that deliver effective clinical outcomes and incentivize a more affordable drug mix, encourage appropriate and clinically sound drug utilization, and deploy clinical programs that engage members and increase patient adherence.

Oliver Wyman Actuarial Consulting, Inc. (“Oliver Wyman”) estimates Part D costs would be 58 percent higher absent PBM management tools and PBM pricing negotiations with pharmacies and manufacturers. In aggregate, we estimate PBMs saved the Part D program \$47 billion in 2014 and project they will save the program \$896 billion from 2016 to 2025. The \$896 billion in savings comes from \$604 billion in PBM-negotiated discounts and price concessions; \$243 billion from shifting utilization toward lower cost, effective products, such as generics; and more than \$49 billion from instituting evidence-based management of pharmacy benefits. In Table 1, we have summarized the savings estimates in billions and on a per member per month (PMPM) basis by calendar year. We estimate that Center for Medicare and Medicaid Services (CMS) and Part D enrollees will pay, on average, \$1,800 less per year for their drug benefits due to PBM activities.

**Table 1**

Calendar Year	Savings from PBMs (in billions)				Savings from PBMs (PMPM)				
	Negotiated Savings	Drug Mix Savings	Evidence-based Management	Total Savings	Negotiated Savings	Drug Mix Savings	Evidence-based Management	Total Savings	PBPY Savings
2014	\$31.7	\$12.8	\$2.5	\$47.0	\$69.92	\$28.14	\$5.62	\$103.67	\$1,244
2016	37.2	15.0	3.0	55.2	75.12	30.23	6.04	111.39	1,337
2017	40.8	16.4	3.3	60.5	78.84	31.73	6.33	116.90	1,403
2018	47.2	19.0	3.8	69.9	87.33	35.15	7.02	129.49	1,554
2019	52.8	21.3	4.2	78.3	94.68	38.11	7.61	140.39	1,685
2020	58.0	23.3	4.7	86.0	100.47	40.44	8.07	148.98	1,788
2021	62.8	25.3	5.0	93.1	105.72	42.55	8.49	156.76	1,881
2022	68.0	27.4	5.5	100.8	111.04	44.69	8.92	164.66	1,976
2023	73.5	29.6	5.9	108.9	116.85	47.03	9.39	173.26	2,079
2024	79.4	31.9	6.4	117.7	123.42	49.67	9.92	183.01	2,196
2025	84.7	34.1	6.8	125.7	128.39	51.68	10.32	190.39	2,285
2016-2025	\$604.3	\$243.2	\$48.6	\$896.1	\$103.73	\$41.75	\$8.33	\$153.81	\$1,846

The remainder of this report outlines the analysis undertaken by Oliver Wyman and presents the details of our results.

<sup>1</sup> <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/reportstrustfunds/downloads/tr2016.pdf>

## Introduction

The Coalition for Affordable Prescription Drugs (CAPD) engaged Oliver Wyman to analyze the financial impact that Pharmacy Benefit Managers (PBMs) are having on the Medicare Part D program. In particular, Oliver Wyman performed an analysis that evaluated the savings generated for both the Centers for Medicare & Medicaid Services (CMS) and Medicare Part D enrollees through negotiation of manufacturer price concessions and pharmacy discounts, and through the use of formulary management tools.

The passing of the Medicare Prescription Drug Improvement and Modernization Act of 2003 (MMA) brought on the biggest changes to the Medicare program in more than 35 years. Under the MMA, private health plans approved by Medicare became known as Medicare Advantage Plans. These plans are generally referred to as "Part C" or "MA Plans." In addition, the MMA expanded Medicare to include an optional prescription drug benefit, "Part D," which went into effect in 2006.

Medicare beneficiaries must be signed up for benefits under Medicare Part A and/or Part B to be eligible for prescription drug coverage under a Part D plan. Eligible beneficiaries can obtain the Part D drug benefit by signing up for one of two different types of plans sold by health plans. Beneficiaries can join a Part C health plan that covers all hospital and medical services covered by Medicare Part A and Part B. This plan also typically covers additional health care costs like prescription drugs (MA-PD). Alternatively, beneficiaries can join a standalone Prescription Drug Plan (PDP) for drug coverage only. About two-thirds of all Medicare beneficiaries are enrolled directly in Part D or receive Part D benefits through an individual MA-PD health plan. Another large group of Medicare beneficiaries receives prescription drug coverage under plans offered by former employers.

PBMs have been an important part of the Part D program since its inception in 2006. In addition to paying claims, formulary management, compliance review, and reporting, PBMs also negotiate discounts on drug costs with pharmacies and negotiate price concessions from manufacturers of brand name drugs. Additionally, PBMs leverage evidence-based benefit management tools to reduce wasteful use of drugs and implement patient adherence programs.

The focus of this analysis was to estimate the financial savings PBMs generate in the Medicare Part D program.

## Analysis

In January through May preceding the calendar year of coverage, health plans develop a Part D bid that represents the Plan's best estimate of the cost to provide prescription drug coverage to members, including an estimation of administrative expenses and risk/profit. The bid specifically represents the cost to provide coverage for the Medicare Defined Standard plan. As part of this analysis, Oliver Wyman replicated the national average bid in 2014 using market average pharmacy discounts and Part D price concessions. We also estimated how the results would change absent pharmacy discounts and Part D price concessions. In addition, we evaluated the impact of drug spending absent formulary management tools; specifically, drug mix (encouraging usage of lower cost generic medications) and evidence-based benefit management tools. The remainder of this section outlines the analysis we undertook.

### Model Calibration

Our first task was to calibrate the Oliver Wyman proprietary Part D pricing model such that the data is representative of national average Part D statistics. Using data from Oliver Wyman's client data and data provided by CMS, we calibrated our model for the 2014 calendar year such that the national program statistics shown in the table below were met. We utilized 2014 as the basis of our analysis since this is the most recent year Medical Loss Ratio (MLR) reports are published by CMS. The model calibration was accomplished by randomly sampling more than 250,000 member months that are representative of the national average.

In Table 2, we report the national average statistics for 2014, to which we calibrated our model.

**Table 2**

	Description	2014 National Statistics (PMPM)
A	National Average Part D Bid	\$75.88
B	Federal Reinsurance	\$51.26
C = A + B	Gross Cost	\$127.14
D = 25.5% x C	Base Beneficiary Premium	\$32.42
E = A - D	Direct Subsidy	\$43.46
	Low Income Membership %	37%

### Assumptions

PBMs are able to obtain volume discounts from pharmacies based on the size of their covered lives. Pharmacies are willing to offer discounts if PBMs can guarantee that large numbers of Part D members will fill their prescriptions at their particular pharmacy. In order to evaluate this piece of the savings generated by PBMs, we needed to estimate the pharmacy cost that would be paid, absent pharmacy discounts. For this analysis, we relied on a pricing discount study completed by the General Accounting Office (GAO).<sup>2</sup> Based on the GAO report, we estimate that the drug price charged to individuals without prescription drug insurance for brand and generic drugs are as follows:

- Retail brand drugs – 18 percent higher than the price negotiated by PBMs
- Mail-order brand drugs – 27 percent higher than the price negotiated by PBMs
- Retail generic drugs – 47 percent higher than the price negotiated by PBMs

<sup>2</sup> <http://www.gao.gov/new.items/d03196.pdf>

- Mail-order generic drugs – 53 percent higher than the price negotiated by PBMs
- The report did not break out specialty medications separately, so we assumed no discounts or price concessions on these products (had we incorporated such discounts and price concessions our estimated savings would likely have been higher)

Part D Health Plans create lists of drugs based on their medical effectiveness and the cost that, in most cases, must be adhered to; otherwise, that drug will not be a covered benefit. These drug lists are called formularies. Pharmaceutical companies want their drugs included on the formularies that are offered by health plans to members. Using its collective covered lives, a PBM negotiates price concessions from pharmaceutical companies for favorable formulary placement. These price concessions are ultimately passed on by the PBM to the Part D health plans and consumers in the form of lower premium costs and lower out of pocket costs.

The Affordable Care Act (ACA), beginning in 2011, required all health insurers to publicly report aggregated state-level financial data, including income from premiums and expenditures on health care claims, quality improvement, taxes, licensing and regulatory fees. Also included in the MLR reporting are Part D price concessions; and within the 2014 MLR reports, health plans reported Part D price concessions of \$28.59 PMPM in aggregate.

In addition to formularies, health plans utilize tiered cost-sharing to incentivize members to use lower cost alternatives by requiring the member to pay a larger share of the cost for brand medications. To estimate the impact tiered cost-sharing has on total Part D drug costs, we utilized the difference in generic fill rate (GFR) between non-low-income and low-income enrollees in the Part D program. Under Part D, low-income individuals pay a nominal copay that does not vary significantly between generic and brand drugs. This limits Part D health plans' ability to encourage members to use lower cost drug options. We observe the GFR is 4 percent to 5 percent lower for low-income members when compared to the GFR for non-low-income members. In our analysis, we estimated the PBM savings for drug mix assuming the GFR would be 5 percent lower than what has currently been achieved in the Part D program.

PBMs also make use of evidence-based programs to reduce inappropriate use of medications and improve patient adherence. The programs' effectiveness varies with the intensity of the use of specific tools. Based on a study completed by Visante, savings from evidence-based benefit management ranges from 1 percent to 3 percent.<sup>3</sup> In our results, we have assumed these programs have resulted in drug cost savings of 2 percent.

Health plans incur both pharmacy costs (the actual costs of prescriptions) and administrative costs, which include salaries, rent, marketing, PBM fees, etc. The ACA requires that health plans participating in Part C and Part D programs are held to an 85 percent loss ratio. In our analysis, we have assumed that the administrative costs and profit load combined is 15 percent of revenue in all scenarios, which is in line with expectations for an 85 percent MLR plan.

Our model was limited to Part D enrollees in individual Medicare Advantage and Prescription Drug Plans, and excluded POS Contractor, PACE, 1876 Cost and EGWP plans. To estimate the impact of PBMs on the entire Part D program, we then applied the savings estimates from the individual market to all plans under the Part D program using total expenditures as reported by CMS in the 2016 Medicare Trustees Report (program-wide results are presented in Table 6).

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<sup>3</sup> <http://thatwhatpbmsdo.com/wp-content/uploads/2016/02/visante-pbm-savings-study-Feb-2016.pdf>

## Results

We ran the Oliver Wyman Part D pricing model under three scenarios:

1. With the pharmacy discounts and price concessions described above;
2. Without the pharmacy discounts and price concessions; and
3. Assuming the GFR would decrease by 5 percent and members would utilize higher cost brand medications.

We then recorded the Part D costs resulting from each analysis, including member premiums, CMS direct subsidy, federal reinsurance and low-income cost sharing subsidy amounts that resulted from each iteration. In Table 3, we display the change in 2014 national average results absent pharmacy discounts and manufacturer price concessions, and with a lower GFR.<sup>4</sup> We estimate that beneficiary premiums in the individual market would have been \$53.95 per month in 2014, \$21.53 (66 percent) higher if not for PBM activities.

**Table 3**

Description	(A)	(B)	(C)	(C) - (A)	(C) / (A) - 1
	2014 National Statistics (PMPM)	2014 Est. Excluding Negotiated Savings	2014 Est. with 5% reduction in GFR and Excluding Negotiated Savings	Total Change (PMPM)	Total Change (%)
National Average Part D Bid	\$75.88	\$118.99	\$124.84	\$48.96	65%
Federal Reinsurance	\$51.26	\$70.77	\$86.75	\$35.49	69%
Gross Cost	\$127.14	\$189.76	\$211.59	\$84.45	66%
Base Beneficiary Premium	\$32.42	\$48.39	\$53.95	\$21.53	66%
Direct Subsidy	\$43.46	\$70.60	\$70.89	\$27.43	63%
Low-Income Cost-Sharing Subsidy	\$63.66	\$76.83	\$85.51	\$21.84	34%
Low Income Membership %	37%	37%	37%		

The gross cost plus the low-income cost-sharing subsidy amounts, as shown in Table 3, represent the total Part D cost estimates to CMS and Part D enrollees. Based on the difference between our model iterations, we estimate Part D costs would be 56 percent higher in 2014 absent improved drug mix, pharmacy discounts and manufacturer price concessions PBMs negotiated with pharmacies and drug manufacturers. In 2014, there were 37.8 million seniors enrolled in Part D with \$80.5 billion in expenditures for CMS and Part D enrollees. Consequently, we estimate Part D enrollees and CMS saved \$44.5 billion in 2014 due to drug mix, pharmacy discounts and manufacturer price concessions PBMs negotiated with pharmacies and drug manufacturers. Assuming an additional 2 percent savings for PBM evidence-based benefit management programs, PBMs saved an additional \$2.5 billion in Part D cost in 2014, which results in a total savings of \$47 billion, or \$104 PMPM.

Our \$47.0 billion estimate can be first broken down into a savings of \$37.5 billion resulting from reductions in the Direct Subsidy, Federal Reinsurance and LICs. In addition, \$9.5 billion is from the reduction in member premiums. We note that savings in member premiums includes the premium CMS subsidizes through the low-income premium subsidy program.

Table 4 provides the results of our analysis broken down between CMS costs and Part D enrollee premiums. These results are consistent with what is reported in Table 3, just in a different format.

<sup>4</sup> The results are reflective of individual Medicare Advantage and Prescription Drug Plans, and excluded POS Contractor, PACE, 1876 Cost, and EGWP plans

SAVINGS GENERATED BY PHARMACY BENEFIT MANAGERS IN THE PART D PROGRAM

**Table 4**

Description	2014 National Statistics (PMPM)	2014 Est. Excluding Price Concessions and Discounts	2014 Est. with 5% reduction in GFR and Excluding Negotiated Savings	PMPM Savings Due to Price Concessions and Discounts	PMPM Savings Due to Drug Mix	Total Savings (PMPM)	Total Change (%)
Direct Subsidy	\$43.46	\$70.60	\$70.89	(\$27.14)	(\$0.28)	(\$27.43)	63%
Federal Reinsurance	\$51.26	\$70.77	\$86.75	(\$19.51)	(\$15.98)	(\$35.49)	69%
Low Income Cost Sharing Subsidy	\$63.66	\$76.83	\$85.51	(\$13.17)	(\$8.67)	(\$21.84)	34%
Total CMS Costs	\$158.38	\$218.20	\$243.14	(\$59.82)	(\$24.94)	(\$84.76)	54%
Member Premium	\$32.42	\$48.39	\$53.95	(\$15.97)	(\$5.57)	(\$21.53)	66%
Total Costs	\$190.80	\$266.59	\$297.09	(\$75.79)	(\$30.50)	(\$106.29)	56%

Based on our analysis, we estimate Part D costs would be roughly 56 percent higher without the savings generated by PBMs. We assume 2 percent savings for evidence-based benefit management programs would result in Part D costs roughly 58 percent higher than what we have observed in the current Part D market.

As stated earlier, our model estimates the impact of PBM activities on the individual market, which excludes enrollees in POS Contractor, PACE, 1876 Cost and EGWP plans. In order to estimate the impact of PBMs on the entirety of the Part D program, we applied our savings estimate to program-wide data from CMS. Table 5 shows the aggregate Part D costs as published by CMS in the 2016 Medicare Trustees report.<sup>5</sup>

**Table 5**

2016 Medicare Trustees Report - Aggregate Part D Reimbursement Amounts (in billions)								
Calendar Year	Member Premium	Direct Subsidy	Reinsurance	LI Subsidy	RDS	Risk Sharing/ Other	Total	Total Part D Costs excluding RDS
2014	\$10.5	\$18.6	\$27.2	\$24.3	\$1.5	(\$0.1)	\$82.0	\$80.5
2016	\$12.8	\$17.8	\$38.7	\$25.8	\$1.2	(\$0.6)	\$95.7	\$94.5
2017	\$16.0	\$15.2	\$44.4	\$27.5	\$1.1	\$0.4	\$104.6	\$103.5
2018	\$19.8	\$18.3	\$51.5	\$30.2	\$1.0	(\$0.1)	\$120.7	\$119.7
2019	\$22.5	\$20.7	\$58.0	\$33.0	\$0.9	(\$0.1)	\$135.0	\$134.1
2020	\$24.8	\$24.4	\$62.3	\$35.9	\$0.8	(\$0.2)	\$148.0	\$147.2
2021	\$26.9	\$26.4	\$67.6	\$38.7	\$0.9	(\$0.2)	\$160.3	\$159.4
2022	\$29.2	\$28.4	\$73.4	\$41.7	\$0.9	(\$0.2)	\$173.4	\$172.5
2023	\$31.7	\$30.6	\$79.5	\$45.0	\$1.0	(\$0.3)	\$187.5	\$186.5
2024	\$34.3	\$33.0	\$86.1	\$48.4	\$1.1	(\$0.3)	\$202.6	\$201.5
2025	\$36.7	\$35.0	\$92.2	\$51.5	\$1.1	(\$0.3)	\$216.2	\$215.1
2016-2025	\$254.7	\$249.8	\$653.7	\$377.7	\$10.0	(\$1.9)	\$1,544.0	\$1,534.0

If we assume Part D expenditures would be roughly 58 percent higher if PBM savings initiatives did not exist, we project Part D expenditures from 2016 to 2025 would be \$890 billion higher than what CMS is currently projecting. In Table 6 we provide the savings estimates by year in billions and on a PMPM basis for the entire Part D population. Our projections assume the impact of negotiated manufacturer price concessions, pharmacy discounts and formulary management tools will be consistent over time.

**Table 6**

<sup>5</sup><https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/reportstrustfunds/downloads/tr2016.pdf>



SAVINGS GENERATED BY PHARMACY BENEFIT MANAGERS IN THE PART D PROGRAM

Savings from PBMs (in billions)					Savings from PBMs (PMPM)				
Calendar Year	Negotiated Savings	Drug Mix Savings	Evidence-based Management	Total Savings	Negotiated Savings	Drug Mix Savings	Evidence-based Management	Total Savings	PBPY Savings
2014	\$31.7	\$12.8	\$2.5	\$47.0	\$69.92	\$28.14	\$5.62	\$103.67	\$1,244
2016	37.2	15.0	3.0	55.2	75.12	30.23	6.04	111.39	1,337
2017	40.8	16.4	3.3	60.5	78.84	31.73	6.33	116.90	1,403
2018	47.2	19.0	3.8	69.9	87.33	35.15	7.02	129.49	1,554
2019	52.8	21.3	4.2	78.3	94.68	38.11	7.61	140.39	1,685
2020	58.0	23.3	4.7	86.0	100.47	40.44	8.07	148.98	1,788
2021	62.8	25.3	5.0	93.1	105.72	42.55	8.49	156.76	1,881
2022	68.0	27.4	5.5	100.8	111.04	44.69	8.92	164.66	1,976
2023	73.5	29.6	5.9	108.9	116.85	47.03	9.39	173.26	2,079
2024	79.4	31.9	6.4	117.7	123.42	49.67	9.92	183.01	2,196
2025	84.7	34.1	6.8	125.7	128.39	51.68	10.32	190.39	2,285
2016-2025	\$604.3	\$243.2	\$48.6	\$896.1	\$103.73	\$41.75	\$8.33	\$153.81	\$1,846

Our model estimates that over the 2016-2025 period, PBM activities will save the Medicare Part D program \$604.3 billion due to discounts and price concessions; \$243.2 billion from shifting drug mix toward lower cost generics; and \$48.6 billion from evidence-based benefit management for a total of \$896.1 billion in savings. On average, CMS and Part D beneficiaries will save \$153.81 per member, per month over the period, or more than \$1,800 per member, per year.

## Considerations and Limitations

The estimated savings will vary considerably by PBM, health plan, and region. The objective of this report is to estimate PBM savings for the Part D program across the entire country.<sup>6</sup> The opinions and conclusions expressed herein reflect technical assessments and analyses, and do not reflect statements or views with respect to public policy.

Our projections involve estimates of future events and are subject to economic variations from expected values. We have not anticipated any changes to the regulatory or economic environment that might affect the results we show here. For these reasons, no assurance can be given that the emergence of actual results will correspond to the projections in this analysis.

Oliver Wyman shall not have any liability to any third party in respect of this report or any actions taken or decisions made as a consequence of anything set forth herein. The opinions expressed herein are valid only for the purpose stated herein and as of the date hereof. Information furnished by others, upon which all or portions of this report are based, is believed to be reliable but has not been verified. No warranty is given as to the accuracy of such information. Public information and industry and statistical data are from sources Oliver Wyman deems to be reliable; however, Oliver Wyman makes no representation as to the accuracy or completeness of such information and has accepted the information without further verification. No responsibility is taken for changes in market conditions or laws or regulations and no obligation is assumed to revise this report to reflect changes, events or conditions, which occur subsequent to the date hereof.

<sup>6</sup> The Actuarial Practice of Oliver Wyman was commissioned to prepare this report by the Glover Park Group on behalf of the Coalition for Affordable Prescription Drugs.