

MILLIMAN REPORT

Point of Sale Rebate Analysis in the Commercial Market:

Sharing rebates may lower patient costs and likely has minimal impact on premiums

[Anna Bungler](#), ASA, MAAA

[Jason Gomberg](#), FSA, MAAA

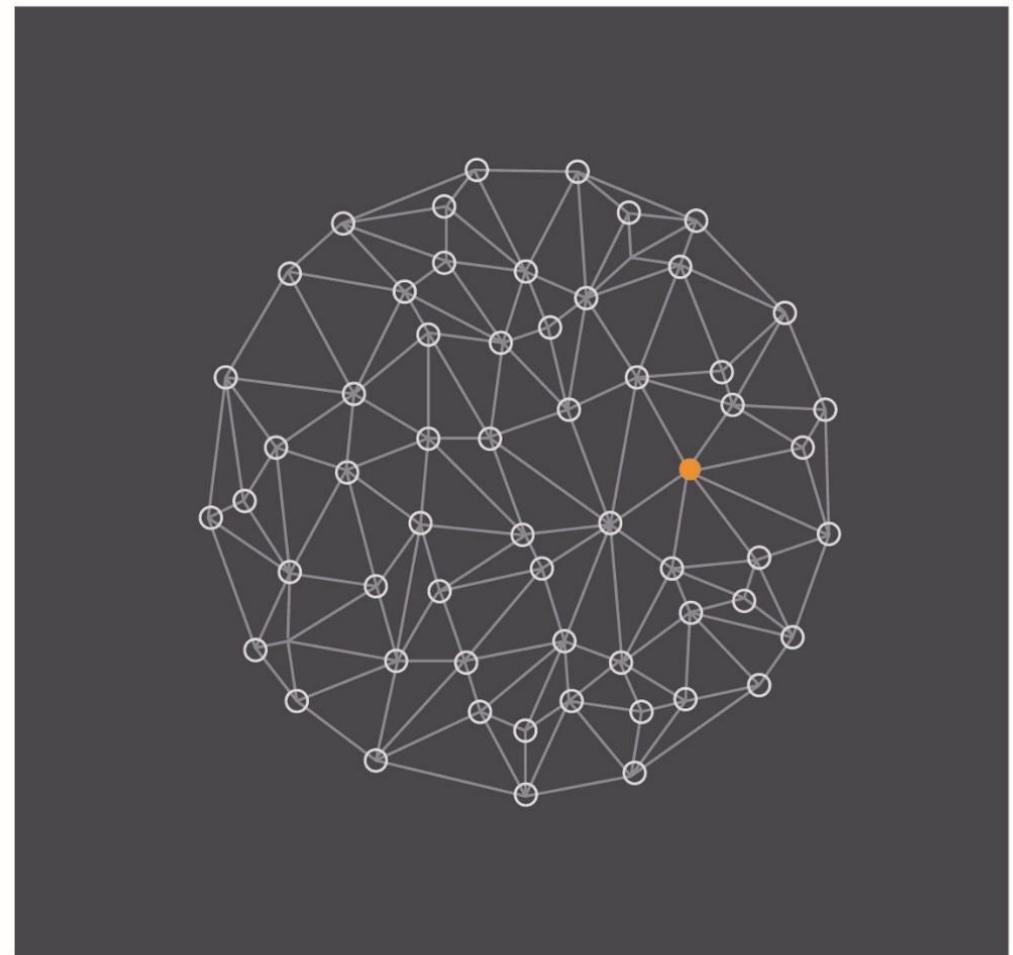
[Michael Hunter](#), PharmD

[Jason Petroske](#), FSA, MAAA

Commissioned by Pharmaceutical
Researchers and Manufacturers of
America

October 2017

milliman.com



Pharmaceutical manufacturers often pay significant rebates to pharmacy benefit managers (PBMs) or payers (including plan sponsors and health plans) on brand medications, reducing the cost of pharmacy benefits. Traditionally, pharmaceutical rebates provided to payers are not shared directly with a member; rather, payers use rebates to reduce their overall costs which often lowers member premium rates. Under this approach, a member using brand medications has the same out-of-pocket cost (OOP) for the prescriptions regardless of whether a rebate was received.

There has been heightened interest in understanding the dynamics, challenges, and impacts of passing rebates directly to a member at the point of sale (POS). This interest is due, in part, to the rise in prevalence of high deductible health plans (HDHPs) and coinsurance-based benefit designs, which expose the member to the underlying price of the medication. The interest is also a byproduct of increases in the list price of brand medications, along with the corresponding rise in rebates to mitigate payer costs. PBMs have the ability to administer rebates at POS for their clients and have shown willingness to do so.^{1,2}

Results

Using Milliman's proprietary Claims Simulation Model (CSM) and a national commercial claims data set, we modeled the impact of applying all rebates at POS and observed the resulting reallocation in payer costs and member cost sharing relative to a baseline scenario across varying plan designs typically found in the employer market. Our analysis focuses on the commercial (under age 65) market, as the considerations and dynamics in the Medicare-eligible market will vary. These plan designs include (see "Methodology" for details):

- A traditional preferred provider organization (PPO) plan
- A high-deductible health plan with pharmacy copays after deductible ("Copay HDHP")
- A HDHP with pharmacy coinsurance after deductible ("Coinsurance HDHP")

To better gauge the variation in cost sharing at the member level, we also developed hypothetical "patient profiles"—each with a unique condition represented by specific pharmacy utilization data. Our analysis demonstrates moving rebates to the POS would result in the following:

- **Minimal plan cost increases.** We find plan costs increase by an average of 1.0% or less, depending on plan design and a member's pharmacy utilization (see Figures 2 and 3). We anticipate these plan costs may result in higher premium rates or benefit reductions, although as illustrated below, this impact is minimal. The table in Figure 1 shows the variation in plan costs for traditional PPOs as compared to Copay or Coinsurance HDHPs.
- **Patients in HDHPs will see the largest reduction in out-of-pocket costs.** Of the plan designs observed, members in the "Coinsurance HDHP" will see the greatest savings when rebates move to the POS (see Figure 2 for the complex diabetic patients example). The total cost reduction will vary depending on the member's baseline OOP spend and will be distributed over the portion of members taking rebatable brand products who are in a cost-sharing phase of the plan (deductible or coinsurance). 50% of members in the Coinsurance HDHP below have costs between \$2,800 and \$5,600.
- **Potentially significant per script reductions in member costs at the pharmacy for brand prescriptions.** Patients whose pharmacy cost sharing is in the deductible or coinsurance phase of a "Coinsurance HDHP" could see POS cost reductions averaging over \$200 a month per script. The table in Figure 3 summarizes the potential cost reduction for patients enrolled in a "Coinsurance HDHP" with varying pharmacy utilization when applying POS rebates.

Figure 1: Plan Cost* Impact of Rebates at Point of Sale (POS)

	PLAN TYPE:		
	TRAD. PPO	COPAY HDHP	COINSURANCE HDHP
NET PLAN PMPM** SPEND	\$433.91	\$374.41	\$372.89
REBATES MOVED TO POS	\$434.73	\$377.03	\$376.72
CHANGE IN PLAN COSTS \$	\$0.82	\$2.62	\$3.84
CHANGE IN PLAN COSTS %	0.2%	0.7%	1.0%

*Plan cost includes medical and pharmacy claims
 ** PMPM = Per Member Per Month

Figure 2: Average Annual Member OOP* Cost Reduction, Complex Diabetics in a Coinsurance HDHP

MEMBER OOP SPEND OVER 12 MONTHS:	MEMBER OOP COST REDUCTION, REBATES MOVE TO POS:	
	COPAY HDHP	COINSURANCE HDHP
BASLINE, NON-POS REBATES		
\$0-\$700	\$145	\$145
\$700-\$1,400	359	359
\$1,400-\$2,100	570	570
\$2,100-\$2,800	750	750
\$2,800-\$3,500	202	385
\$3,500-\$4,200	151	484
\$4,200-\$4,900	148	677
\$4,900-\$5,600	144	834
\$5600+	21	270

* OOP = Out of Pocket for Medical and Pharmacy

Figure 3: Per-Script Cost Reduction at Pharmacy When Rebates Are Moved to POS for Patients in a Coinsurance HDHP

PATIENT TYPE (SCRIPT TYPE*)	MONTHLY COST REDUCTION IN:	
	DEDUCTIBLE**	POST-DEDUCTIBLE**
DIABETES/CHRONIC RESPIRATORY DISEASE (B)	\$204	\$41
COMPLEX DIABETIC (B)	\$221	\$44
AUTOIMMUNE DISEASE (S)	N/A***	\$265

* B = Cost Reduction per Average Brand Script, S = Cost Reduction per Average Specialty Script
 ** Assumes script does not cross over from deductible to coinsurance or from coinsurance over the MOOP
 *** Patient's average script cost will exceed deductible under both scenarios (non-POS rebates and POS rebates)

Methodology

We measured changes in payer and member liability caused by shifting pharmaceutical manufacturer rebates to the POS. We leveraged information in the 2016 Kaiser Family Foundation Employer-Sponsored Coverage survey to develop “typical” 2018 plan designs with different cost-sharing structures, as described below (all benefits describe individual, in-network coverage):

- **A Traditional PPO** with a \$1,200 deductible, 80% coinsurance up to \$4,000 in out-of-pocket maximum costs, and \$25/\$50 primary care physician (PCP)/specialist copays. Pharmacy costs are subject to no deductible, \$12 generic copays, 25% coinsurance on preferred brand scripts up to a maximum \$55 per script, 35% coinsurance on non-preferred brand scripts up to a maximum \$80 per script, and 30% coinsurance on specialty scripts up to a maximum \$200 per script.
- **A Copay HDHP** with a \$2,800 deductible, 80% coinsurance up to \$6,000 in out-of-pocket maximum costs. Pharmacy costs are subject to the medical deductible, then \$12 copays on generic scripts, \$35 copays on preferred brand scripts, \$60 copays on non-preferred scripts, and 30% coinsurance on specialty scripts.
- **A Coinsurance HDHP** with a \$2,800 deductible, 80% coinsurance up to \$6,000 in out-of-pocket maximum costs. Pharmacy costs are subject to the medical deductible and coinsurance.

We used the Claims Simulation Model, populated with a sample of 2015 claims trended to 2018. To analyze rebates at the POS, we adjusted the allowed cost of specialty and brand products using 35% rebates for brand medications and 15% rebates for specialty medications (except as noted below for the patient profiles). The allowed cost in our data sets includes the dispensing fee. We did not account for changes in member, payer, or pharmaceutical manufacturer behavior that may occur as a result of moving rebates to the POS. This could include increased brand utilization due to reduced POS costs or improved medical adherence with subsequent offsets in medical spending¹.

To model the specific patient profile referenced, we analyzed members filling at least one medication in each of the underlying categories:

Complex diabetic patient:

- Brand dipeptidyl peptidase-IV inhibitor (DPP-IV) or DPP-IV combination with metformin
- Brand insulin (including short, intermediate, and/or long-acting)
- Generic angiotensin-converting-enzyme (ACE) inhibitor or ACE/hydrochlorothiazide (HCTZ) combination
- Generic statin (HMG-CoA reductase inhibitor)

Diabetic/chronic respiratory disease patient:

- Brand dipeptidyl peptidase-IV inhibitor (DPP-IV) or DPP-IV combination with metformin
- Brand insulin (including short, intermediate, and/or long-acting)
- Anti-asthmatic/bronchodilator agents

Autoimmune disease patient

- Tumor necrosis factor (TNF) inhibitor

We assumed the brand DPP-IV and insulin medications provide 40% rebates off allowed retail costs and TNF inhibitor and anti-asthmatic products provide rebates of 30% off allowed retail costs, while other brand medications provide 35% rebates and specialty medications provide 15% rebates (the same assumption used in the aggregate-level analysis). This will result in a new rebate across all brands to be higher than 35% (or 15% for specialty) and, therefore, we avoid direct comparisons between the aggregate level analysis in Figure 1 above and the patient-specific analyses in Figures 2 and 3 above. We used the therapeutic classifications in the Medi-Span Master Drug Database v2.5 (MDDDB) to identify the generic product identifiers (GPIs) for medications in the categories listed above.

We summarized the members of each patient profile into buckets of various ranges of total OOP costs. Note that some members may not have a full year of membership in the database. We did not consider employer contributions to a member spending account or manufacturer coupon cards that offset a patient’s spend.

Caveats, limitations, and qualifications

The results in this report have been prepared for PhRMA. We developed this information to illustrate the potential impact of moving pharmaceutical manufacturer rebates to the POS for members with employer-sponsored benefits taking certain medications. This information may not be appropriate, and should not be used, for other purposes.

PhRMA may share this report with third parties in its entirety subject to the terms of our Consulting Services Agreement (dated January 19, 2016) and the Work Authorization for this project (dated March 23, 2017). Milliman does not intend to benefit and assumes no duty of 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.

In preparing our estimates, we relied upon data from the Kaiser Family Foundation Health Research and Educational Trust Employer Health Benefits 2016 Annual Survey for prevalence data and design elements of employer-sponsored plans. For the detailed plan cost impact and member profile analyses, we used Milliman’s CSM and proprietary databases. Our results will likely vary with new information or with alternative models or modeling approaches.

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. Anna Bungler, Jason Gomberg and Jason Petroske are actuaries for Milliman. They are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

¹ Fein, A. (June 15, 2017). Will CVS Health’s point-of-sale rebates deflate the gross-to-net bubble—and disrupt the PBM business? Drug Channels. Retrieved September 29, 2017, from <http://www.drugchannels.net/2017/06/will-cvs-healths-point-of-sale-rebates.html>.

² Roberts, J. (June 7, 2017). Consumer transparency: Helping members with high-cost drugs at the point of sale. CVSHealth Payor Solutions. Retrieved September 29, 2017, from <https://payorsolutions.cvshealth.com/insights/consumer-transparency>.

³ Roebuck, C. Medication Adherence Leads to Lower Health Care Use and Costs Despite Increased Drug Spending. Health Affairs 30, no. 1 (2011). Retrieved September 29, 2017.