Pharmacy Carve-In: The Benefit of Integrated Benefits

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Introduction

Over the past decade, pharmacy costs have exhibited a trend exceeding that of either medical benefits or general inflation. Pharmacy is generally only 20 percent of the total claim cost, yet it garners a lot of attention. In an effort to control costs, many employers have been lured into "carving out" their pharmacy from their medical coverage. By carving out, they obtain benefits for drug coverage through a stand-alone Pharmacy Benefit Manager (PBM) instead of receiving integrated medical and pharmacy benefits through the same carrier.

To examine this further, Premera Blue Cross recently conducted an actuarial analysis to study the difference in cost between integrated plans and plans that carve out pharmacy from medical benefits. Our study shows that although carving out to a separate PBM may save money on the pharmacy benefit alone, the impact of higher medical costs without an integrated benefit dwarf those pharmacy savings.

Results

On average the medical claims costs for our two sets were statistically different, varying between 3.0% and 11.8%, with a.n mean of 7.5% higher medical claims for the Carved-Out set. As shown in Table 1 (top of page 2) even a theoretical 15% savings on pharmacy benefits through a carve-out would still result in a higher total claim cost. Under this scenario, *employer groups could save approximately 2.2% by integrating their pharmacy and medical benefits*.

The most important driver of this cost difference may be due to the design of Premera's preferred formulary, which is based on a combination of cost and clinical characteristics. Many drugs are on the preferred tier even though they contribute to higher pharmacy cost, because they are expected to be offset by lower medical costs. By taking a holistic view of overall treatment methodology, Premera helps control costs in a responsible way.

The cost difference may also be partially due to more effective care management programs, where integrated pharmacy data allows more rapid identification of those members who would benefit from engagement. These programs use pharmacy information to reduce adverse drug interactions, coordinate the care of complex cases, and avoid omissions of needed care. Integration of pharmacy and medical data could potentially provide more accurate and thorough information for both members and providers, leading to better overall health outcomes.
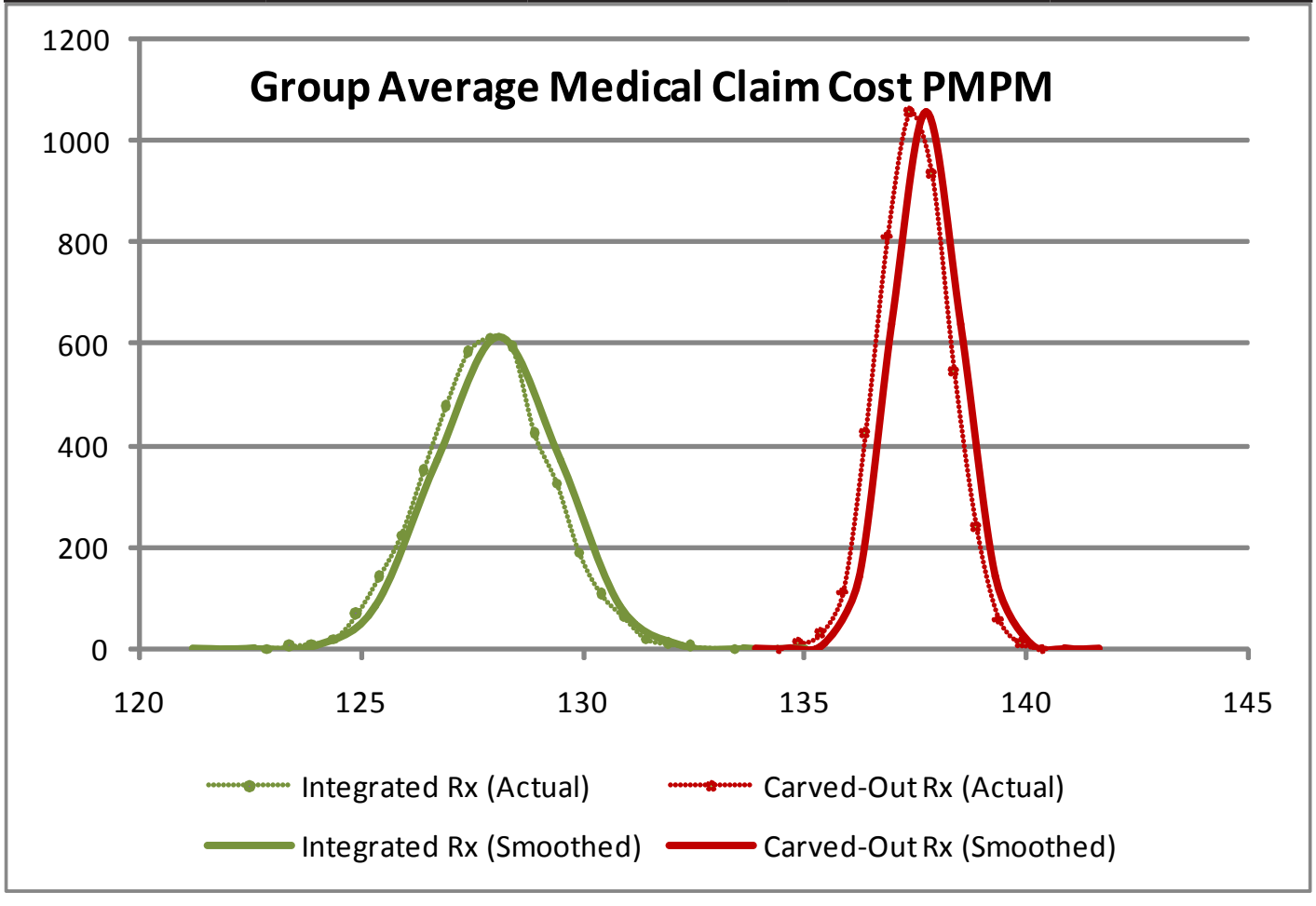
Methodology

We began our study with both medical and pharmacy claims incurred by Washington-based self-funded large employer groups between 1/1/08 and 12/31/10, with no lapse in coverage during that time period, then defined the following cohorts:

- Those with integrated medical and pharmacy benefits during the entire period (Integrated)

Table 1: Difference in Experience and Potential Savings				
	Carved-Out Rx	**Integrated Rx**	**Additional Cost (PMPM)**	
Medical	$137.76	$128.10	$9.66	7.5%
Rx	$34.19	$40.23	($6.03)	(15.0%)
Total	$171.96	$168.33	$3.63	2.2%

Group Average Medical Claim Cost PMPM

Legend: Integrated Rx (Actual) • Carved-Out Rx (Actual) • Integrated Rx (Smoothed) • Carved-Out Rx (Smoothed)

- Those that provided only medical benefits through Premera during the entire period

  -Those groups that did not provide pharmacy benefits

  -Those groups that provided pharmacy benefits through a separate carrier (Carve-Out)

- Those that provided some combination of coverage during the period

We focused on the difference in experience between Integrated and Carve-Out sets. We limited both sets to only members who were present with no lapse for the entire period. Members were then placed into categories based on the following characteristics:

- Gender

- Age

- Diagnosis of:

  -Diabetes

  -Coronary Artery Disease (CAD)

  -Congestive Heart Failure (CHF)

  -Chronic Obstructive Pulmonary Disease (COPD)

  -Asthma

- Disease Management offered

- Health Status

- Deductible

- Coinsurance

In addition, we removed any claimants whose total claims exceeded $50,000 in any year. We then randomly selected the same number of members from each category for both the Integrated and Carve-Out sets, and examined their paid claims

Table 2: Comparison of Integrated and Carve-Out Sample Characteristics		
Characteristic	**Carved-Out Rx**	**Integrated Rx**
Size of Data Sets		
Population Total (Member-Years)	40,236	659,806
Sample Size	13,489	13,489
Number of Iterations	5,000	5,000
Key Characteristics	*Average*	*Average*
Percent of Males	49.78%	49.78%
Members with Diabetes	3.28%	3.28%
Members with CAD	0.56%	0.56%
Members with CHF	0.01%	0.01%
Members with COPD	0.13%	0.13%
Members with Asthma	2.19%	2.19%
Members with Disease Management Available	22.18%	22.18%
Average Age of Samples	38.07	37.84
Natural Log of Health Status	(1.39)	(1.39)
Deductible of Samples	$339	$339
Coinsurance of Samples	19.7%	19.7%
Claims Experience	*Average*	*Average*
Allowed Medical Claims PMPM	$185.26	$170.99
Difference in Allowed Medical Claims	8.3%	
Paid Medical Claims PMPM	$137.76	$128.10
Difference in Paid Medical Claims	7.5%	

experience. We repeated this random selection 5,000 times, with a sample size of 13,489 each time. As can be seen in Table 2, the method we used allowed us to achieve a near-perfect match between our groups.

Study Limitations

Although we have attempted to make our analysis as accurate as possible, some simplifications were necessary. To ensure a credible sample size, we considered only commonly occurring chronic conditions, and did not match on lower incidence or acute conditions. Additionally, we did not include out of pocket maximums and other small benefit differences as characteristics in our study.

The groups in our study had at least three full years under the same benefit structure, and are representative of the long-term effects that a carve-out has on medical costs. Employers should not expect to see an immediate change in their overall costs if their structure is changed. We estimate that the full effects may not be seen for three to five years after that change takes place.

Conclusion

Savings from a carve-out plan may seem beneficial on the surface, but the impact of such choices appears to be about 7.5% higher medical costs. This leads to a simple message: Employers should be cautious when evaluating offers to carve-out their drug coverage and not overlook

the benefit of integrated benefits.

Pamela Wells is an Associate of the Society of Actuaries, and has spent the past seven years on the Actuarial Special Projects Team of Premera Blue Cross. During that time she has become a subject matter expert on pharmacy programs and their impacts to the company. She has been engaged in a variety of projects for the company, ranging from product pricing to disease management program ROI to formulary design. She is currently involved in several projects supporting pharmacy and Premera's health care reform initiatives. She will attain her Fellowship with the Society of Actuaries in March of this year.

Daniel Ness is an honors graduate

of Central Washington University with degrees in mathematics, economics, and German. While there he specialized in actuarial science, and took a particular interest in hypothesis testing and other forms of statistical analyses. He has spent the last year and a half working for the Actuarial Special Projects Team of Premera Blue Cross, ensuring data quality and helping analyze data. He performs a wide range of tasks for the company, including data extraction, pricing, ad hoc requests, and supporting Premera's health care reform initiatives. He is currently pursuing a fellowship in the Society of Actuaries.