MILLIMAN CLIENT REPORT

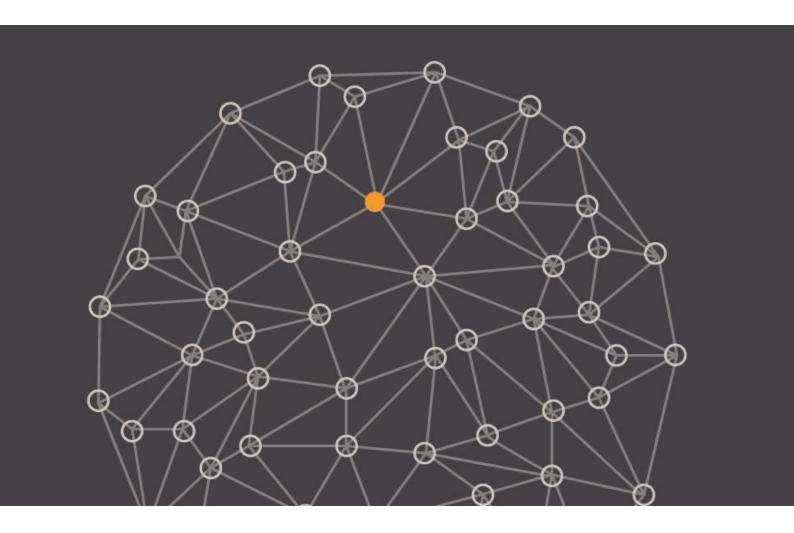
Mitigating out-of-pocket costs for prescription drugs

Supplemental material

Prepared for Eli Lilly

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Milliman is among the world's largest independent actuarial and consulting firms.

This material is prepared as a supplement to the December 2016 research report that explored how nearterm relief could be delivered to members who have high cost-sharing exposure for prescription drugs.

This research was commissioned by Eli Lilly and Company (Lilly), and reflects the research of the authors.

Anne Jackson is a member of the American Academy of Actuaries and meets the qualification standards to perform the analyses in this report.

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Background

Eli Lilly and Company (Lilly) commissioned an analysis to identify tactics plan administrators could adopt that would reduce the out-of-pocket costs for brand-name drugs. The research report examined two specific tactics: eliminating patient cost sharing for insulins and reducing member cost sharing at the point of sale.

Since the research report was published, stakeholders have expressed interest in a third patient cost sharing approach. This supplemental material has been prepared with the results of this third tactic: making insulins exempt from the deductible in high-deductible health plans.

The authors refer the reader to the original research report for the full context and discussion related to affordability and the general characteristics required for a mitigation tactic to be successful. The results provided in this supplement were produced from the original analysis and reflect the same study population and time period.

This research was commissioned by Eli Lilly and Company (Lilly), and reflects the independent research of the authors. Anne Jackson is a member of the American Academy of Actuaries and meets the qualification standards to perform the analyses in this report. Milliman does not endorse any policy or product.

Proposed approach

As a supplement to the approaches discussed in the original research report, we evaluated a third approach that would exempt insulins from the deductible. The scope is limited to individuals in a high deductible health plan, defined as an integrated medical and pharmacy deductible at or above \$1,250 per benefit year. Instead of an individual paying the full cost for insulin while in the deductible, they would pay a copay or coinsurance consistent with the cost sharing requirement in the benefit phase.

Figure A illustrates the patient cost sharing for insulins in the deductible and benefit phase under the status quo and the insulins exempt from the deductible approach.

FIGURE A: ILLUSTRATION OF PATIENT PERSPECTIVE OF INSULINS EXEMPT FROM DEDUCTIBLE

Illustration assumes 20% member cost sharing in the benefit phase (i.e., after deductible is satisfied, but before out-of-pocket maximum is reached).

MEMBER COST SHARING EXAMPLES	DEDUCTIBLE PHASE	BENEFIT PHASE
POINT-OF-SALE PRODUCT COST	\$400	\$400
STATUS QUO	\$400	\$80
INSULINS EXEMPT FROM DEDUCTIBLE	\$80	\$80

For this approach, we considered two types of cost sharing in the benefit phase: plan designs where the member's pharmacy cost sharing is a coinsurance percentage and plan designs where the member's pharmacy cost sharing is a copayment. A plan with a coinsurance structure requires the member to pay a percentage of the point-of-sale product cost, such as 20%. A plan with a copayment structure requires the member to pay a fixed dollar amount for the prescription, such as \$40.

As discussed in the original research paper, the rebates paid by drug manufacturers for insulins on the preferred formulary list are higher than the average brand rebate. By providing relief to the patient who fills insulin prescriptions in the deductible phase, a portion of the rebate provided by the manufacturer directly benefits the patient.

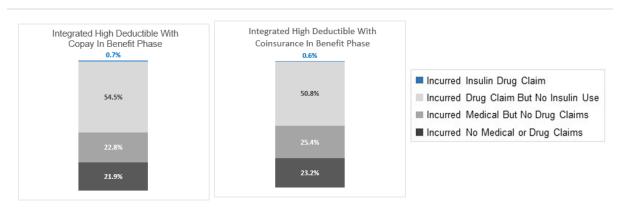
Results

We generated exhibits to assess the extent to which exempting insulin from the deductible achieves two goals: (a) provides a material reduction in out-of-pocket costs for the patients impacted by it, and (b) results in a relatively modest increase to the overall cost of care. This approach is consistent with the original research report.

APPROACH: RESULTS FOR INSULINS EXEMPT FROM DEDUCTIBLE

This mitigation strategy was applied to integrated high-deductible health plans with either a coinsurance or copayment requirement in the benefit phase. Figure B stratifies the enrollment in each benefit design category. The members who had any insulin drug claims filled in the deductible phase would benefit from this tactic.

FIGURE B: INSULIN USERS BY BENEFIT DESIGN



Plans are categorized as having a high deductible if the deductible is at or above \$1,250 for single coverage.

Source: CY 2013 Truven MarketScan Commercial Claims and Encounters Data.

A small number of members in high deductible health plans use insulin. This approach will reduce the out-of-pockets costs for insulin scripts filled in the deductible. This will provide some cost sharing relief at the point-of-sale. Members with significant out-of-pocket expenses on other pharmacy or medical services may still reach their out-of-pocket maximum (i.e., incur the same total out-of-pocket costs during the benefit year).

Figure C summarizes some relevant metrics for this approach. As seen in the first row of Figure C, very few members in high deductible health plans use insulins in the deductible. Members who filled an insulin claim in the deductible phase will experience savings on their out-of-pocket costs for insulin by this approach. On average, the out-of-pocket costs for their insulin script(s) will be \$634 lower for members in high deductible health plans with coinsurance in the benefit phase. Among members who have lower out-of-pocket costs during the plan year, they save, on average, approximately \$560.

The impact of exempting insulin from the deductible would vary based on the number insulin users enrolled in the high deductible plan and the rate which those users fill prescriptions in the deductible. Individual plan experience and member experience will differ from these estimates.

FIGURE C: IMPACT FROM REMOVING INSULIN COST SHARING: REDUCTION IN OUT-OF-POCKET COSTS

PLAN DESIGNS	INTEGRATED HIGH DEDUCTIBLE WITH COINSURANCE IN BENEFIT PHASE	INTEGRATED HIGH DEDUCTIBLE WITH COPAYMENT IN BENEFIT PHASE
PERCENTAGE OF MEMBERS WHO USED INSULINS	0.6%	0.7%
PERCENTAGE OF MEMBERS WHO FILLED AN INSULIN CLAIM IN THE DEDUCTIBLE	0.2%	0.3%
AVERAGE REDUCTION IN INSULIN COST SHARING	\$634	\$607
PERCENTAGE OF MEMBERS WITH LOWER COST SHARING	0.1%	0.1%
AVERAGE ANNUAL REDUCTION IN COST SHARING	\$563	\$560
DISTRIBUTION OF ANNUAL REDUCTION COST SHARING	19.2% 17.1% 17.1% 45.00 45.00 45.00 45.00	24.7% 7.7% 10.1%

Source: CY 2013 Truven MarketScan Commercial Claims and Encounters Data

If the benefit administrator wants to preserve profitability (or maintain the same loss ratio target), the benefit that is accrued to the patients represented in Figure C must be collected through an increase in the group's premium (or premium-equivalent for self-insured employers). The offsetting impact to premiums is estimated in Figure D on a per member per year (PMPY) basis.

As noted in the original research report, the percentage of members using insulin was lower in the integrated high-deductible health plan than we would expect for a non-elderly population. Figure D estimates the increase in premium associated with exempting insulins from the deductible if the number of users of insulin was consistent with the non-high deductible plans (approximately double the value reported in Figure B). Note that we have not quantified the increase in the total claims costs; we have assumed that the insulin users are already covered under a plan offered by the plan administrator. If the expected costs increase in the high-deductible health plan, there should be an offsetting reduction in another plan.

FIGURE D: IMPACT FROM MAKING INSULINS EXEMPT FROM THE DEDUCTIBLE: INCREASE IN PLAN PREMIUM

PLAN DESIGNS	INTEGRATED HIGH DEDUCTIBLE WITH COINSURANCE IN BENEFIT PHASE	INTEGRATED HIGH DEDUCTIBLE WITH COPAYMENT IN BENEFIT PHASE
ESTIMATED INCREASE IN PLAN PREMIUM		
MAINTAINING EXISTING LEVEL INSULIN USERS	\$0.72 PMPY	\$0.92 PMPY
WITH TWICE AS MANY INSULIN USERS	\$1.44	\$1.80

Assumes a target loss ratio of 85%. Increase in plan premium is associated with the removal of cost sharing for insulin only and does not reflect any increase (or decrease) in the baseline medical and prescription spending associated with insulin users.

Source: CY 2013 Truven MarketScan Commercial Claims and Encounters Data

Methodology

As noted in the background, the proposed approach discussed in this supplement material was evaluated using the same study population and time period described in the original research report. Relevant sections from the methodology section have been repeated here.

SOURCE DATA

We used the calendar year 2013 Truven MarketScan Commercial Claims and Encounters (Truven) data set. The Truven database reflects the healthcare experience of employees and dependents covered by the health benefit programs of large employers. The data reflects claims and membership information from approximately 100 different insurance companies, Blue Cross Blue Shield plans, and third-party administrators. The data represents the medical experience of active employees, early retirees, and COBRA continuations. No Medicare Supplemental, Medicaid, or workers' compensation experience is included.

BENEFIT DESIGN IDENTIFICATION

Approximately 8.8% of the plan data contributed to Truven includes detailed plan design information, such as deductible and cost-sharing requirements. In order to have a robust sample of plans to use in our estimates, we created an algorithm to derive the benefit design structure for each reported plan. We confirmed that the algorithm was reasonable by comparing the derived benefit design characteristics with the reported characteristics for plans with the detailed information available. In this way, we were able to identify 3.1 million members enrolled in integrated high-deductible health plans.

LOSS RATIO TARGETS

The premium impact these tactics was estimated assuming an 85% loss ratio. For insured large group commercial business, this is the lowest loss ratio allowed under the ACA. Small group insured business must meet an 80% loss ratio. The premium estimates shown in the exhibits would be 6% higher for small group insured business at an 80% loss ratio. Self-insured employers establish budget expectations or premium equivalents. The loss ratio for self-insured employers would not include a profit margin and may reflect different expectations for administrative expense and risk margin. At any loss ratio higher than 85% (e.g., 88% or 90%), the premium estimates shown in the exhibits would be lower by a factor of [85%] *divided by* [loss ratio target]. For example, a 90% target loss ratio would result in premium equivalents 6% lower than the values shown in the exhibits.

¹ 45 CFR 158.210

Limitations

The financial estimates were based on calendar year 2013 data from the Truven Commercial Claims and Encounters database. Benefit design features were identified for each plan and included an estimate of the deductible (single and family) level, cost sharing requirement for medical and pharmacy benefits, and the out-of-pocket maximum level. Service limits, exceptions to cost sharing for certain services, and other specific features were not considered in the analysis.

There is a relationship between lower cost sharing and increased utilization. For prescription drug benefits, increased utilization may result in improved adherence or compliance with a treatment regimen. Increased utilization may lead to higher prescription drug costs for the plan administrator, which we have not reflected in the exhibits. Improved adherence may lead to lower overall medical costs, which we have not reflected in the exhibits. Plan sponsors should consider the potential impact to medical and pharmacy budgets, the time horizon associated with those impacts, and whether to establish any metrics for monitoring emerging results.

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