Washington State Health Care Authority

REPORT TO THE LEGISLATURE

PEBB Health Benefit Plan

Cost and Utilization Trends, Demographics, and Impacts of Alternative Consumer-Directed Health Plan

Second Engrossed Senate Bill 5773, Chapter 8
Laws of 2011, RCW 41.05.065 (6)

November 30, 2016

PEBB Health Benefit Plan

Cost and Utilization Trends, Demographics, and Impacts of Alternative Consumer-Directed Health Plan

Washington State Health Care Authority

Financial Services Division
P.O. Box 45510
Olympia, WA 98504-5510
Phone: (360) 725-1918
Fax: (360) 753-9152
http://hca.wa.gov/

Table of Contents

Executive Summary

HCA is required to submit a report to relevant legislative policy and fiscal committees by November 30, 2015, and each year thereafter as directed by RCW 41.05.065(6)(b). The report is to evaluate the impact of offering a consumer-directed health plan (CDHP) and will include:

1. Public Employees Benefits Board (PEBB) health plan cost and service utilization trends for the previous three years, in total and for each health plan offered to employees.

2. For each health plan offered to employees, the number and percentage of employees and dependents enrolled in the plan, and the age and gender demographics of enrollees in each plan.

3. Any impact of enrollment in alternatives to the most comprehensive plan, including the high deductible health plan with a health savings account, on the cost of health benefits for those employees who have chosen to remain enrolled in the most comprehensive plan.

This report, dated November 30, 2016, addresses the three elements listed above. Key findings for the time period Calendar Year (CY) 2012 – CY2015 include the following:

- The presence of the Uniform Medical Plan (UMP) CDHP and Group Health CDHP contributes to a lower claims trend; allowed claims[1] per member per month (PMPM) costs and service utilization are lower for CDHPs than non-CDHPs.

- Membership in CDHPs has grown slowly and steadily from CY2012 to CY2015.

- CDHP members are generally younger than non-CDHP members.

- There do not appear to be significant differences in the gender or member type makeup of the CDHP members compared to the non-CDHP members.

- The demographic profile of both CDHP members and non-CDHP members is relatively stable.

- For the total PEBB portfolio of medical benefits the ratio of paid to allowed claims has increased over the three years of study, meaning that the impact of introducing a CDHP was not enough to dampen the level of the benefit richness of the PEBB portfolio.

- Over the three years, the general trend is that CDHP members pay a higher monthly premium than they would have if the CDHPs had not been introduced, according to the modeled premium analysis by the actuarial firm, Milliman, Inc. This impact has in turn lowered the employee contribution for non-CDHP members. The analysis shows that the impact is stabilizing as the claims and membership mature for the CDHPs.

[1] Allowed Claims equals the amount that was allowed by the health plan.

This report focuses on measuring the impact that enrollment in CDHPs has had on the cost of health benefits for subscribers in every non-CDHP plan (except the Kaiser Classic plan) rather than the impact on just the most comprehensive plan. Due to the very low enrollment in the Kaiser CDHP, the results for the plan were not credible and not included in the analysis. Also, in keeping with statutory language, this report does not speculate on or address additional possible impacts, such as differences in plan richness, administrative costs, or unit costs.

PEBB Health Benefit Plan Analysis

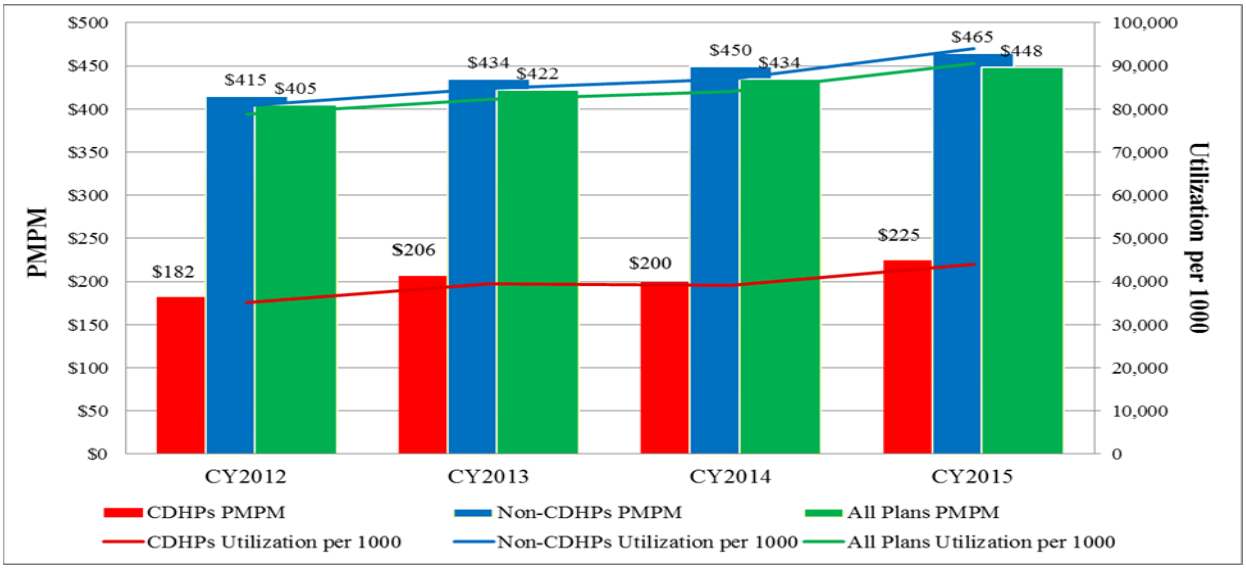
Health Plan Cost and Service Utilization

The attached Appendix is a report by the actuarial firm, Milliman, Inc., detailing health plan cost and service utilization. Milliman calculated cost trends based on allowed and paid claims[2] PMPM (per member per month) for non-Medicare PEBB enrollees.

The report finds that for CY2012 through CY2015, the allowed claims PMPM for CDHPs ranged from $182 in CY2012 to $225 in CY2015, which was 52 to 56 percent lower than the average of non-CDHPs. The allowed claims PMPM for non-CDHPs ranged from $415 in CY2012 to $465 in CY2015 (see Chart 1 below).

Service utilization (per 1,000 members[3]) shows a similar relationship. Service utilization in CDHPs in the period for CY2012 to CY2015 was also about 53 to 56 percent lower than non-CDHPs.

Chart 1: Allowed PMPM Cost and Service Utilization



[2] Paid claims equals the amount paid by the health plan after adjusting the allowed amount for coordination of benefits, co-payments, deductible and other patient payment amounts.

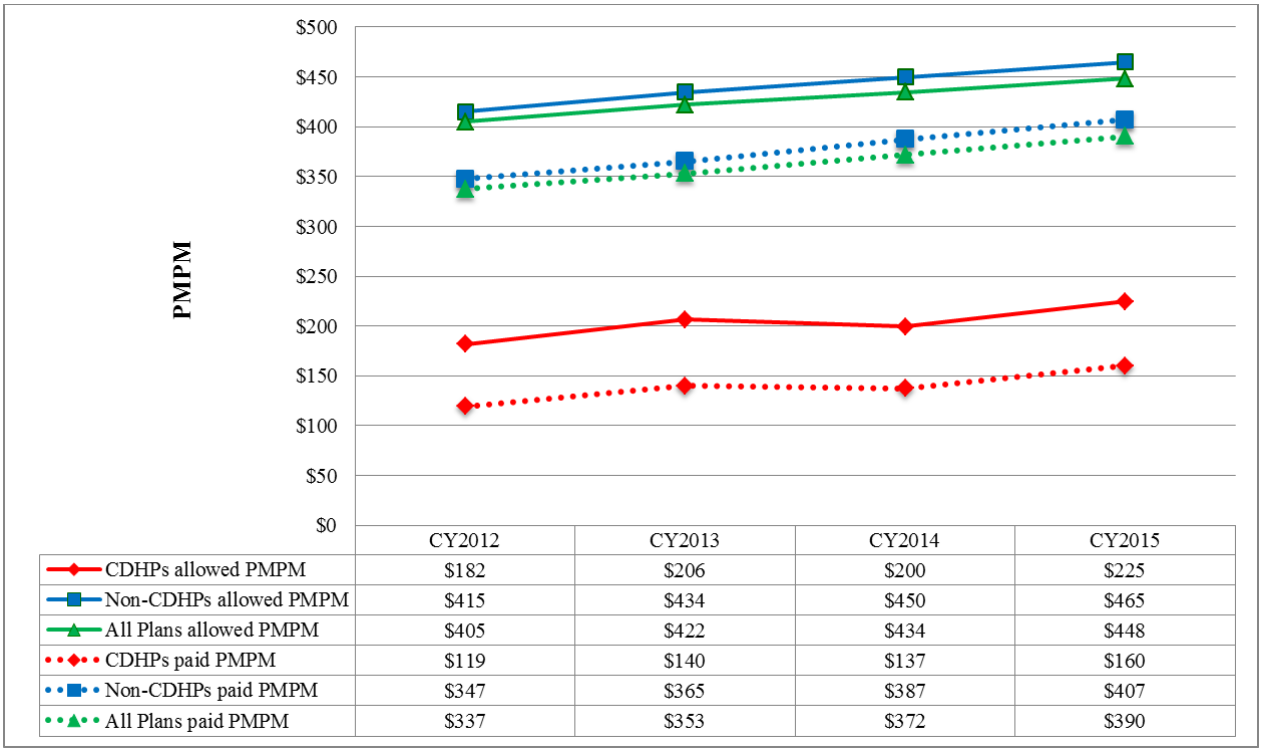
[3] Utilization per 1,000 members = total number of units within a service category (hospital days, encounters, prescriptions, etc.) / average member for a year (member months/12) X 1,000.

Health Plan Cost Trends

Charts 2, 3 and 4 (below and on the next page) show cost trends for CDHPs and non-CDHPs, calculated as allowed and paid claims PMPM for CY2012 through CY2015. Allowed and paid claims PMPM are based on the entire PEBB non-Medicare risk pool enrollment. The allowed claims are the benefit costs allowed by the health plans whereas paid claims are the amounts paid by the plans after adjusting for member copayments and deductibles, and payments by other plans or responsible third parties.

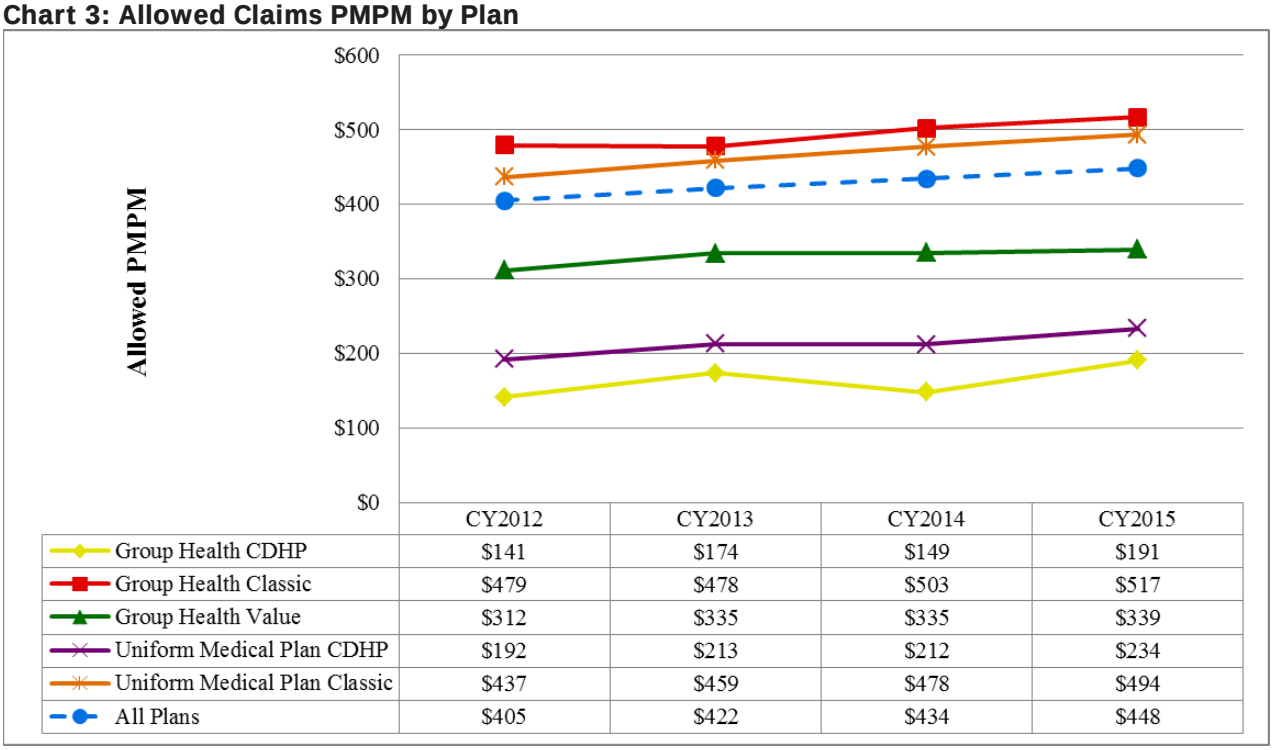
CDHPs show allowed claims PMPM that are 52 to 56 percent lower than non-CDHPs and paid claims PMPM that are 61 to 66 percent lower than non-CDHPs.

Chart 2: Allowed Claims vs Paid Claims PMPM



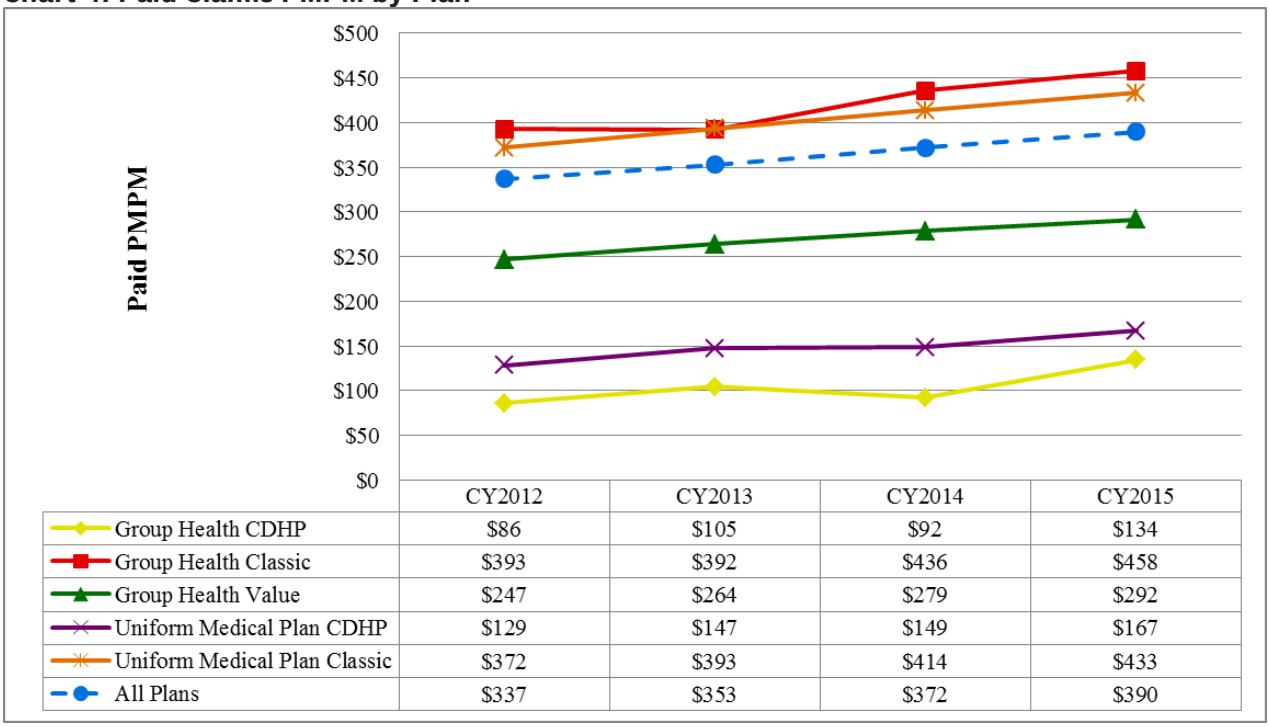
	CY2012	CY2013	CY2014	CY2015
CDHPs allowed PMPM	$182	$206	$200	$225
Non-CDHPs allowed PMPM	$415	$434	$450	$465
All Plans allowed PMPM	$405	$422	$434	$448
CDHPs paid PMPM	$119	$140	$137	$160
Non-CDHPs paid PMPM	$347	$365	$387	$407
All Plans paid PMPM	$337	$353	$372	$390

Chart 3: Allowed Claims PMPM by Plan



	CY2012	CY2013	CY2014	CY2015
Group Health CDHP	$141	$174	$149	$191
Group Health Classic	$479	$478	$503	$517
Group Health Value	$312	$335	$335	$339
Uniform Medical Plan CDHP	$192	$213	$212	$234
Uniform Medical Plan Classic	$437	$459	$478	$494
All Plans	$405	$422	$434	$448

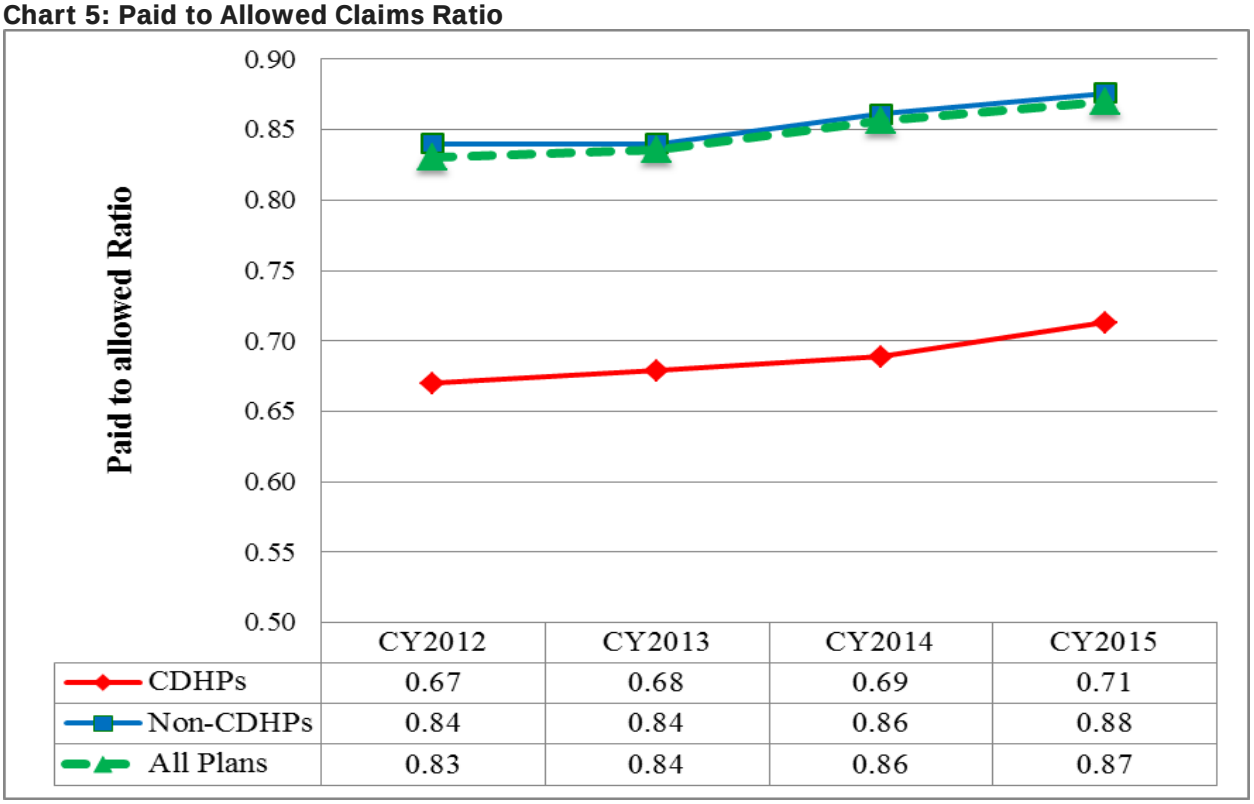
Chart 4: Paid Claims PMPM by Plan



	CY2012	CY2013	CY2014	CY2015
Group Health CDHP	$86	$105	$92	$134
Group Health Classic	$393	$392	$436	$458
Group Health Value	$247	$264	$279	$292
Uniform Medical Plan CDHP	$129	$147	$149	$167
Uniform Medical Plan Classic	$372	$393	$414	$433
All Plans	$337	$353	$372	$390

The paid-to-allowed ratio reflects the level of benefit richness to the PEBB portfolio without consideration of the Health Savings Account (HSA) contribution. The benefit richness has increased over the last three years. This is due to an increase in the allowed costs over time without a corresponding increase in the cost sharing structure, which is relatively fixed. As deductibles, co-payments, and maximum out-of-pocket amounts hold relatively stable over time, they result in decreased cost sharing as a percentage of the total allowed spend. The CDHP introduction could have alleviated the benefit richness increase but the enrollment was not enough to reduce the overall average level of benefit richness of the PEBB portfolio. (See Chart 5, below, and Exhibit 3a in the Appendix.)

Chart 5: Paid to Allowed Claims Ratio



	CY2012	CY2013	CY2014	CY2015
CDHPs	0.67	0.68	0.69	0.71
Non-CDHPs	0.84	0.84	0.86	0.88
All Plans	0.83	0.84	0.86	0.87

Service Utilization Trends

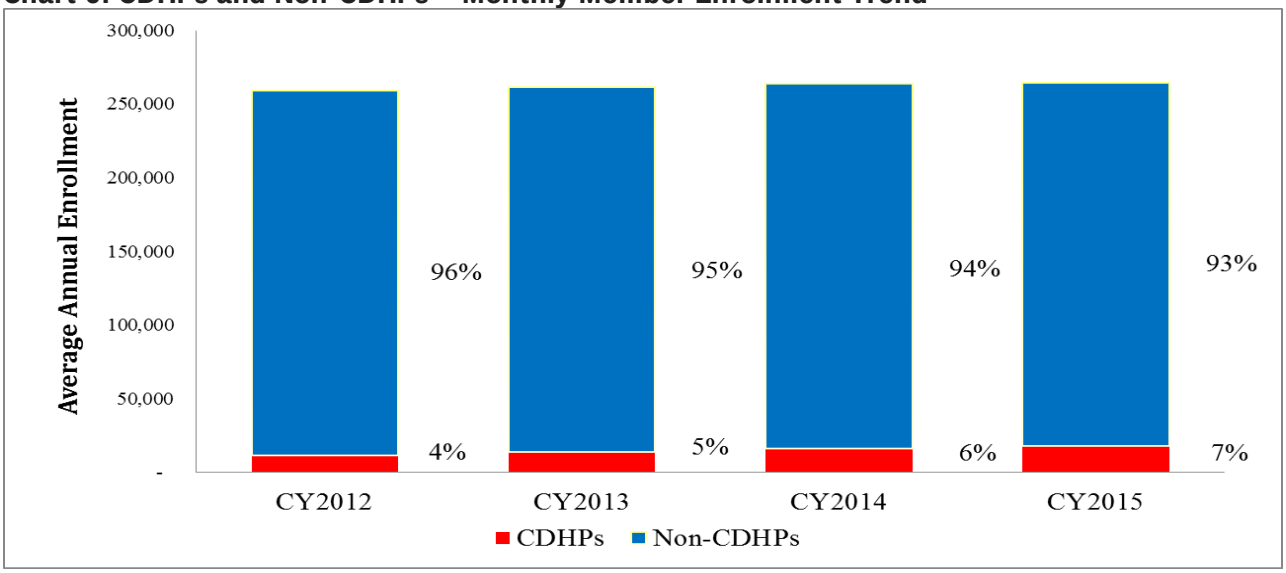
Utilization per 1,000 members for CDHPs from CY2012 through CY2015 was approximately 53 to 56 percent lower than for non-CDHPs (See Exhibit 1 in the Appendix). The utilization, however, is not adjusted for the different service categories and, therefore, does not measure the intensity of high- and low-cost services provided across the various categories of services.

Two major factors driving lower utilization are the lower risk scores for the younger population in the CDHPs and the impact of a higher deductible on member utilization of services. Non-CDHPs experienced moderate increases in utilization year over year at a rate slightly higher than the average for all plans.

Enrollment and Demographics

As shown in Chart 6, the average annual enrollment in CDHPs has grown slightly each year, from 11,391, or 4 percent of total enrollment, in 2012 to 18,077, or 7 percent of enrollment, in 2015.

Chart 6: CDHPs and Non-CDHPs – Monthly Member Enrollment Trend



On average, CDHP members are younger than non-CDHP members. In CDHPs, 77 to 79 percent of members were under age 50 compared to 65 to 66 percent of members in non-CDHPs (see Chart 7). Table 1 (next page) shows a detailed breakdown of enrollment by plan and age group for years 2012 through 2015.

Chart 7: Member Distribution by Age (Under 50 and Over 50)

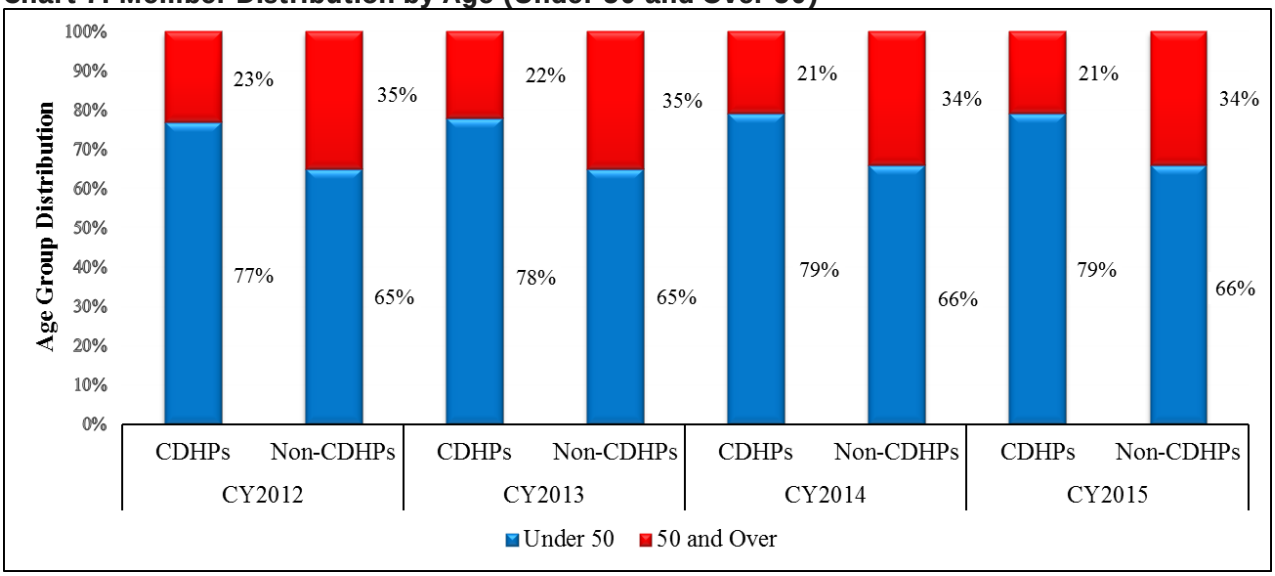


Table 1: Member Distribution by Age Band

	CDHPs				Non-CDHPs			
	CY2012	CY2013	CY2014	CY2015	CY2012	CY2013	CY2014	CY2015
Under 25	4,287	5,216	5,843	6,452	78,304	78,604	79,479	79,072
25 to 34	1,405	2,101	2,716	3,259	26,853	27,457	28,290	28,524
35 to 44	2,022	2,493	2,778	3,119	35,609	35,409	35,535	35,566
45 to 54	2,036	2,331	2,559	2,851	43,884	42,740	42,297	41,805
55 to 64	1,568	1,878	2,055	2,256	54,067	53,023	51,798	50,748
Over 65	74	94	112	141	9,192	9,870	10,422	10,770
Total	11,391	14,113	16,062	18,077	247,909	247,102	247,821	246,485
Under 50	8,716	10,979	12,630	14,286	160,885	161,140	163,039	163,064
50 and over	2,675	3,134	3,431	3,792	87,024	85,962	84,782	83,420
Total	11,391	14,113	16,062	18,077	247,909	247,102	247,821	246,485
Under 50 (%)	77%	78%	79%	79%	65%	65%	66%	66%
50 and over (%)	23%	22%	21%	21%	35%	35%	34%	34%
Total	100%	100%	100%	100%	100%	100%	100%	100%

Chart 8 and Table 2 show the distribution of members by gender for each year from 2012 through 2015. Non-CDHPs and CDHPs show approximately the same distribution ratio over the last four year period.

Chart 8: Member Distribution by Gender

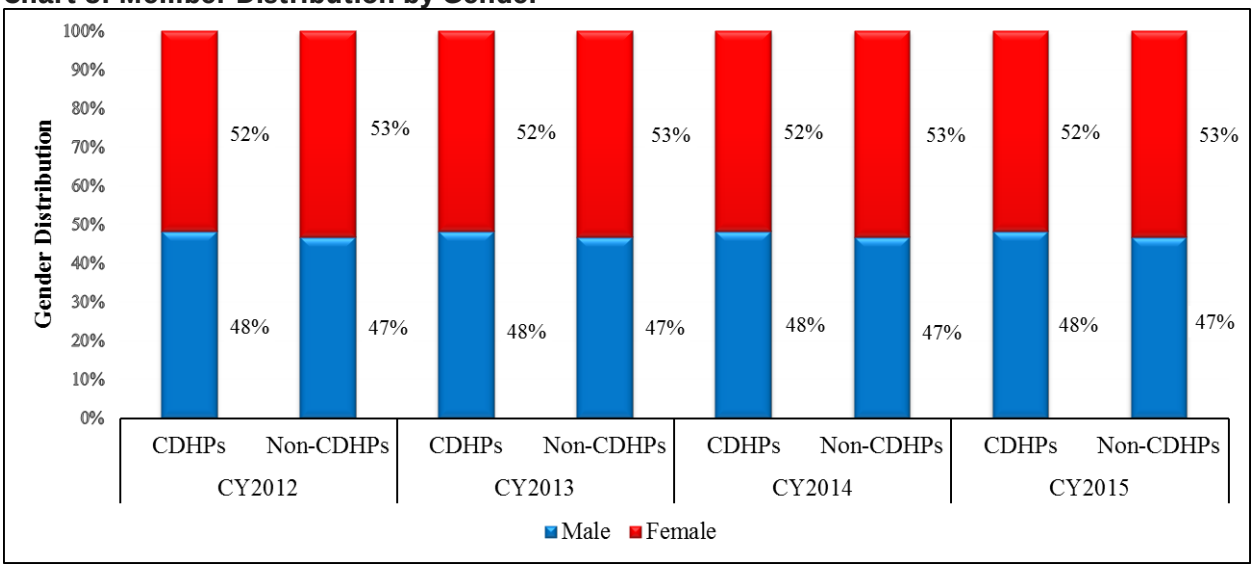


Table 2: Member Enrollment and Distribution by Gender

	CDHPs				Non-CDHPs			
	CY2012	CY2013	CY2014	CY2015	CY2012	CY2013	CY2014	CY2015
Male	5,478	6,779	7,750	8,714	115,527	115,097	115,356	114,776
Female	5,913	7,333	8,311	9,364	132,382	132,005	132,465	131,708
Total	11,391	14,113	16,062	18,077	247,909	247,102	247,821	246,485
Male (%)	48%	48%	48%	48%	47%	47%	47%	47%
Female (%)	52%	52%	52%	52%	53%	53%	53%	53%
Total	100%	100%	100%	100%	100%	100%	100%	100%

Chart 9 and Table 3 display enrollment and distribution by member type (employees vs. dependents). The CDHPs show slightly higher dependent enrollment than non-CDHPs. Overall, the demographic profiles of both CDHPs and non-CDHPs have been relatively stable from year to year.

Chart 9: Distribution by Member Type

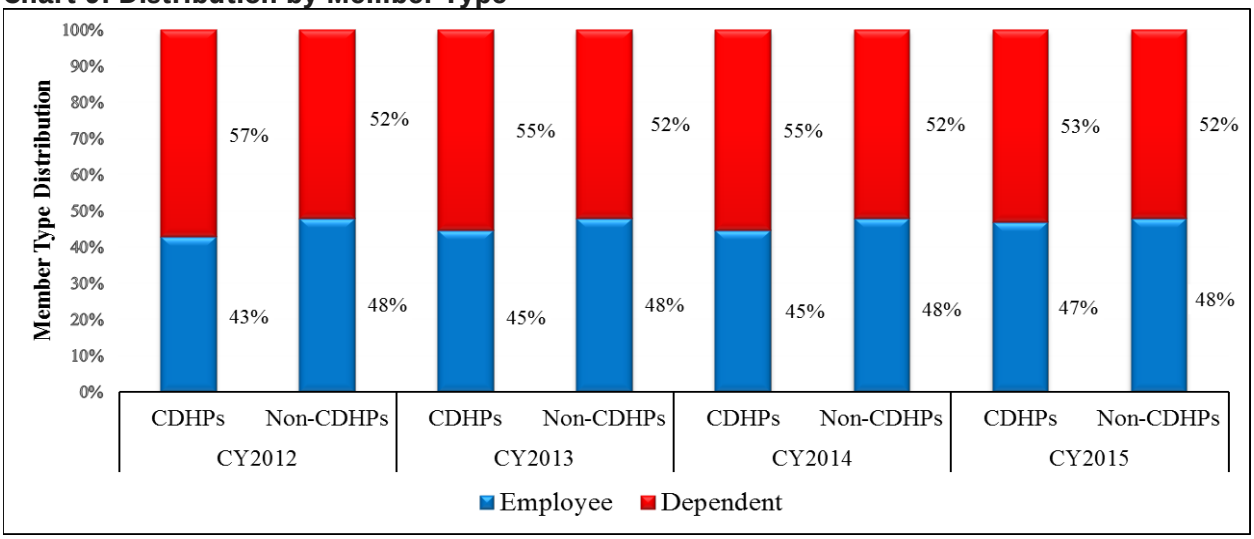


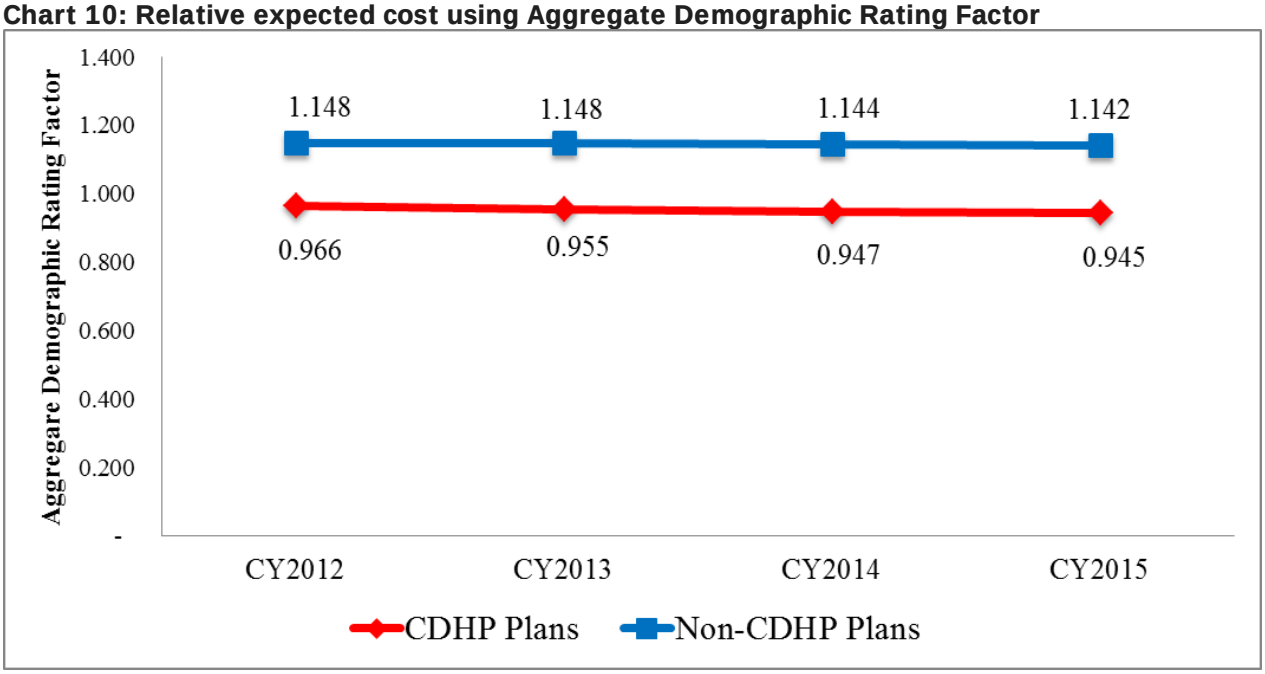
Table 3: Enrollment and Distribution by Member Type

	CDHPs				Non-CDHPs			
	CY2012	CY2013	CY2014	CY2015	CY2012	CY2013	CY2014	CY2015
Employee	4,884	6,290	7,303	8,478	119,101	118,409	118,933	119,256
Dependent	6,508	7,822	8,759	9,599	128,807	128,693	128,888	127,229
Total	11,391	14,113	16,062	18,077	247,909	247,102	247,821	246,485
Employee (%)	43%	45%	45%	47%	48%	48%	48%	48%
Dependent(%)	57%	55%	55%	53%	52%	52%	52%	52%
Total	100%	100%	100%	100%	100%	100%	100%	100%

The aggregate demographic rating factor[4] for CDHPs, which is a measure of relative expected claims cost based on age and gender per Milliman Health Cost Guidelines, is lower for CDHPs than non-CDHPs. This means that the CDHPs would be expected to have relatively lower costs than non-CDHPs. The rating factors for both CDHPs and non-CDHPs are showing a stable but slightly lower trend during the last four years.

[4] The aggregate demographic rating factor is based on Milliman Health Cost Guidelines and represents the relative claims cost expected from a large employer group based on their age and gender distribution, all other factors being equal.

Chart 10: Relative expected cost using Aggregate Demographic Rating Factor



Impact of CDHP Enrollment on the Cost of Other Plans

Methodology

Milliman measured the impact of CDHPs on all existing non-CDHP plans by creating a "modeled premium" and comparing it to the actual premiums from the procurement process. The model simulates a scenario in which members in existing plans would not be impacted by the introduction of CDHPs.

The modeled premium measures the impact that enrollment in CDHPs has had on every plan in the PEBB portfolio rather than just the impact on the most comprehensive plan. Experience shows that PEBB members are much more likely to switch from one plan to another within a carrier family than they are to switch between carriers. Since there is little movement between carriers, comparing the impact of movement from one carrier to the most comprehensive plan in another carrier may be misleading, and may not reflect the reality of how the new CDHPs have impacted all PEBB plans.

Due to the very low enrollment in the Kaiser CDHP, the results for the plan were not credible and were not included in the analysis.

Cost Impact on Other Plans

The difference between the actual and modeled bid rates displayed in Table 4 (next page) represents the impact that CDHP enrollment has had on those members who have elected to remain within other plan options. This impact could also stem from differences in plan richness, administrative costs, unit costs, differences in morbidity that are not accounted for in the procurement risk score model, or other factors such as actual to expected pricing variation. Please

note that in keeping with statutory language, this report does not speculate on or address these possible additional impacts.

A negative impact implies that members in the plan are underpaying compared to what would be expected in the modeled scenario. A positive impact implies that members are overpaying. The results for CY2013 and CY2014 have changed slightly from what was shared last year in the 2015 report due to a Milliman risk model update, and more updated claims and eligibility information.

Table 4: CDHP Impact based on Modeled/Actual Bid Rate

		CY2013					
Carrier	Plan	Modeled Bid Rate (With HSA**)	Actual Bid Rate (With HSA**)	Modeled Employee Contribution*	Actual Employee Contribution*	Impact ($)*	Impact % on Actual
UMP	Uniform Medical Plan CDHP	$404.3	$485.1	-$58.7	$22.0	$80.7	16.6%
UMP	Uniform Medical Plan Classic	$548.3	$539.7	$85.3	$77.0	-$8.3	-1.5%
GH	Group Health CDHP	$352.5	$499.4	-$110.5	$36.0	$146.5	29.3%
GH	Group Health Value	$543.4	$529.0	$80.4	$66.0	-$14.4	-2.7%
GH	Group Health Classic	$566.5	$578.5	$103.5	$115.0	$11.5	2.0%
All	CDHPs Totals	$395.4	$487.6	-$67.6	$25.0	$92.6	19.0%
All	Non-CDHPs Totals	$549.7	$542.6	$86.7	$80.0	-$6.7	-1.2%
All	All Plans	$541.7	$539.8	$78.7	$77.0	-$1.7	-0.3%

* Per Adult Unit Per Month (PAUPM), ** Monthly Health Savings Account (HSA) Employer Contributions

		CY2014					
Carrier	Plan	Modeled Bid Rate (With HSA**)	Actual Bid Rate (With HSA**)	Modeled Employee Contribution*	Actual Employee Contribution*	Impact ($)*	Impact % on Actual
UMP	Uniform Medical Plan CDHP	$465.9	$490.8	-$0.1	$25.0	$25.1	5.1%
UMP	Uniform Medical Plan Classic	$545.4	$544.8	$79.4	$79.0	-$0.4	-0.1%
GH	Group Health CDHP	$439.5	$486.9	-$26.5	$21.0	$47.5	9.8%
GH	Group Health Value	$532.5	$530.8	$66.5	$65.0	-$1.5	-0.3%
GH	Group Health Classic	$580.2	$583.0	$114.2	$117.0	$2.8	0.5%
All	CDHPs Totals	$460.6	$490.0	-$5.4	$24.0	$29.4	6.0%
All	Non-CDHPs Totals	$547.1	$546.7	$81.1	$81.0	-$0.1	0.0%
All	All Plans	$542.0	$543.3	$76.0	$77.0	$1.0	0.2%

* Per Adult Unit Per Month (PAUPM), ** Monthly Health Savings Account (HSA) Employer Contributions

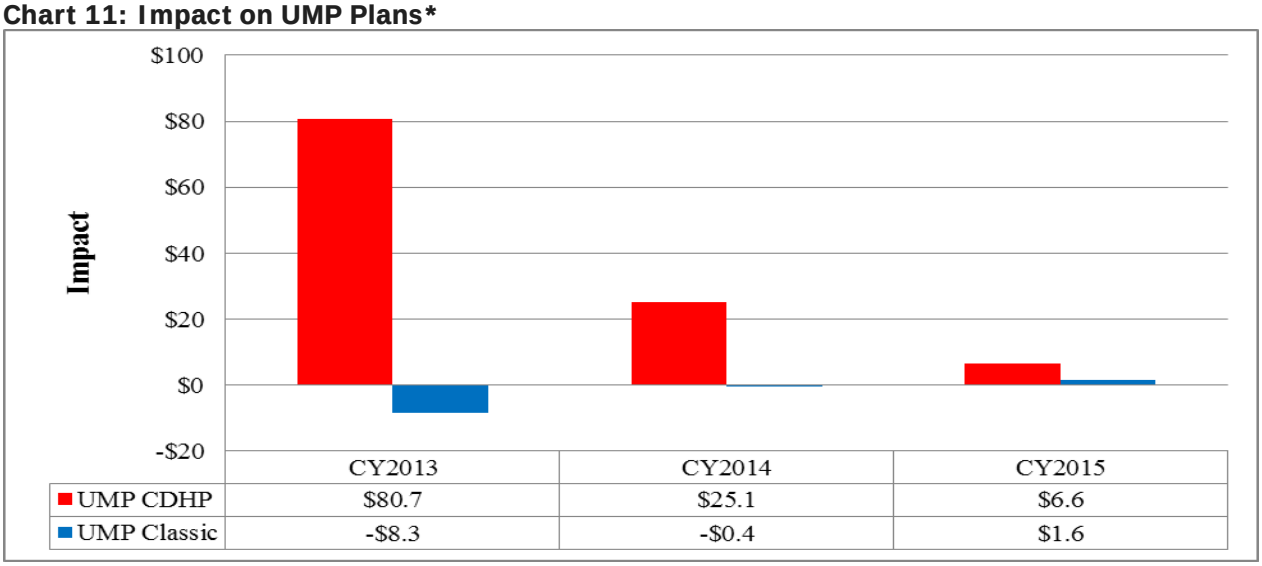
		CY2015					
Carrier	Plan	Modeled Bid Rate (With HSA**)	Actual Bid Rate (With HSA**)	Modeled Employee Contribution*	Actual Employee Contribution*	Impact ($)*	Impact % on Actual
UMP	Uniform Medical Plan CDHP	$512.4	$519.3	$24.4	$31.0	$6.6	1.3%
UMP	Uniform Medical Plan Classic	$570.4	$572.3	$82.4	$84.0	$1.6	0.3%
GH	Group Health CDHP	$516.6	$513.6	$28.6	$26.0	-$2.6	-0.5%
GH	Group Health Value	$555.6	$563.1	$67.6	$75.0	$7.4	1.3%
GH	Group Health Classic	$591.1	$594.6	$103.1	$107.0	$3.9	0.7%
All	CDHPs Totals	$513.3	$518.1	$25.3	$30.0	$4.7	0.9%
All	Non-CDHPs Totals	$570.1	$573.3	$82.1	$85.0	$2.9	0.5%
All	All Plans	$566.3	$569.6	$78.3	$82.0	$3.7	0.6%

* Per Adult Unit Per Month (PAUPM), ** Monthly Health Savings Account (HSA) Employer Contributions

Specifically regarding UMP Classic, the modeled impact was negative in CY2013 and CY2014: UMP Classic members were paying lower contributions (lower by $8.3 per adult unit per month

(PAUPM)[5] in CY2013, and $0.4 PAUPM in CY2014) than they would have if the CDHPs had not been introduced according to the modeled premium analysis. In CY2015, the impact was positive, i.e. members were paying a higher contribution of $1.6 PAUPM. Although the CY2015 UMP Classic impact is positive, it is smaller than the impact calculated for all non-Medicare plans (positive $3.7 PAUPM), indicating that the employees in this plan are overpaying less than the average PEBB non-Medicare employee.

Chart 11: Impact on UMP Plans*



	CY2013	CY2014	CY2015
UMP CDHP	$80.7	$25.1	$6.6
UMP Classic	-$8.3	-$0.4	$1.6

*Per Adult Unit Per Month (PAUPM)

The impact of the Group Health (GH) CDHP on GH Classic and Value plans is complicated and difficult to isolate because GH is allowed to manage its margin within the bid rates between the Classic and Value plans in the procurement process. The GH CDHP had a positive impact in CY2013 and CY2014, which means GH Value and Classic plan members overall were paying lower monthly contributions. There was a negative impact in CY2015, which means plan members paid higher contributions overall for GH Value and Classic plans.

The cost and utilization analysis shows that the presence of the CDHPs contributes to a lower claims trend. The migration of members into the low-cost plan option has driven lower trends across the non-Medicare pool. The all-plan[6] allowed PMPM trend was lower than the non-CDHPs trends over the last three years and also lower than the CDHPs trends in CY2013 and CY2015. (See Exhibit 1, Total Allowed PMPM Trend, in the Appendix.)

[5] Per adult per month (PAUPM) is the monthly cost for an adult unit, i.e. unit for a single subscriber, which is applied to different family tiers based on the pre-defined ratio.

[6] Kaiser plans are not included in the analysis due to the very low enrollment and, therefore, not credible results.

The report shows that the introduction of the CDHPs lowered member contributions in non-CDHPs by $6.7 PAUPM in CY2013, lowered member contribution by $0.1PAUPM in CY2014, and raised employee contributions for non-CDHP members by $2.9 PAUPM in CY2015.

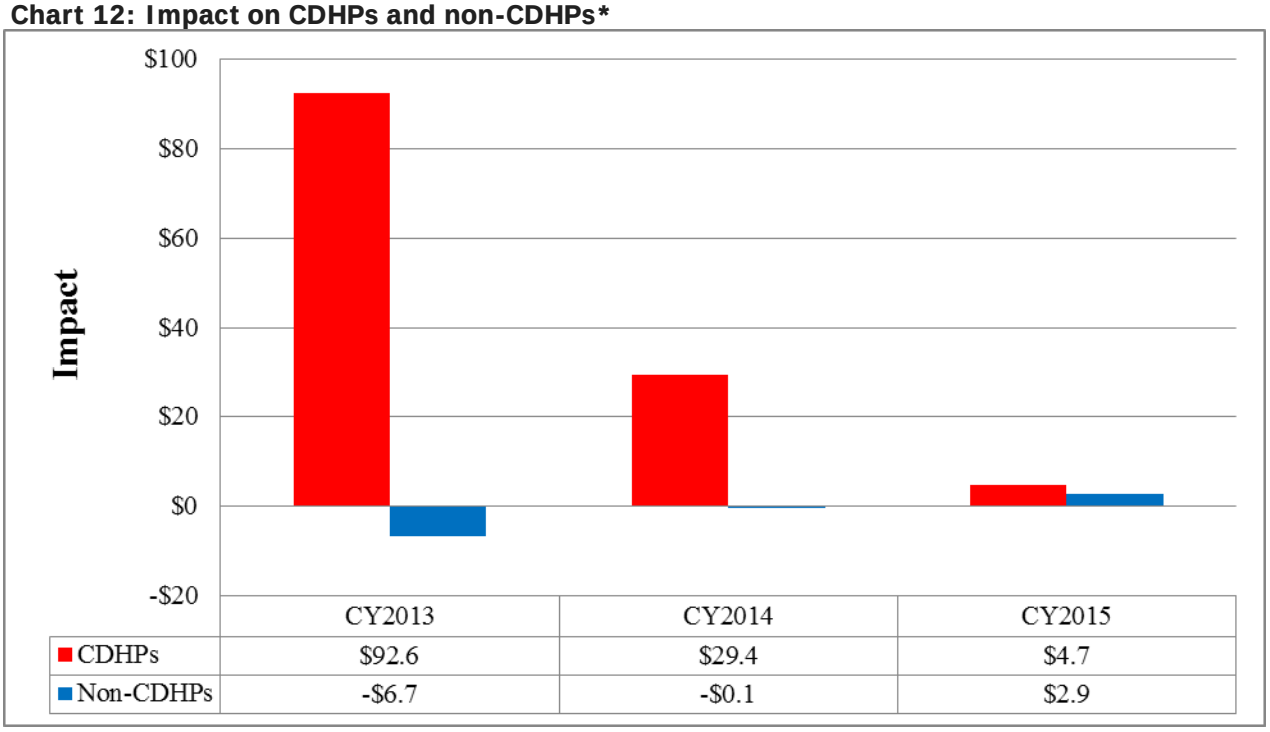
The 2015 impact on all non-Medicare plans is $3.7 PAUPM. This overall overpayment impact, not a net zero impact, is a result of the complex rate setting process in procurement, and the differences between the procurement projection and modeled estimates. The analysis model does not target a net zero impact, but instead shows the difference between the historical actuals and theoretical bid rate with the benefit of available historical actual claims and risk scores.

Over the last three years, the general trend is that CDHP members pay a higher monthly premium than they would have if the CDHPs had not been introduced according to the modeled premium analysis by Milliman.

The difference between the actual and modeled bid rates displayed in Table 4 represents what the member cost would have been had those members contributed toward bid rates which did not reflect the plan-specific selection. The members who have elected to remain within other plan options were modeled to have bid rates that were generally higher than what they were actually charged, while the members who selected the CDHP were modeled to have bid rates that were generally much lower than what they were actually charged. These differences could be attributed to differences in plan richness, administrative costs, unit costs, differences in morbidity that are not accounted for in the procurement risk score model, or other factors such as actual to expected pricing variation which are not included in the modeling of the bid rates.

In summary, the analysis shows that the impact is stabilizing as the claims and membership mature for the CDHPs (See Chart 12, next page). We expect that the projections of employee premium contributions will be more accurate and under- and over-payment by introducing CDHPs should further decrease in future years.

Chart 12: Impact on CDHPs and non-CDHPs*



	CY2013	CY2014	CY2015
CDHPs	$92.6	$29.4	$4.7
Non-CDHPs	-$6.7	-$0.1	$2.9

*Per Adult Unit Per Month (PAUPM)

Appendix

Milliman

1301 Fifth Avenue
Suite 3800
Seattle, WA 98101-2605
Tel +1 206 504 5561
Fax +1 206 682 1295
Email: ben.diederich@milliman.com

September 14, 2016

Thuy Hua-Ly
Chief Financial Officer
Washington State Health Care Authority
626 8th Ave. SE, M/S 45500
Olympia, WA 98504-5500

Stephen Lee
Fiscal Information & Data Analyst
Washington State Health Care Authority
626 8th Ave. SE, M/S 45500
Olympia, WA 98504-5500

Re: Legislative Report Regarding Implementation of CDHPs

Thuy and Stephen,

As requested in work order #PEBB-0351, we have prepared this report to comply with the three legislative requirements set forth in RCW 41.05.065(6) relating to the establishment of the consumer driven health plan (CDHP) option for employees covered by the Public Employee Benefits Board (PEBB) program. We understand that you may use this information as a supplemental appendix to a formal report submitted by the Washington State Health Care Authority (HCA) to the Washington State Legislature. It is not appropriate for any other purpose and should be referenced in its entirety as supplementary material.

Executive Summary

Overall our analysis shows a general pattern that the subscribers in both the UMP CDHP and Group Health CDHP pay a higher monthly premium contribution than they would otherwise pay. If these subscribers were not in the CDHP, given their claims and risk profiles, the employee contributions would have been zero. This impact has in turn lowered the employee contribution for subscribers in the UMP Classic (PPO) and Group Health Classic (MCO) and Group Health Value (MCO) plans. These subscribers pay less than they would have if the CDHPs had not been introduced. This impact is due to the specific mechanics of the complex bid rate and employee contribution calculation process utilized by PEBB, discussed at more detail in this report. There is an observed model exception to this generalized pattern. In 2015 the Group Health CDHP members in 2015 payed slightly less than they otherwise would have.

Over the 3 years analyzed in this report update we can see these results stabilizing as the claims and membership mature for the CDHPs. As the CDHPs continue to mature and grow, we expect the projections underlying employee contributions will continue to increase in accuracy and stability, and thus the under- and over-payment caused by the introduction of the CDHPs should further decrease.

Furthermore, although the reported claim trend in the CDHPs continues to vary dramatically, the presence of the low-cost CDHPs continues to drive a lower overall claims trend in the PEBB non-Medicare population.

Scope of Analysis

This analysis aims to address the data summaries and analysis specifically requested by the relevant RCW, and to analyze the impact of introducing the Group Health and UMP CDHP benefit plans into the PEBB portfolio starting in 2012. In areas where the RCW was not sufficiently clear to prescribe a certain approach or data summary, care has been taken to develop a methodology and provide results that are actuarially sound and consistent with our understanding of the RCW. Although there are other policy implications associated with these summaries, discussion of these implications is outside of the scope of this report.

Analysis

We have organized the following sections of our analysis to correspond with the three RCW requirements: Utilization and Cost Trends, Demographics, and Impact of CDHP on Other Plans.

Utilization and Cost Trends:

The analysis of utilization and cost trends is found in Exhibit 1. Allowed and paid claims per member per month (PMPM), member months, and utilization per 1,000 are displayed for each year, and are based on the entirety of the PEBB, non-Medicare risk pool enrollment. The utilization trends are calculated directly from the utilization data and unadjusted for any changes in the population from year to year. From this data, allowed PMPM trends are calculated. The portion of the overall allowed PMPM trend not explained by the utilization trend is presented in the unit cost and mix trend. This includes the impact of changes in unit cost due to contract negotiation with providers as well as trend due to changes in the underlying mix of high and low cost services provided from year to year across the various categories of service in the analysis.

Demographics:

Exhibit 2 includes the demographic summaries in total and by demographic groups. These groups include gender, age band, and member type (employee vs dependent). All counts are displayed as average members, which is total member months divided by 12.

Additionally, we have included an aggregate demographic rating factor for each plan and year based on the Milliman *Health Cost Guidelines*. This factor represents the relative claims cost expected from a large employer group based on their age and gender distribution, all other factors being equal. We provided this factor to allow for a quick comparison between plans and years of the age and gender demographics. This factor has not been normalized to a 1.0 for the PEBB population, so factors should not be compared to a 1.0 demographic factor, but rather to the factor of other plans or subtotals.

Synthesis of Results for Utilization and Cost Trends and Demographics:

Several important conclusions can be drawn from the data presented in Exhibits 1 and 2, and are listed below for your consideration.

- The presence of the CDHPs is driving a lower claims trend – Although the trend for the CDHPs has been relatively volatile over the past several years, the migration of members into this low-cost plan option has driven lower trends across the entire PEBB non-Medicare pool. This is seen on Exhibit 1, where the trend shown for all

plans is low. In fact, in 2012 to 2013 and again in 2014 to 2015, the all plans trend is lower than either the total CDHP and total PPO and MCO trend.

- Pharmacy claims have experienced very high trends recently – Nearly all plans had a double digit pharmacy claim trend from 2014 to 2015, which is much higher than the average medical claim trend from the same time period.
- The CDHP members are generally younger than PPO and MCO members – The demographic summaries by age band in Exhibit 2 show that CDHP members are significantly younger on average than PPO and MCO members. There do not appear to be significant differences in the gender or member type makeup of the CDHP members compared to the PPO and MCO members.
- Membership in CDHPs continues to grow – The member month totals by plan in Exhibit 1 show that the CDHPs continue to grow through 2015, while the PPO and MCO enrollment remains relatively constant.
- The demographic profile of both the CDHP and PPO and MCO members is relatively stable – The demographic distributions in Exhibit 2 vary significantly by plan and for CDHP vs PPO and MCO, but they do not vary significantly from year to year.

Impact of CDHP on Other Plans:

The impact that enrollment on the CDHPs has had for those members that have elected to remain enrolled within the other plan options, as measured by the differences between the actual and modeled bid rates, is displayed in Table 1 below as well as in column (L) of the attached Exhibit 3b. This impact could be based on material differences in plan richness, administrative costs, unit costs, or morbidity of the plan specific populations that are not accounted for within the procurement risk score model, or the other factors (such as actual to expected pricing variation) used in the calculation of modeled bid rates. A negative impact implies that members in the plan are underpaying compared to what we have modeled within the analysis for this report. A positive impact implies that members are overpaying compared to what we have modeled in the analysis for this report.

Table 1
Impact of CDHP on Other Plans

Plan	2013	2014	2015
Uniform Medical Plan CDHP	$80.69	$25.12	$6.57
Uniform Medical Plan Classic	(8.30)	(0.42)	1.55
Group Health CDHP	146.48	47.49	(2.59)
Group Health Value	(14.42)	(1.49)	7.38
Group Health Classic	11.49	2.84	3.87
CDHP Totals	92.63	29.41	4.67
PPO and MCO Totals	(6.72)	(0.09)	2.89
All Plans	**($1.68)**	**$1.02**	**$3.65**

In 2013 and 2014, the total impact on the UMP Classic plan is negative, indicating that members are paying a lower contribution than they would under the modeled analysis. In 2015, the total impact on UMP Classic was positive, indicating that members are paying a higher contribution than the modeled analysis. In looking at the 2015 results for the UMP Classic plan, it is relevant to note that the 2015 impact was also positive for the entire PEBB non-Medicare risk pool as shown in the all plans impact of $3.65.

The way we model impacts to the bid rates for this analysis does not target a net zero impact, where each dollar of overpayment in one plan corresponds to a dollar of underpayment in another plan. Instead, we are measuring how the actual payments developed in the historical process of procurement compare to a theoretical bid rate each plan would require under the benefit of hindsight though using the claims and risk score information available to us now.

Although the 2015 UMP Classic impact is positive, it is smaller than the impact calculated for all plans, indicating that employees in this plan are overpaying less than the average PEBB non-Medicare employee. The difference between the modeled and actual employee contribution for UMP Classic can most likely be attributed to differences between actual and projected experience as well as the morbidity factors that are not captured by the risk score models used in this analysis.

The impact of the Group Health CDHP on the Group Health Classic and Value plans is further complicated by the fact that there is significant selection bias between the Classic and Value plans and that during procurement Group Health is allowed to actively manage the relative margin within the bid rates of each plan. The selection bias between these two plans makes it difficult to isolate the impact that any one plan has on either of the other two plans. We would recommend focusing on the UMP results, which give a clearer picture of the CDHP vs PPO and MCO program impacts.

One interpretation of the Group Health process is to focus only on the Group Health CDHP impact. As with other plan specific impacts, a positive Group Health CDHP impact, means the members are paying a higher contribution than what was actually charged. The Group Health CDHP had a positive impact in 2013 and 2014 and a slight negative impact in 2015, which means that the Value and Classic plan members were paying lower contributions in 2013 and 2014 due to the Group Health CDHP, and higher contributions in 2015. It is the relative spread of the impacts across all three plans which creates complexity in interpretation of the results.

The results reported in this analysis for 2013 and 2014 have changed slightly from the report released in 2015 due to two reasons.

1) The underlying experience data is slightly different as we have continued to receive claims paid in recent months but incurred in 2013 and 2014. Additionally, some retroactive changes have been made to the claims and eligibility information.
2) The concurrent risk score model relied upon for this analysis is the Verisk DxCG risk score model. This concurrent model is the same model used for the prospective risk scores in the bid rate development and was not available last year. In the 2015 report an entirely different concurrent risk score model was used. While all risk score models attempt to make similar estimates of cost relativities they each vary in terms of the exact

data used to allocate concurrent cost relativities or predict future cost relativities. The DxCG concurrent risk score model used in this analysis should be more consistent with the prospective score used in the bid rate development. However even with a model change for this analysis the actual prospective risk scores used in the development of bid rates are still calculated 15 months in arrears to the actual rate setting period. It is this fact that we are attempting to overcome with the benefit of hindsight.

Background on Bid Rate and Employee Contribution Development Process

The impact that employees or members in one plan have on the claims cost, risk scores, bid rates and employee contributions of members in another plan is based on a set of very complex interactions within the PEBB program. Payment rates for the non-Medicare risk pool are based on the projected costs of each benefit plan. Bid rates are the payment rates standardized for the risk score in each plan; these bid rates are used to establish the monthly employee premium contribution for State Active employees.

The interaction between the employee contribution rates of different plans is driven by the collective bargaining agreement and the "index rate" methodology. The current collective bargaining agreement for State Active employees dictates that employees will contribute no more than 15% of the aggregate bid rate volume across all plans. The current methodology for employee premium contributions establishes the state index rate as the fixed contribution per adult unit per month that the state provides across all plans; employees pay the difference between the index rate and the bid rate. This methodology causes some plans to have an effective contribution rate above 15% of the bid rate and other plans to have a contribution rate below 15% of the bid rate.

When the CDHPs were introduced to the PEBB program, the HCA adopted greater flexibility within the procurement process in terms of allowing the employee contribution rates to vary across plans. Prior to the introduction of CDHPs, the bid rates between the plan options were within a narrow range of values. The CDHPs have been offered with rates that are significantly lower than the PPOs and MCOs, which caused aggregate bid rates to decrease. A lower bid rate volume lowers the index rate and raises the employee contribution on the existing plan. Although a bid rate represents a standardized population, there are many reasons why a lower bid rate is appropriate for plans like CDHPs. The most common reasons are:

- Leaner plan design,
- Lower unit cost due to different networks,
- Lower administrative costs,
- Deviation of actual claims costs from expected results in pricing, and
- Imperfections of the risk model for a lower morbidity population.

These factors, among others, were considered as part of the process of establishing the CDHPs in 2012.

Because the CDHPs were new in 2012, there was an element of pricing uncertainty between the claims costs that were assumed in development of premiums and the costs that actually occurred. Each year, new information was introduced to the pricing process that allowed pricing to be

more accurate. In 2012, plan-specific information was not available for claims costs or risk scores. In 2013, plan specific risk scores became available. In 2014, the CDHPs were able to be priced using plan specific risk scores and experience, however, that experience reflected an immature plan population. We would expect claims costs to change as the plan matures. In 2015, the CDHPs were again able to be priced using plan specific risk scores and experience. Of all of the years included in this analysis, 2015 should give the best picture of what the impact on the existing plans will look like going forward; however, the magnitude or direction of the impact may change as the plans continue to mature.

The procurement process has long used prospective risk scores to standardize the morbidity differences between plans in the calculation of employee contributions. Any morbidity based variation that is not captured in the risk scores would impact the bid rate pricing for each of the plans.

Methodology for Determining Impact of CDHPs on Members in Non-CDHPs

We have measured the impact of the CDHP alternatives on all existing plans by creating a "modeled employee contribution" and comparing it to the actual employee contribution from the procurement process. The modeled employee contribution concept simulates a scenario in which members in existing plans would not be impacted by the introduction of CDHPs.

Exhibits 3a and 3b show the development of the modeled employee contribution. In Exhibit 3a a composite carrier-wide allowed cost amount in column (A) is developed from all members covered by the carrier, regardless of their plan selection. This allowed amount represents a baseline amount of claims cost for the carrier's population. Modeled allowed amounts for each plan are calculated by adjusting the carrier-wide allowed amounts in (A) by the plan specific concurrent risk score in (B). A modeled paid amount is then calculated in (D) by applying the historical paid to allowed factor in (C) to the modeled allowed amount. The concurrent risk score is independent of the process used in the development of the bid rates and represents our current expectation of claims distribution between the plans. In this instance the risk score is used to apportion the relative morbidity of the carrier wide experience to each plan.

The next step is to convert the modeled paid amounts in (D) to the required revenue for comparison to the payment rates developed during procurement. To accomplish this, modeled paid claim amounts are loaded with non-benefit expenses using the target medical loss ratio (MLR) per plan in (E) from the 2016 procurement to produce our modeled payment rate in column (F). In order for our modeled payment rate to be comparable with the original index rate the modeled payment rates are converted to an adult unit basis from a member basis, and scaled to the original payment rate at the carrier level. The resulting scaled modeled payment rate per adult unit per month (PAUPM) is shown in (G), and is comparable to the actual payment rate in (H). Payment rates shown in Exhibit 3a do not include payments for HSA contributions. As the HSA contribution is not risk adjusted, it is only included in the bid rate development within Exhibit 3b for the final impact on employee contributions.

Exhibit 3b builds on the Exhibit 3a payment rate by standardizing the required revenue into a bid rate and computing the modeled employee contributions for each plan. The modeled bid rate in (C) is developed by standardizing the modeled payment rate from Exhibit 3a, displayed again in

column (A) of Exhibit 3b, using the prospective risk score in (B) from the procurement process. Employer HSA contributions (including the additional contribution for Wellness members in 2015) in (D) are added to the CDHPs to develop the modeled bid rate for all plans in (E). This modeled bid rate is comparable to the actual bid rate from procurement displayed in (F). Modeled and actual employee contributions in (H) and (I) are then calculated from the modeled and actual bid rate using the actual index rate in (G) from each procurement cycle.

As we noted previously, the concurrent risk scores used to create the modeled amounts for this report are completely independent from the prospective risk scores used in the bid development process. The concurrent risk score for a given year predicts claim cost for that year using diagnosis data from that year. The prospective risk score used in the bid development process predicts claim costs for the bid year using 12 months of diagnosis data from 15 months prior to the bid year. For example, the 2015 bid year prospective risk score is based on diagnosis information from October 2013 through September 2014, while the 2015 concurrent risk score is based on diagnosis information from CY2015. Further complicating the discussion is that the prospective risk score model is calibrated to estimate the cost for the 12 months immediately following the diagnosis information. The way they are currently being used in the bid development process introduces a three month gap between the diagnosis period and the projected period. Because there can be meaningful differences between the prospective risk scores used during development of the actual bid rate and the concurrent risk scores used to create the modeled bid rate for this report, we attempted to separately quantify the difference between the actual and modeled amounts due solely to this risk score change. This impact is shown in column (J). The remaining impact from all other sources is found in column (K). The total impact is the sum of these two items, shown in column (L).

This methodology does not replicate every detail of the procurement process. Instead it represents an approximation of the procurement process.

Data and Assumptions

In the course of this analysis, we relied upon data from several sources. We reviewed this data for reasonableness, but did not conduct a full audit of this data. We found no significant issues in the data. Due to the low enrollment in the Kaiser CDHP, the results for this plan were not deemed credible and are not displayed in this report. A full description of the data sources is provided below.

Enrollment and Demographic Information:
Monthly enrollment and demographic information was obtained from the PEBB Master Enrollment Database (PMED). This data is provided by HCA to Milliman through monthly enrollment snapshots. Milliman compiles this information into a single database.

Claims Information:
Quarterly medical claim information is provided to Milliman by each of the major carriers (Group Health, Kaiser, and Regence for UMP). MODA provides monthly pharmacy files. This data is compiled, grouped, and summarized by Milliman. The claims data used for this analysis include claims paid through March 2016. Since we are using claims incurred through December

2015 in this analysis we have 3 months of run-out, and no adjustments for completion were made.

Concurrent Risk Scores:
The risk relativities are based on the enrollment provided by HCA and diagnoses from paid claim data for each calendar year. This data is processed through the Verisk DxCG risk adjustment model to produce the concurrent age/gender and diagnosis based risk scores. The raw risk scores are scaled such that the aggregate modeled payment rate dollars by carrier are equal to the original aggregate payment rate dollars.

Bid Rates and Prospective Risk Scores:
The risk relativities are based on the enrollment provided by HCA and diagnoses from paid claim data. This data is processed through the Verisk DxCG Risk Adjustment Model to produce prospective age/gender and diagnosis-based risk scores. Members with eligibility in the diagnosis period were assigned diagnosis-based risk scores while members without eligibility in the diagnosis period received an age/gender score. The health-status based risk relativities are weighted by member months with the age/gender risk relativities to complete the DxCG model output and capture the total risk by plan or carrier for the calculation of risk adjustment relativity factors. The bid rates are used for the expense index in order to ensure that the factors are revenue neutral across all of the plans in the portfolio.

Caveats and Limitations

The information contained in this letter has been prepared for the Washington State Health Care Authority and its consultants and advisors. It is our understanding that the information contained in this report may be utilized in a public document and may be provided to legislative policy and fiscal committees. To the extent that the information contained in this report is provided to third parties, it should be distributed in its entirety. Any user of this information should possess a certain level of expertise in health care modeling and projections so as not to misinterpret the data presented.

Milliman makes no representations or warranties regarding the contents of this report to third parties. Likewise, third parties are instructed that they are to place no reliance upon this report prepared for the Washington State Health Care Authority by Milliman that would result in the creation of any duty or liability under any theory of law by Milliman or its employees to third parties. Other parties receiving this report must rely upon their own experts in drawing conclusions about the Washington State Health Care Authority's management of the PEBB program.

In performing this analysis, Milliman has relied upon data ultimately provided by the Health Care Authority, as well as HCA's third party administrators. We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment. To the extent that there are errors contained within this data, the results of our analysis could produce erroneous results.

The analysis provided with this report represents the most current information available, and is based on the specific methodology we describe herein. Future analyses may vary from these results for many reasons, including but not limited to enrollment shifts, random claims fluctuations, and alternate methodologies. It is important to monitor enrollment and claims and make revisions to the assumptions as needed.

This analysis is subject to the terms and conditions of the Contract between Milliman and Washington State Health Care Authority.

I am a member of the American Academy of Actuaries and meet the qualification standards to perform financial projections of this type.

Closing

We recognize that this report deals with highly technical material. Please feel free to give us a call if you have any questions regarding the material presented in this report.

Sincerely,

Ben Diederich, FSA, MAAA
Consulting Actuary

David Koenig, ASA, MAAA
Associate Actuary

PEBB - Exhibit 1
CDHP LEG Report
PEBB Health Plan Cost and Service Utilization Trends for 2012 Through 2015
Non-Medicare Risk Pool

Allowed Claims PMPM

	2012			2013			2014			2015		
Plan	Medical	Pharmacy	Medical & Pharmacy	Medical	Pharmacy	Medical & Pharmacy	Medical	Pharmacy	Medical & Pharmacy	Medical	Pharmacy	Medical & Pharmacy
Uniform Medical Plan CDHP	$170.01	$22.44	$192.45	$190.99	$22.04	$213.03	$188.88	$23.35	$212.23	$206.15	$27.61	$233.75
Uniform Medical Plan Classic	$367.12	$69.69	$436.81	$383.21	$75.96	$459.16	$397.87	$79.75	$477.62	$403.50	$90.07	$493.57
Group Health CDHP	$128.83	$12.60	$141.43	$156.64	$17.16	$173.80	$135.50	$13.01	$148.51	$176.84	$14.19	$191.03
Group Health Value	$277.91	$33.80	$311.71	$298.11	$36.50	$334.61	$294.00	$41.16	$335.16	$292.18	$47.26	$339.44
Group Health Classic	$418.79	$60.49	$479.28	$414.24	$63.61	$477.85	$429.45	$73.13	$502.59	$436.94	$80.44	$517.37
All CDHP	$161.22	$20.34	$181.56	$185.08	$21.20	$206.29	$178.24	$21.29	$199.53	$199.85	$24.73	$224.58
All PPO and MCO	$354.76	$60.44	$415.20	$368.75	$65.67	$434.43	$379.16	$70.49	$449.65	$384.71	$79.97	$464.69
All Plans	$346.26	$58.68	$404.94	$358.83	$63.27	$422.10	$366.93	$67.49	$434.43	$372.08	$76.20	$448.28

Paid Claims PMPM

	2012			2013			2014			2015		
Plan	Medical	Pharmacy	Medical & Pharmacy	Medical	Pharmacy	Medical & Pharmacy	Medical	Pharmacy	Medical & Pharmacy	Medical	Pharmacy	Medical & Pharmacy
Uniform Medical Plan CDHP	$116.23	$12.29	$128.52	$134.05	$13.33	$147.38	$133.95	$14.71	$148.66	$148.70	$18.48	$167.18
Uniform Medical Plan Classic	$314.37	$57.54	$371.90	$328.90	$64.55	$393.44	$344.84	$68.93	$413.78	$353.29	$79.77	$433.06
Group Health CDHP	$80.40	$5.66	$86.06	$93.80	$10.88	$104.68	$85.33	$7.15	$92.48	$125.85	$8.45	$134.30
Group Health Value	$222.70	$24.18	$246.89	$236.48	$27.44	$263.92	$246.11	$32.91	$279.02	$252.49	$39.17	$291.66
Group Health Classic	$348.29	$44.81	$393.10	$343.95	$48.41	$392.36	$376.50	$59.44	$435.94	$390.64	$67.34	$457.98
All CDHP	$108.58	$10.87	$119.45	$127.13	$12.91	$140.04	$124.26	$13.21	$137.46	$143.79	$16.32	$160.12
All PPO and MCO	$298.93	$48.35	$347.28	$310.70	$54.27	$364.97	$327.27	$59.87	$387.14	$337.19	$69.77	$406.96
All Plans	$290.57	$46.70	$337.27	$300.78	$52.04	$352.82	$314.91	$57.03	$371.94	$323.97	$66.12	$390.09

Member Months

Plan	2012	2013	2014	2015
Uniform Medical Plan CDHP	107,507	140,226	154,330	170,358
Uniform Medical Plan Classic	1,893,284	1,919,701	1,949,604	1,967,117
Group Health CDHP	29,187	29,124	38,412	46,570
Group Health Value	657,756	648,430	649,459	612,661
Group Health Classic	423,865	397,093	374,789	378,036
All CDHP	136,694	169,350	192,742	216,928
All PPO and MCO	2,974,905	2,965,224	2,973,852	2,957,814
All Plans	3,111,599	3,134,574	3,166,594	3,174,742

Utilization Per 1,000

	2012			2013			2014			2015		
Plan	Medical	Pharmacy	Medical & Pharmacy	Medical	Pharmacy	Medical & Pharmacy	Medical	Pharmacy	Medical & Pharmacy	Medical	Pharmacy	Medical & Pharmacy
Uniform Medical Plan CDHP	33,355	5,605	38,960	36,200	5,266	41,465	37,090	5,293	42,383	41,803	5,401	47,204
Uniform Medical Plan Classic	76,482	13,100	89,582	80,157	13,026	93,183	83,883	12,833	96,716	90,816	12,805	103,621
Group Health CDHP	17,153	4,116	21,269	25,358	4,544	29,902	22,051	3,968	26,019	28,424	3,822	32,246
Group Health Value	44,789	8,713	53,502	49,876	8,801	58,677	49,855	8,700	58,555	52,632	8,500	61,133
Group Health Classic	69,063	14,541	83,604	71,755	14,596	86,351	71,308	14,521	85,829	83,115	13,691	96,806
All CDHP	29,896	5,287	35,183	34,335	5,142	39,477	34,093	5,029	39,122	38,931	5,062	43,993
All PPO and MCO	68,417	12,336	80,753	72,410	12,313	84,723	74,867	12,143	87,010	81,923	12,027	93,949
All Plans	66,725	12,026	78,751	70,353	11,925	82,278	72,385	11,710	84,095	78,985	11,551	90,536

PEBB - Exhibit 1
CDHP LEG Report
PEBB Health Plan Cost and Service Utilization Trends for 2012 Through 2015
Non-Medicare Risk Pool

Utilization Trend

	2012 to 2013			2013 to 2014			2014 to 2015		
Plan	Medical	Pharmacy	Medical & Pharmacy	Medical	Pharmacy	Medical & Pharmacy	Medical	Pharmacy	Medical & Pharmacy
Uniform Medical Plan CDHP	8.5%	-6.1%	6.4%	2.5%	0.5%	2.2%	12.7%	2.0%	11.4%
Uniform Medical Plan Classic	4.8%	-0.6%	4.0%	4.6%	-1.5%	3.8%	8.3%	-0.2%	7.1%
Group Health CDHP	47.8%	10.4%	40.6%	-13.0%	-12.7%	-13.0%	28.9%	-3.7%	23.9%
Group Health Value	11.4%	1.0%	9.7%	0.0%	-1.2%	-0.2%	5.6%	-2.3%	4.4%
Group Health Classic	3.9%	0.4%	3.3%	-0.6%	-0.5%	-0.6%	16.6%	-5.7%	12.8%
All CDHP	14.9%	-2.7%	12.2%	-0.7%	-2.2%	-0.9%	14.2%	0.7%	12.5%
All PPO and MCO	5.8%	-0.2%	4.9%	3.4%	-1.4%	2.7%	9.4%	-1.0%	8.0%
All Plans	5.4%	-0.8%	4.5%	2.9%	-1.8%	2.2%	9.1%	-1.4%	7.7%

Unit Cost and Mix Trend

	2012 to 2013			2013 to 2014			2014 to 2015		
Plan	Medical	Pharmacy	Medical & Pharmacy	Medical	Pharmacy	Medical & Pharmacy	Medical	Pharmacy	Medical & Pharmacy
Uniform Medical Plan CDHP	3.5%	4.6%	4.0%	-3.5%	5.4%	-2.5%	-3.2%	15.9%	-1.1%
Uniform Medical Plan Classic	-0.4%	9.6%	1.1%	-0.8%	6.6%	0.2%	-6.3%	13.2%	-3.5%
Group Health CDHP	-17.8%	23.4%	-12.6%	-0.5%	-13.2%	-1.8%	1.2%	13.2%	3.8%
Group Health Value	-3.7%	6.9%	-2.1%	-1.3%	14.1%	0.4%	-5.9%	17.5%	-3.0%
Group Health Classic	-4.8%	4.8%	-3.5%	4.3%	15.6%	5.8%	-12.7%	16.7%	-8.7%
All CDHP	0.0%	7.2%	1.3%	-3.0%	2.7%	-2.4%	-1.8%	15.4%	0.1%
All PPO and MCO	-1.8%	8.9%	-0.3%	-0.6%	8.8%	0.8%	-7.3%	14.5%	-4.3%
All Plans	-1.7%	8.7%	-0.2%	-0.6%	8.6%	0.7%	-7.1%	14.4%	-4.2%

Total Allowed PMPM Trend

	2012 to 2013			2013 to 2014			2014 to 2015		
Plan	Medical	Pharmacy	Medical & Pharmacy	Medical	Pharmacy	Medical & Pharmacy	Medical	Pharmacy	Medical & Pharmacy
Uniform Medical Plan CDHP	12.3%	-1.8%	10.7%	-1.1%	5.9%	-0.4%	9.1%	18.2%	10.1%
Uniform Medical Plan Classic	4.4%	9.0%	5.1%	3.8%	5.0%	4.0%	1.4%	12.9%	3.3%
Group Health CDHP	21.6%	36.2%	22.9%	-13.5%	-24.2%	-14.6%	30.5%	9.1%	28.6%
Group Health Value	7.3%	8.0%	7.3%	-1.4%	12.8%	0.2%	-0.6%	14.8%	1.3%
Group Health Classic	-1.1%	5.2%	-0.3%	3.7%	15.0%	5.2%	1.7%	10.0%	2.9%
All CDHP	14.8%	4.3%	13.6%	-3.7%	0.4%	-3.3%	12.1%	16.1%	12.6%
All PPO and MCO	3.9%	8.7%	4.6%	2.8%	7.3%	3.5%	1.5%	13.5%	3.3%
All Plans	3.6%	7.8%	4.2%	2.3%	6.7%	2.9%	1.4%	12.9%	3.2%

PEBB - Exhibit 2
CDHP LEG Report
Demographic Summary

Average Members*

	Uniform Medical Plan CDHP				Uniform Medical Plan Classic				Group Health CDHP				Group Health Value				Group Health Classic			
Demographic Group	2012	2013	2014	2015	2012	2013	2014	2015	2012	2013	2014	2015	2012	2013	2014	2015	2012	2013	2014	2015
Gender																				
Male	4,299	5,612	6,188	6,807	72,699	73,651	74,846	75,579	1,179	1,167	1,563	1,907	25,983	25,634	25,618	24,197	16,845	15,812	14,892	15,000
Female	4,660	6,073	6,673	7,390	85,075	86,324	87,621	88,347	1,254	1,260	1,638	1,974	28,830	28,402	28,504	26,858	18,477	17,279	16,340	16,503
Total	8,959	11,686	12,861	14,197	157,774	159,975	162,467	163,926	2,432	2,427	3,201	3,881	54,813	54,036	54,122	51,055	35,322	33,091	31,232	31,503
Age Band																				
Under 25	3,387	4,314	4,683	5,111	48,440	49,827	51,212	51,905	900	903	1,161	1,341	19,211	18,797	18,883	17,621	10,653	9,980	9,384	9,547
25 to 29	434	755	981	1,093	6,547	7,033	7,436	7,787	194	231	323	455	3,692	3,676	3,624	3,309	1,383	1,360	1,307	1,427
30 to 34	584	901	1,086	1,271	8,995	9,240	9,671	9,795	193	213	327	440	4,396	4,471	4,608	4,432	1,840	1,677	1,646	1,774
35 to 39	732	992	1,096	1,229	10,241	10,492	10,785	11,231	204	212	289	330	4,224	4,229	4,363	4,231	1,983	1,887	1,809	1,950
40 to 44	870	1,076	1,107	1,217	12,064	12,016	12,026	11,983	217	213	286	343	4,559	4,478	4,408	4,063	2,539	2,308	2,144	2,109
45 to 49	782	974	1,057	1,183	12,942	12,929	13,203	13,438	221	195	236	273	4,341	4,182	4,125	4,044	2,837	2,559	2,406	2,420
50 to 54	836	1,000	1,047	1,123	15,471	15,216	15,027	14,762	197	162	218	272	4,599	4,457	4,415	4,119	3,695	3,397	3,121	3,022
55 to 59	775	926	970	1,035	17,946	17,579	17,073	16,767	181	165	192	223	4,668	4,512	4,415	4,180	4,469	4,091	3,762	3,647
60 to 64	501	667	744	824	18,660	18,678	18,603	18,456	112	120	149	176	4,067	4,064	4,033	3,829	4,258	4,099	3,913	3,869
Over 65	59	81	91	112	6,469	6,965	7,432	7,804	14	13	21	29	1,056	1,171	1,248	1,228	1,666	1,734	1,742	1,739
Total	8,959	11,686	12,861	14,197	157,774	159,975	162,467	163,926	2,432	2,427	3,201	3,881	54,813	54,036	54,122	51,055	35,322	33,091	31,232	31,503
Member Type																				
Employee	3,775	5,146	5,774	6,537	76,720	77,309	78,451	79,577	1,109	1,144	1,528	1,942	24,921	24,751	24,943	23,892	17,460	16,348	15,539	15,787
Dependent	5,184	6,540	7,087	7,660	81,054	82,666	84,016	84,349	1,323	1,283	1,673	1,939	29,892	29,284	29,178	27,164	17,862	16,743	15,693	15,716
Total	8,959	11,686	12,861	14,197	157,774	159,975	162,467	163,926	2,432	2,427	3,201	3,881	54,813	54,036	54,122	51,055	35,322	33,091	31,232	31,503
Avg Demographic Factor**	0.974	0.963	0.957	0.957	1.179	1.175	1.169	1.165	0.934	0.916	0.907	0.905	1.021	1.025	1.023	1.027	1.207	1.217	1.221	1.209

*Calculated as member months divided by 12

**The average demographic factor is based on the Milliman *Health Cost Guidelines* age/sex factors assigned by age band and gender to the plan's population. It is a measure of relative cost based on the age and gender distribution of members, all else being equal.

Distribution Within Each Plan

	Uniform Medical Plan CDHP				Uniform Medical Plan Classic				Group Health CDHP				Group Health Value				Group Health Classic			
Demographic Group	2012	2013	2014	2015	2012	2013	2014	2015	2012	2013	2014	2015	2012	2013	2014	2015	2012	2013	2014	2015
Gender																				
Male	48%	48%	48%	48%	46%	46%	46%	46%	48%	48%	49%	49%	47%	47%	47%	47%	48%	48%	48%	48%
Female	52%	52%	52%	52%	54%	54%	54%	54%	52%	52%	51%	51%	53%	53%	53%	53%	52%	52%	52%	52%
Age Band																				
Under 25	38%	37%	36%	36%	31%	31%	32%	32%	37%	37%	36%	35%	35%	35%	35%	35%	30%	30%	30%	30%
25 to 29	5%	6%	8%	8%	4%	4%	5%	5%	8%	10%	10%	12%	7%	7%	7%	6%	4%	4%	4%	5%
30 to 34	7%	8%	8%	9%	6%	6%	6%	6%	8%	9%	10%	11%	8%	8%	9%	9%	5%	5%	5%	6%
35 to 39	8%	8%	9%	9%	6%	7%	7%	7%	8%	9%	9%	9%	8%	8%	8%	8%	6%	6%	6%	6%
40 to 44	10%	9%	9%	9%	8%	8%	7%	7%	9%	9%	9%	9%	8%	8%	8%	8%	7%	7%	7%	7%
45 to 49	9%	8%	8%	8%	8%	8%	8%	8%	9%	8%	7%	7%	8%	8%	8%	8%	8%	8%	8%	8%
50 to 54	9%	9%	8%	8%	10%	10%	9%	9%	8%	7%	7%	7%	8%	8%	8%	8%	10%	10%	10%	10%
55 to 59	9%	8%	8%	7%	11%	11%	11%	10%	7%	7%	6%	6%	9%	8%	8%	8%	13%	12%	12%	12%
60 to 64	6%	6%	6%	6%	12%	12%	11%	11%	5%	5%	5%	5%	7%	8%	7%	8%	12%	12%	13%	12%
Over 65	1%	1%	1%	1%	4%	4%	5%	5%	1%	1%	1%	1%	2%	2%	2%	2%	5%	5%	6%	6%
Member Type																				
Employee	42%	44%	45%	46%	49%	48%	48%	49%	46%	47%	48%	50%	45%	46%	46%	47%	49%	49%	50%	50%
Dependent	58%	56%	55%	54%	51%	52%	52%	51%	54%	53%	52%	50%	55%	54%	54%	53%	51%	51%	50%	50%

PEBB - Exhibit 2
CDHP LEG Report
Demographic Summary

	Average Members*											
	All CDHP				All PPO and MCO				All Plans			
Demographic Group	2012	2013	2014	2015	2012	2013	2014	2015	2012	2013	2014	2015
Gender												
Male	5,478	6,779	7,750	8,714	115,527	115,097	115,356	114,776	121,005	121,876	123,107	123,490
Female	5,913	7,333	8,311	9,364	132,382	132,005	132,465	131,708	138,295	139,339	140,776	141,072
Total	11,391	14,113	16,062	18,077	247,909	247,102	247,821	246,485	259,300	261,215	263,883	264,562
Age Band												
Under 25	4,287	5,216	5,843	6,452	78,304	78,604	79,479	79,072	82,590	83,820	85,322	85,524
25 to 29	628	986	1,304	1,547	11,622	12,069	12,366	12,523	12,250	13,055	13,670	14,070
30 to 34	777	1,115	1,412	1,711	15,231	15,388	15,924	16,002	16,008	16,503	17,336	17,713
35 to 39	936	1,204	1,384	1,559	16,447	16,608	16,957	17,412	17,383	17,812	18,342	18,971
40 to 44	1,086	1,289	1,393	1,560	19,162	18,801	18,578	18,154	20,248	20,090	19,971	19,713
45 to 49	1,002	1,169	1,294	1,456	20,119	19,670	19,734	19,902	21,121	20,839	21,027	21,358
50 to 54	1,034	1,162	1,265	1,394	23,765	23,070	22,563	21,903	24,799	24,232	23,828	23,297
55 to 59	955	1,091	1,162	1,257	27,083	26,182	25,250	24,594	28,038	27,273	26,412	25,851
60 to 64	613	786	892	999	26,985	26,841	26,548	26,154	27,597	27,627	27,441	27,154
Over 65	74	94	112	141	9,192	9,870	10,422	10,770	9,266	9,964	10,533	10,911
Total	11,391	14,113	16,062	18,077	247,909	247,102	247,821	246,485	259,300	261,215	263,883	264,562
Member Type												
Employee	4,884	6,290	7,303	8,478	119,101	118,409	118,933	119,256	123,985	124,699	126,236	127,734
Dependent	6,508	7,822	8,759	9,599	128,807	128,693	128,888	127,229	135,315	136,516	137,647	136,828
Total	11,391	14,113	16,062	18,077	247,909	247,102	247,821	246,485	259,300	261,215	263,883	264,562
Avg Demographic Factor**	0.966	0.955	0.947	0.945	1.148	1.148	1.144	1.142	1.140	1.137	1.132	1.129

*Calculated as member months divided by 12
**The average demographic factor is based on the Milliman Health Cost Guidelines age/sex factors assigned by age band and gender to the plan's population. It is a measure of relative cost based on the age and gender distribution of members, all else being equal.

	Distribution Within Each Plan											
	All CDHP				All PPO and MCO				All Plans			
Demographic Group	2012	2013	2014	2015	2012	2013	2014	2015	2012	2013	2014	2015
Gender												
Male	48%	48%	48%	48%	47%	47%	47%	47%	47%	47%	47%	47%
Female	52%	52%	52%	52%	53%	53%	53%	53%	53%	53%	53%	53%
Age Band												
Under 25	38%	37%	36%	36%	32%	32%	32%	32%	32%	32%	32%	32%
25 to 29	6%	7%	8%	9%	5%	5%	5%	5%	5%	5%	5%	5%
30 to 34	7%	8%	9%	9%	6%	6%	6%	6%	6%	6%	7%	7%
35 to 39	8%	9%	9%	9%	7%	7%	7%	7%	7%	7%	7%	7%
40 to 44	10%	9%	9%	9%	8%	8%	7%	7%	8%	8%	8%	7%
45 to 49	9%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
50 to 54	9%	8%	8%	8%	10%	9%	9%	9%	10%	9%	9%	9%
55 to 59	8%	8%	7%	7%	11%	11%	10%	10%	11%	10%	10%	10%
60 to 64	5%	6%	6%	6%	11%	11%	11%	11%	11%	11%	10%	10%
Over 65	1%	1%	1%	1%	4%	4%	4%	4%	4%	4%	4%	4%
Member Type												
Employee	43%	45%	45%	47%	48%	48%	48%	48%	48%	48%	48%	48%
Dependent	57%	55%	55%	53%	52%	52%	52%	52%	52%	52%	52%	52%

PEBB - Exhibit 3a
CDHP LEG Report
CDHP Impact Summary - Payment Rate

		Year 2013							
Carrier	Plan	(A) Carrier Allowed PMPM	(B) Concurrent Risk Score	(C) Paid / Allowed	(D) Modeled Paid PMPM	(E) Target Medical Loss Ratio	(F) Modeled Payment PMPM	(G) Scaled Modeled Payment PAUPM	(H) Original Payment PAUPM
UMP	Uniform Medical Plan CDHP	$442.41	0.51	0.69	$155.31	88.4%	$175.61	$260.92	$318.27
UMP	Uniform Medical Plan Classic	$442.41	1.04	0.86	$392.86	95.3%	$412.14	$584.76	$580.76
GH	Group Health CDHP	$383.18	0.46	0.60	$105.53	71.0%	$148.70	$211.70	$310.42
GH	Group Health Value	$383.18	0.86	0.79	$258.44	86.1%	$300.12	$422.18	$410.11
GH	Group Health Classic	$383.18	1.28	0.82	$401.23	88.2%	$455.14	$619.34	$631.49
All	CDHP Totals			0.68	$146.75		$170.98	$252.42	$316.91
All	PPO and MCO Totals			0.84	$364.59		$393.40	$554.71	$551.17
All	All Plans			0.84	$352.82		$381.38	$538.98	$538.98

		Year 2014							
Carrier	Plan	(A) Carrier Allowed PMPM	(B) Concurrent Risk Score	(C) Paid / Allowed	(D) Modeled Paid PMPM	(E) Target Medical Loss Ratio	(F) Modeled Payment PMPM	(G) Scaled Modeled Payment PAUPM	(H) Original Payment PAUPM
UMP	Uniform Medical Plan CDHP	$458.15	0.52	0.70	$165.57	88.4%	$187.21	$260.92	$231.20
UMP	Uniform Medical Plan Classic	$458.15	1.04	0.87	$412.44	95.3%	$432.67	$579.65	$581.91
GH	Group Health CDHP	$387.46	0.44	0.62	$105.92	71.0%	$149.25	$201.82	$216.59
GH	Group Health Value	$387.46	0.86	0.83	$275.87	86.1%	$320.36	$432.00	$435.91
GH	Group Health Classic	$387.46	1.31	0.87	$440.01	88.2%	$499.13	$649.85	$641.85
All	CDHP Totals			0.69	$153.68		$179.64	$249.06	$228.27
All	PPO and MCO Totals			0.86	$386.09		$416.52	$557.09	$558.39
All	All Plans			0.86	$371.94		$402.10	$538.91	$538.91

		Year 2015							
Carrier	Plan	(A) Carrier Allowed PMPM	(B) Concurrent Risk Score	(C) Paid / Allowed	(D) Modeled Paid PMPM	(E) Target Medical Loss Ratio	(F) Modeled Payment PMPM	(G) Scaled Modeled Payment PAUPM	(H) Original Payment PAUPM
UMP	Uniform Medical Plan CDHP	$472.86	0.55	0.72	$184.48	88.4%	$208.59	$289.03	$263.01
UMP	Uniform Medical Plan Classic	$472.86	1.04	0.88	$431.56	95.3%	$452.73	$606.14	$608.32
GH	Group Health CDHP	$397.63	0.45	0.70	$127.19	71.0%	$179.22	$236.35	$217.16
GH	Group Health Value	$397.63	0.86	0.86	$292.92	86.1%	$340.15	$451.90	$453.38
GH	Group Health Classic	$397.63	1.30	0.89	$456.83	88.2%	$518.20	$667.52	$667.51
All	CDHP Totals			0.71	$172.18		$202.28	$277.55	$253.02
All	PPO and MCO Totals			0.88	$406.07		$437.78	$582.74	$584.49
All	All Plans			0.87	$390.09		$421.69	$562.40	$562.40

PEBB - Exhibit 3b
CDHP LEG Report
CDHP Impact Summary - Bid Rate

Year 2013

Carrier	Plan	(A) Scaled Modeled Payment PAUPM	(B) Prospective Risk Score	(C) Modeled Bid Rate PAUPM	(D) HSA and Wellness Contribution PAUPM	(E) Modeled Bid Rate With HSA PAUPM	(F) Actual Bid Rate With HSA PAUPM	(G) Index Rate PAUPM	(H) Modeled Employee Contribution PAUPM	(I) Actual Employee Contribution PAUPM	(J) Risk Score Gap Impact	(K) Other Impact	**(L) Total Impact**
UMP	Uniform Medical Plan CDHP	$260.92	0.740	$352.57	$51.74	$404.31	$485.08	$463.00	-$58.69	$22.00	$137.98	-$57.29	**$80.69**
UMP	Uniform Medical Plan Classic	$584.76	1.067	$548.30	$0.00	$548.30	$539.65	$463.00	$85.30	$77.00	-$9.98	$1.68	**-$8.30**
GH	Group Health CDHP	$211.70	0.707	$299.40	$53.12	$352.52	$499.40	$463.00	-$110.48	$36.00	$216.94	-$70.46	**$146.48**
GH	Group Health Value	$422.18	0.777	$543.42	$0.00	$543.42	$529.04	$463.00	$80.42	$66.00	$7.20	-$21.62	**-$14.42**
GH	Group Health Classic	$619.34	1.093	$566.51	$0.00	$566.51	$578.48	$463.00	$103.51	$115.00	-$24.87	$36.36	**$11.49**
All	CDHP Totals	$252.42		$343.39	$51.98	$395.37	$487.55	$463.00	-$67.63	$25.00	$151.61	-$58.98	**$92.63**
All	PPO and MCO Totals	$554.71		$549.72	$0.00	$549.72	$542.63	$463.00	$86.72	$80.00	-$8.32	$1.61	**-$6.72**
All	All Plans	$538.98		$538.98	$2.71	$541.68	$539.77	$463.00	$78.68	$77.00	$0.00	-$1.68	**-$1.68**

Year 2014

Carrier	Plan	(A) Scaled Modeled Payment PAUPM	(B) Prospective Risk Score	(C) Modeled Bid Rate PAUPM	(D) HSA and Wellness Contribution PAUPM	(E) Modeled Bid Rate With HSA PAUPM	(F) Actual Bid Rate With HSA PAUPM	(G) Index Rate PAUPM	(H) Modeled Employee Contribution PAUPM	(I) Actual Employee Contribution PAUPM	(J) Risk Score Gap Impact	(K) Other Impact	**(L) Total Impact**
UMP	Uniform Medical Plan CDHP	$260.92	0.630	$413.92	$51.97	$465.88	$490.78	$466.00	-$0.12	$25.00	$74.19	-$49.08	**$25.12**
UMP	Uniform Medical Plan Classic	$579.65	1.063	$545.42	$0.00	$545.42	$544.81	$466.00	$79.42	$79.00	-$7.03	$6.61	**-$0.42**
GH	Group Health CDHP	$201.82	0.522	$386.52	$52.99	$439.51	$486.91	$466.00	-$26.49	$21.00	$116.15	-$68.66	**$47.49**
GH	Group Health Value	$432.00	0.811	$532.49	$0.00	$532.49	$530.82	$466.00	$66.49	$65.00	$19.80	-$21.29	**-$1.49**
GH	Group Health Classic	$649.85	1.120	$580.16	$0.00	$580.16	$582.97	$466.00	$114.16	$117.00	-$37.45	$40.29	**$2.84**
All	CDHP Totals	$249.06		$408.42	$52.17	$460.59	$490.00	$466.00	-$5.41	$24.00	$82.61	-$53.20	**$29.41**
All	PPO and MCO Totals	$557.09		$547.09	$0.00	$547.09	$546.69	$466.00	$81.09	$81.00	-$5.18	$5.09	**-$0.09**
All	All Plans	$538.91		$538.91	$3.08	$541.98	$543.35	$466.00	$75.98	$77.00	$0.00	$1.02	**$1.02**

Year 2015

Carrier	Plan	(A) Scaled Modeled Payment PAUPM	(B) Prospective Risk Score	(C) Modeled Bid Rate PAUPM	(D) HSA and Wellness Contribution PAUPM	(E) Modeled Bid Rate With HSA PAUPM	(F) Actual Bid Rate With HSA PAUPM	(G) Index Rate PAUPM	(H) Modeled Employee Contribution PAUPM	(I) Actual Employee Contribution PAUPM	(J) Risk Score Gap Impact	(K) Other Impact	**(L) Total Impact**
UMP	Uniform Medical Plan CDHP	$289.03	0.637	$453.72	$58.71	$512.43	$519.33	$488.00	$24.43	$31.00	$59.16	-$52.59	**$6.57**
UMP	Uniform Medical Plan Classic	$606.14	1.063	$570.45	$0.00	$570.45	$572.26	$488.00	$82.45	$84.00	-$6.37	$7.93	**$1.55**
GH	Group Health CDHP	$236.35	0.517	$457.16	$59.43	$516.59	$513.61	$488.00	$28.59	$26.00	$107.20	-$109.79	**-$2.59**
GH	Group Health Value	$451.90	0.813	$555.62	$0.00	$555.62	$563.13	$488.00	$67.62	$75.00	$17.05	-$9.67	**$7.38**
GH	Group Health Classic	$667.52	1.129	$591.13	$0.00	$591.13	$594.55	$488.00	$103.13	$107.00	-$32.35	$36.22	**$3.87**
All	CDHP Totals	$277.55		$454.47	$58.87	$513.33	$518.08	$488.00	$25.33	$30.00	$69.63	-$64.96	**$4.67**
All	PPO and MCO Totals	$582.74		$570.11	$0.00	$570.11	$573.29	$488.00	$82.11	$85.00	-$4.97	$7.87	**$2.89**
All	All Plans	$562.40		$562.40	$3.95	$566.35	$569.61	$488.00	$78.35	$82.00	$0.00	$3.65	**$3.65**