PEBB health benefit plan

Cost and utilization trends, demographics, and impacts of alternative consumer-directed health plans

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

November 30, 2020

Washington State Health Care Authority

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Executive summary

The Health Care Authority (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). This report evaluates the impact of offering a consumer-directed health plan (CDHP). The report includes information regarding:

- The health plan cost and service utilization;
- Enrollment and demographics; and
- The impacts of the CDHP enrollment on costs of other plans.

The appendix is a report by the actuarial firm, Milliman, Inc. The appendix includes details otherwise not included in this report.

Key findings:

- The composite CDHP health plan cost and service utilization was lower than the composite cost and utilization from the UMP Classic, KPWA Classic, KPWA Value, UMP Plus ACPs, and KPWA SoundChoice plans for calendar year (CY) 2017 through CY 2019.
- Based on the analysis Milliman, Inc. provided, the demographic information is consistent with the findings of the CDHP legislative report submitted in 2019.
- The retrospective analysis shows that while CDHP members are overpaying, all other members are underpaying.

Analysis

Health plan cost and service utilization

This report uses data from CY 2017 through CY 2019. During these years, the Public Employees Benefits Board (PEBB) Program offered three CDHPs. The CDHPs were offered by the self-insured Uniform Medical Plan (UMP), as well as Kaiser Foundation Health Plan of the Northwest (KPNW) and Kaiser Foundation Health Plan of Washington (KPWA). Results from the KPNW Classic plan and the KPNW CDHP are not included in this report due to low enrollment. For the purposes of this report, data for KPWA SoundChoice and UMP Plus Accountable Care Plans (ACP) are categorized together because of plan design similarities. UMP Classic, KPWA Classic, and KPWA Value are categorized together for the same reason.

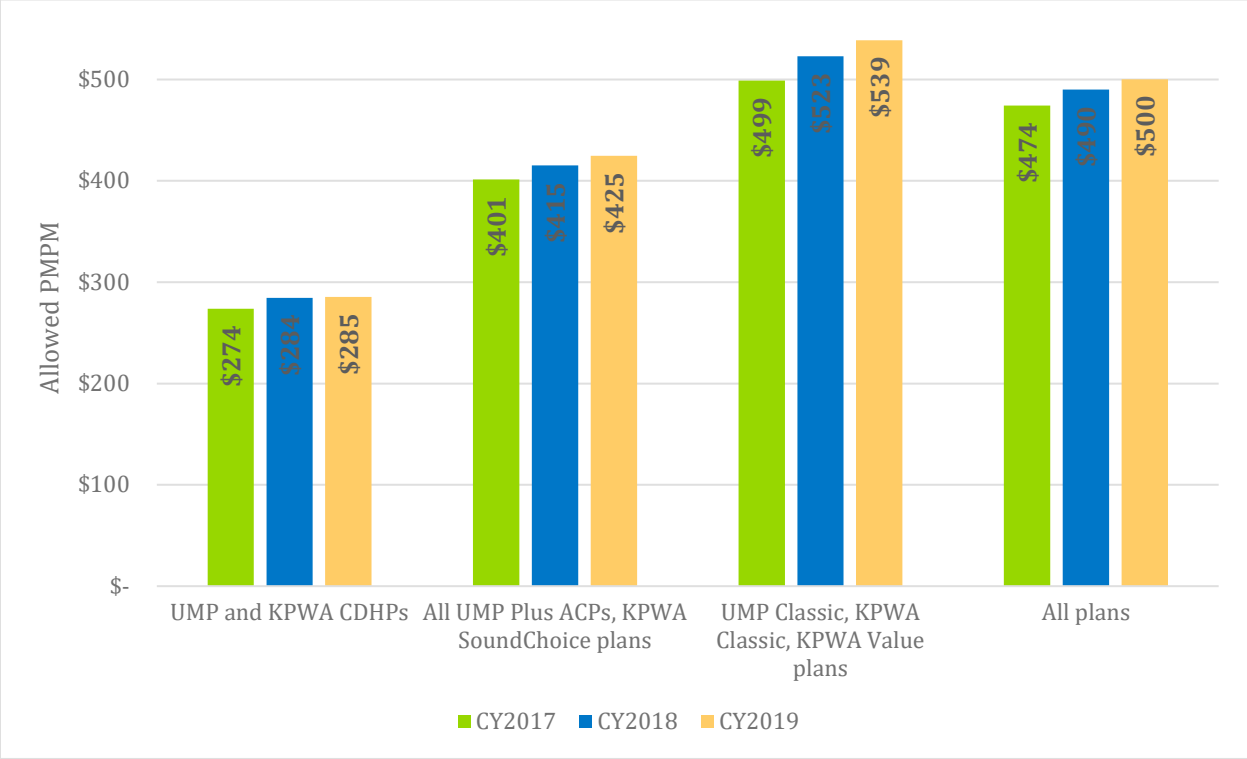
The composite CDHP health plan cost and service utilization was lower than the composite cost and utilization from the UMP Classic. KPWA Classic, KPWA Value, UMP Plus ACPs, and KPWA SoundChoice plans for CY 2017 through CY 2019. For CY 2017 through CY 2019, allowed claims for the two CDHPs ranged from $274 per member per month (PMPM) in CY 2017 to $285 PMPM in CY 2019 (Chart 1, see next page).

The allowed claims for composite UMP Plus ACPs (Puget Sound High Value Network and UW Medicine Accountable Care Network) and KPWA SoundChoice ranged from $401 PMPM in CY 2017 to $425 PMPM in CY 2019. The allowed claims for composite KPWA Classic, UMP Classic, and KPWA

Value ranged from $499 PMPM in CY 2017 to $539 PMPM in CY 2019. Service utilization (per 1,000 members) shows a similar relationship.

See Exhibit 1 in the attached appendix for more details.

Chart 1 – Allowed claim costs per PMPM



Enrollment and demographics

Based on the analysis Milliman, Inc. provided, the demographic information is consistent with the findings of the CDHP legislative report submitted in 2019.

Enrollment in both the UMP Plus ACPs, KPWA SoundChoice, and the CDHPs has increased slightly each year since 2017 (Chart 2, see next page). Additionally, enrollment in the UMP Classic, KPWA Classic, and KPWA Value plans has decreased since 2017. Members enrolled in the UMP Plus ACPs, KPWA SoundChoice, and CDHPs are generally younger than members enrolled in the UMP Classic, KPWA Classic, and KPWA Value plans (Appendix, Exhibit 2). However, there are no significant differences in the gender makeup of the CDHP and UMP Plus ACP members compared to the UMP Classic, KPWA Classic, and KPWA Value plan members (Chart 3, see next page). Although demographic distribution varies between plans, it does not vary significantly year to year within each plan.

Chart 2 – Average member enrollment

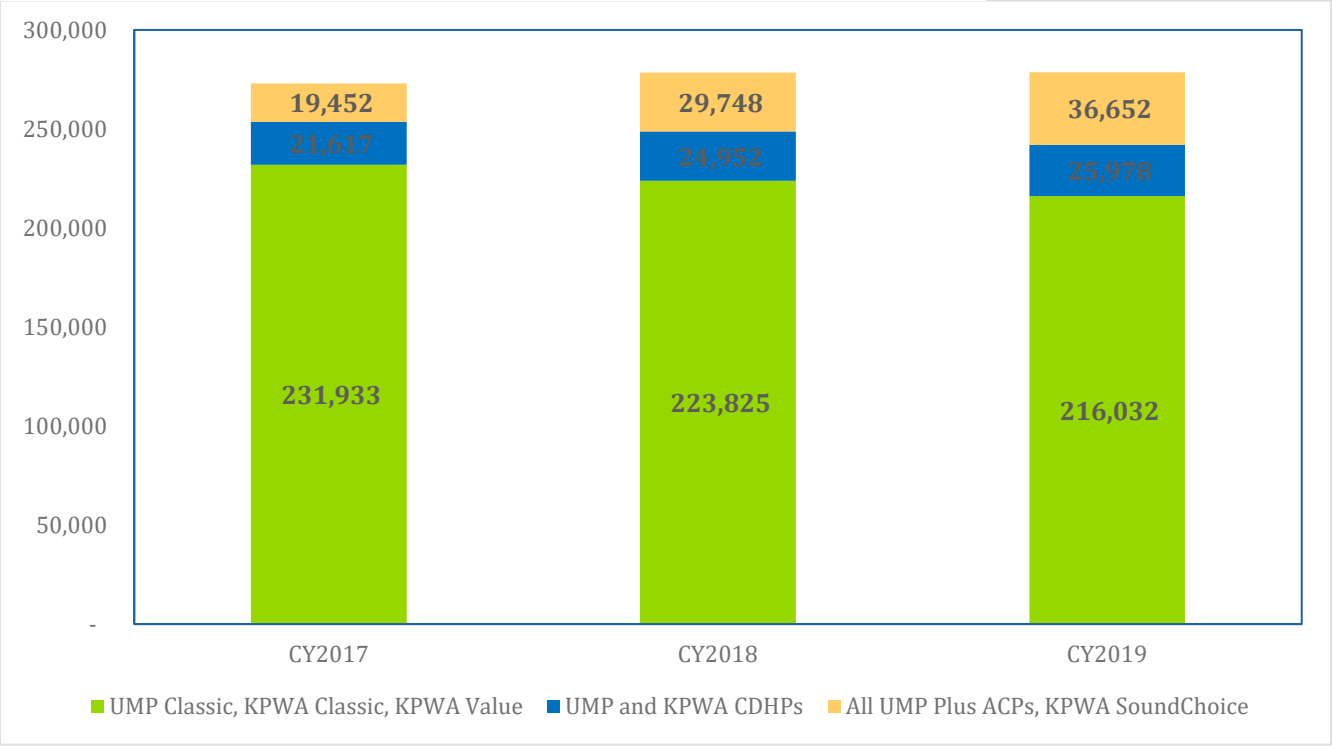
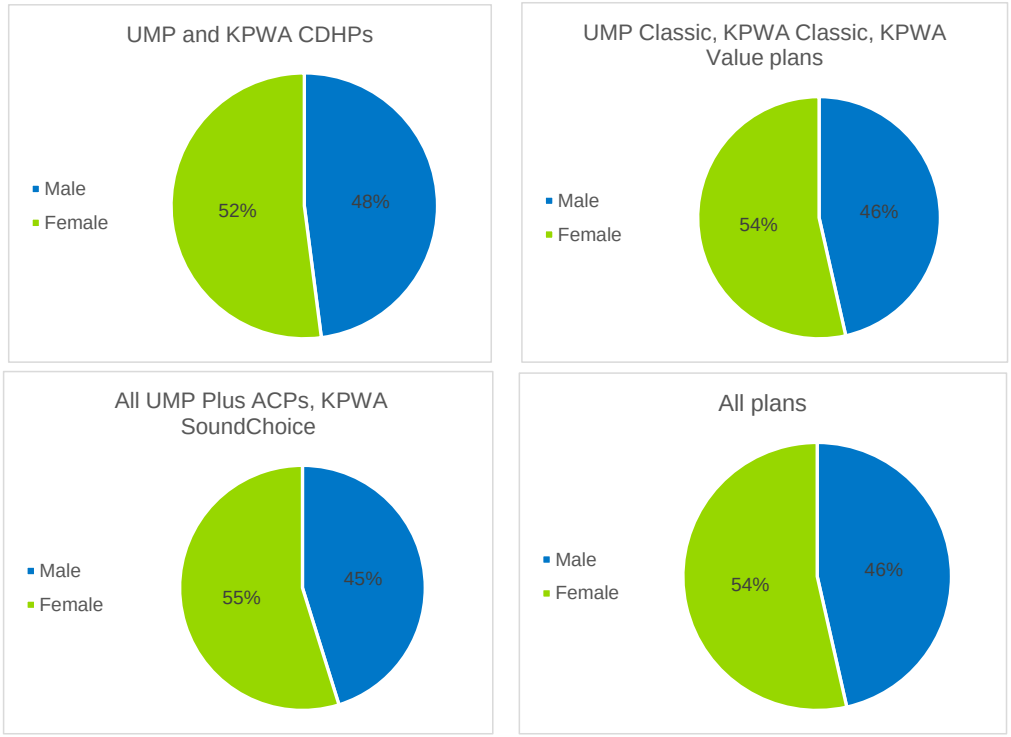


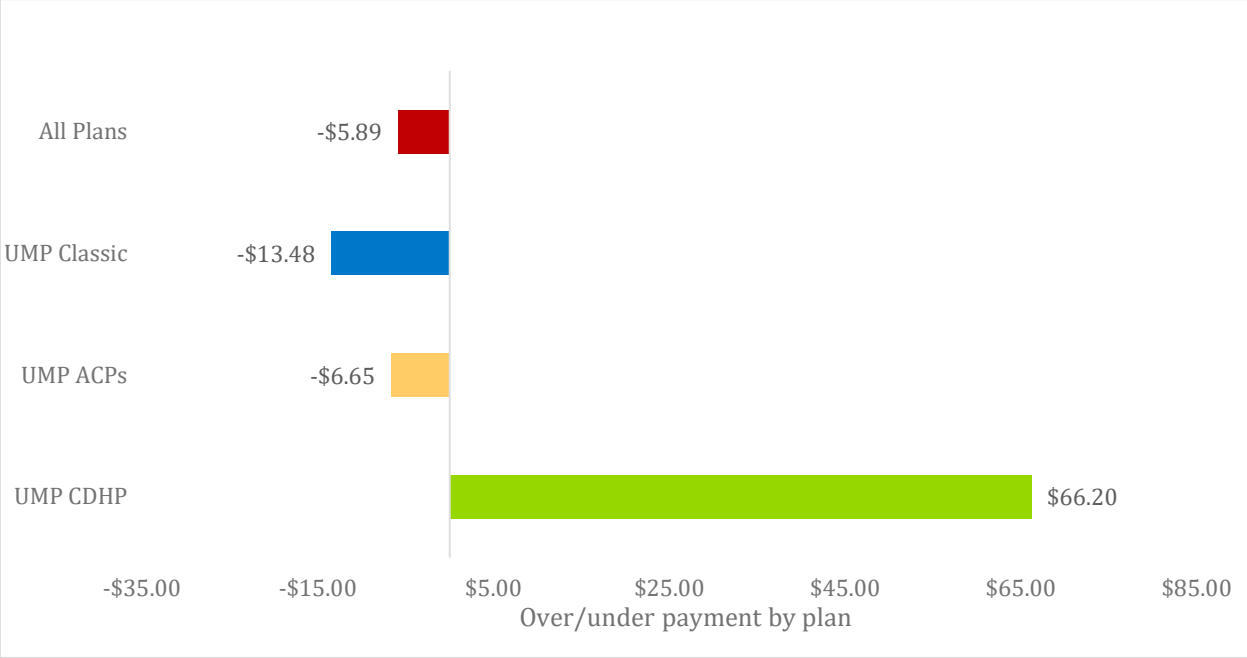
Chart 3 – Average gender distribution



Impact of CDHP enrollment on costs of other plans

Milliman, Inc. completed their analysis to determine the impact of the CDHPs on bid rates and the cost of other plans. This analysis was done to determine the impact of bid rates in hindsight, whereas actual bid rates are set prospectively using experience projections. This method measures the difference between the actual costs and the costs modeled retrospectively. A negative number indicates that members in a plan are underpaying compared to the hindsight review; inversely, a positive number indicates that members are overpaying compared to the hindsight review (Appendix, pg. 4, Table 1). To better understand how this works, see chart 4 and our below analysis of the UMP CDHP plan's impact on the UMP portfolio.

Chart 4 – Impact of UMP CDHP plan on UMP portfolio



In CY 2019, the UMP Classic impact was an underpayment of $13.48 per adult unit per month (PAUPM). This is $7.59 PAUPM more than the impact calculated for all non-Medicare plans (-$5.89 PAUPM). While a UMP Classic member and the average PEBB non-Medicare member are both underpaying, these numbers show that a UMP Classic member is paying even less (about $5.89 less) than the average PEBB non-Medicare member. Similarly, in CY 2019, members enrolled in the UMP Plus plans (ACPs) were underpaying by $6.65 PAUPM, which means they were paying $.76 less than the average PEBB non-Medicare member (see Chart 4 above and Appendix, Exhibits 3a and 3b). These impacts could be based on a variety of benefit design differences among plans, cost assumptions, and plan morbidity assumptions that are not accounted for during development of plan bid rates.

Due to their recent introduction, 2019 data should give the most complete illustration of how CDHPs and ACPs are maturing within the PEBB portfolio. As all the PEBB health plans mature, it is expected that claims costs will vary. Data from 2019 best represents the outlook of the existing

plans. However, the impacts of the plans will continue to change as they mature or as new plans are introduced.

Conclusion

The results from this analysis are similar to previous reports. The PEBB portfolio has changed over time with the introduction of new plans, as well as the creation of the School Employees Benefits Board (SEBB) Program effective January 1, 2020. The impacts of this new program is not included in this report because the applicable reporting data is through 2019.

Appendix:

Milliman report regarding implementation of CDHPs and other alternative plans

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July 15, 2020

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Delivered via email

Re: Legislative report regarding implementation of CDHPs and other alternative plans

Megan, Tanya, and Kate,

As requested, we have prepared this report to comply with the three legislative requirements set forth in the Revised Code of Washington (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 continues to demonstrate that subscribers in the Uniform Medical Plan (UMP) CDHP pay a higher monthly premium contribution than what is actuarially supported by a hindsight review of the claims and risk profile. This impact is due to the complex mechanics of the bid rate development and employee contribution methodology utilized by PEBB. Selecting the UMP CDHP plan is still desirable for some members because of the combined HSA and Wellness Program contributions for subscribers in the UMP CDHP plan. These items are discussed in more detail in the analysis section of this report.

In this report, we are including the results from the Accountable Care Program (ACP) and related UMP plans. These plans began in 2016. In 2017 the UMP Plus subscribers paid more than they would have under a hindsight review. In 2018 and 2019, UMP Plus subscribers paid less than they would have under such review. This is a result of the under projection of costs relating to the trend guarantee that was expected to be in place for the UMP ACP program. During 2018 rate development the UMP Plus plan targeted a trend 3% lower than the UMP Classic plan from 2016 to 2017 and a 2% lower from 2017 to 2018. The ACP program guarantee structure has been renegotiated to be a comparison of the risk standardized performance between the Plus plans and the Classic plan within any given year. The result is a decrease in premium contribution required of UMP Plus relative to those required of UMP Classic. The timing of this analysis does not allow for consideration of the accountable care network (ACN) rewards or penalties that will ultimately impact the premium contributions.

The results from the Kaiser Permanente of Washington (KPWA) plans are less stable from year to year, which is expected given the lower membership in the KPWA CDHP and ACP plans compared to the UMP CDHP and ACP plans. The analysis shows that the KPWA Value and CDHP subscribers consistently paid less than they would have under this hindsight review. The Sound Choice and Classic subscribers do not show a clear pattern of paying more or less than expected. Over the three years included in this analysis they have paid more and paid less, depending on the year and plan. Generally the under- and over-payments in the Classic plan have been small relative to the other plans.

The under- and over-payments have stabilized in 2018 and 2019 as the claims and membership have matured for the ACP plans. As the ACP plans continue to mature and grow, we expect the projections underlying the employee contributions will continue to increase in accuracy and stability, and thus the under- and over-payment caused by the introduction of the ACP plans should further decrease. There may be further variation starting in 2021 with the introduction of UMP Select.

The claims data used in this analysis are paid through December 2019. Later runout was not available for some of the plans at the time of this analysis. We are using a consistent claims runout date for each plan and are applying IBNP estimates for the 2019 dates of service.

Scope of analysis

This analysis aims to address the data summaries and analyses specifically requested by the relevant RCW, and to analyze the impact of introducing the KPWA and UMP CDHP and ACP benefit plans into the PEBB portfolio starting in 2012 for CDHP and 2016 for ACP. 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 plan, and are based on the entirety of the PEBB non-Medicare risk pool enrollment. The utilization and allowed trends are calculated directly from the data and unadjusted for any changes in the population from year to year. The pharmacy claims utilization basis is quantity supplied. The portion of the overall allowed PMPM trend not explained by the utilization trend is presented as the unit cost and mix trend. This includes the impact of changes in unit cost due to contract negotiation with providers as well as 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 and ACP plans is driving a lower claims trend – Although the trend for the CDHPs and ACP plans have been relatively volatile over the past several years, the migration of members into these low-cost plan options 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, the all plans calculated average trend is generally lower than either the total average CDHP trend, the total average ACP trend, or the total average Classic and Value trend. This is likely due to program savings as members move into these lower average cost plan alternatives.

- The CDHP and ACP members are generally younger than Classic and Value members – The demographic summaries by age band in Exhibit 2 show that CDHP and ACP members are significantly younger on average than Classic and Value members. In 2019, 61% of members in CDHP plans and 62% of members in ACP plans are under age 40 and while 50% of members in Classic and Value plans are under 40. There do not appear to be significant differences in the gender or member type makeup of the CDHP or ACP members compared to the Classic and Value members.

- Membership in CDHPs and ACPs continues to grow – The member month totals by plan in Exhibit 1 show that the CDHP and ACP membership continues to grow through 2019, while the Classic and Value enrollment declined slightly from 2016 to 2019.

- The demographic profile by plan is relatively stable – The demographic distributions in Exhibit 2 vary significantly from plan to plan, but they do not vary significantly from year to year within each plan.

<u>Impact of CDHP and ACP on other plans:</u>

The impact that enrollment on the CDHPs and ACP plans 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. A negative impact implies that members in the plan are underpaying compared to the hindsight review that we have modeled within the analysis for this report. A positive impact implies that members are overpaying compared to the hindsight review that we have modeled in the analysis for this report. 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 with the hindsight of plan experience.

Table 1
Impact of CDHP on Other Plans

Plan	2017	2018	2019
UMP CDHP	$81.56	$53.99	$66.20
UMP Plus	15.48	(4.14)	(6.65)
UMP Classic	(4.30)	(2.57)	(13.48)
KPWA CDHP	(85.95)	(4.14)	(0.95)
KPWA Sound Choice	150.17	37.03	(5.42)
KPWA Value	(13.36)	(12.21)	(14.75)
KPWA Classic	18.18	3.72	(1.05)
CDHP Totals	45.39	41.89	52.72
Accountable Care Totals	31.81	(0.46)	(6.19)
Classic and Value Totals	(3.06)	(3.44)	(11.86)
All Plans	**$3.12**	**$0.43**	**($5.89)**

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. This can be seen in the non-zero totals in the All Plans row of Table 1. Instead, we are measuring how the actual payments determined in the historical process of procurement compare to a theoretical bid rate each plan would require under the benefit of hindsight using the actual claims and risk score information available to us now.

In comparing the impact of each plan, it can be instructive to compare the plan specific impact to the All Plan impact for each year to assess whether a plan over- or under-paid compared to the average over- or under-payment of the entire program. For example, although the 2019 KPWA Classic impact is an underpayment of $1.05, it is smaller than the underpayment calculated for all plans ($5.89), indicating that although employees in this plan are underpaying, they are underpaying less than the average PEBB non-Medicare employee.

It is challenging to identify the impact of the KPWA CDHP and KPWA Sound Choice plans on the KPWA Classic and Value plans because there is significant selection bias between the Classic and Value plans. During procurement, KPWA is allowed to actively manage the relative margin within the bid rates of each plan in order to target certain contribution levels while maintaining budget neutrality for the risk adjustment process. The selection bias between these plans makes it difficult to isolate the impact that any one plan has on any of the other plans. We recommend focusing on the UMP results, which give a clearer picture of the CDHP, ACP, and Classic program impacts and interactions.

The results reported in this analysis for 2017 and 2018 have changed slightly from the report released in 2019 due to three reasons.

1) The underlying experience data is slightly different as we have continued to receive claims paid in recent months but incurred in years prior to 2019. Additionally, some retroactive changes have been made to the claims and eligibility information.

2) The concurrent risk score model relied upon for this analysis has changed. Previously we used version 3.15 of Milliman's MARA risk score model. This year, however, we are using Milliman's MARA version 4.3.3 risk score model.

3) The target medical loss ratio used to calculate payment rates from paid claims levels was updated to be consistent with the target loss ratios from the latest rate submissions for

procurement. These targets for the 2021 rate development are then used to scale all three years of historical experience.

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 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 for state employees 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; state active 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 more narrow range of values. The CDHPs have been offered with rates that are significantly lower than the Classic and Value plans, which caused aggregate bid rate volume 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 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 initial CDHP bid rates 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, plan specific risk scores and claims cost became available, however, that claim experience reflected an immature plan population. In subsequent years the risk scores and claims experience stabilized. The timeline for the ACP plans follows a similar trajectory. In 2016, plan specific information was not available for claims costs or risk scores. In 2017 the ACP plans were able to be priced using plan specific risk scores. In 2018 and on the ACP plans were able to be priced using plan specific claim costs.

We expect claims costs to change as any health plan matures. Of all of the years included in this analysis, 2019 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 and as the plan offerings change like they did in 2012 with the new CDHP plans and in 2016 with the new

ACP plans. We expect there may be a similar interruption in 2021 with the introduction of the UMP Select plan.

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 and ACPs on subscribers in other plans

We have measured the impact of the CDHP and ACP 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 or ACPs.

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 entire 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). 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. 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 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 2020 procurement process 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 and on) 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 2018 bid year prospective risk score is based on diagnosis information from October 2015 through September 2016, while the 2018 concurrent risk score is based on diagnosis information from CY2018. 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 the risk scores are currently being applied in the bid development process introduces a fifteen 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. A full description of the data sources and assumptions is provided below.

Exclusions of Kaiser Permanente of the Northwest:

Due to the low enrollment in the Kaiser Permanente of the Northwest (KPNW) CDHP, the results for this plan were not deemed credible and no results for KPNW are displayed in this report.

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 (KPWA, KPNW, and Regence for UMP plans). MODA provides monthly pharmacy files. This data is compiled, grouped, and summarized by Milliman. We rely upon this information without audit and review only for reasonableness relative to other experience reports. The claims data used for this analysis include claims paid through December 2019 and are adjusted for IBNP estimates.

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 MARA 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 Milliman MARA 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 MARA 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 HCA 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 HCA 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 HCA's management of the PEBB program.

In performing this analysis, Milliman has relied upon data ultimately provided by the HCA, 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 HCA signed on December 15, 2017.

We are members 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,

David Koenig, FSA, MAAA
Consulting Actuary

cc: Ben Diederich, Milliman
Nate Deardorff, Milliman

PEBB - Exhibit 1
CDHP LEG Report
PEBB Health Plan Cost and Service Utilization Trends for 2016 Through 2019
Non-Medicare Risk Pool

Allowed Claims PMPM

	2016			2017			2018			2019		
Plan	Medical	Pharmacy	Total	Medical	Pharmacy	Total	Medical	Pharmacy	Total	Medical	Pharmacy	Total
Uniform Medical Plan CDHP	$218.13	$29.87	$248.00	$233.77	$35.26	$269.03	$264.59	$42.01	$306.60	$255.54	$48.97	$304.51
Uniform Medical Plan Classic	$412.15	$97.83	$509.97	$422.57	$106.11	$528.67	$450.43	$112.40	$562.83	$475.40	$120.33	$595.73
Uniform Medical Plan Plus	$346.01	$70.36	$416.37	$357.44	$71.65	$429.09	$361.41	$73.34	$434.75	$383.34	$78.64	$461.98
Kaiser Permanente of Washington CDHP	$212.40	$14.03	$226.43	$274.31	$16.48	$290.79	$171.54	$26.29	$197.84	$178.36	$27.68	$206.04
Kaiser Permanente of Washington Sound Choice	$172.26	$23.53	$195.79	$180.98	$22.21	$203.19	$221.70	$23.23	$244.93	$186.64	$26.21	$212.84
Kaiser Permanente of Washington Value	$306.00	$51.80	$357.81	$311.79	$52.13	$363.92	$302.89	$53.84	$356.73	$278.63	$55.68	$334.31
Kaiser Permanente of Washington Classic	$451.92	$85.96	$537.88	$457.00	$92.40	$549.40	$463.39	$94.54	$557.93	$420.36	$93.99	$514.35
All CDHP	$216.89	$26.46	$243.35	$242.37	$31.28	$273.65	$245.58	$38.80	$284.39	$240.48	$44.81	$285.30
All Accountable Care	$321.98	$63.89	$385.87	$335.64	$65.54	$401.19	$347.00	$68.18	$415.18	$353.98	$70.81	$424.80
All Classic and Value	$396.32	$87.18	$483.51	$405.14	$93.88	$499.02	$423.78	$99.07	$522.85	$433.28	$105.52	$538.80
All Plans	$379.39	$81.55	$460.93	$387.30	$86.91	$474.20	$399.61	$90.37	$489.99	$404.88	$95.29	$500.17

Paid Claims PMPM

	2016			2017			2018			2019		
Plan	Medical	Pharmacy	Total	Medical	Pharmacy	Total	Medical	Pharmacy	Total	Medical	Pharmacy	Total
Uniform Medical Plan CDHP	$156.50	$20.78	$177.28	$171.38	$25.98	$197.37	$198.47	$32.60	$231.08	$186.92	$39.44	$226.36
Uniform Medical Plan Classic	$362.01	$87.60	$449.61	$371.58	$96.25	$467.83	$398.60	$102.50	$501.11	$422.12	$110.86	$532.98
Uniform Medical Plan Plus	$298.03	$63.71	$361.74	$308.85	$65.63	$374.48	$312.49	$67.17	$379.65	$335.99	$72.72	$408.71
Kaiser Permanente of Washington CDHP	$160.62	$8.57	$169.19	$223.27	$10.89	$234.16	$130.71	$20.08	$150.78	$138.01	$20.94	$158.95
Kaiser Permanente of Washington Sound Choice	$142.49	$18.76	$161.25	$150.39	$17.24	$167.62	$195.38	$17.60	$212.98	$167.54	$20.53	$188.07
Kaiser Permanente of Washington Value	$269.38	$44.12	$313.50	$276.64	$42.93	$319.57	$269.67	$44.58	$314.25	$246.89	$46.30	$293.19
Kaiser Permanente of Washington Classic	$417.11	$73.82	$490.92	$420.69	$79.83	$500.52	$430.58	$80.60	$511.18	$390.81	$80.32	$471.13
All CDHP	$157.39	$18.15	$175.54	$182.39	$22.78	$205.17	$184.63	$30.05	$214.68	$177.38	$35.83	$213.21
All Accountable Care	$276.52	$57.49	$334.02	$289.27	$59.65	$348.92	$300.41	$62.05	$362.47	$310.85	$64.93	$375.78
All Classic and Value	$350.85	$77.21	$428.06	$359.04	$83.82	$442.86	$377.78	$88.81	$466.59	$386.70	$95.56	$482.27
All Plans	$332.88	$71.88	$404.76	$340.08	$77.27	$417.35	$352.22	$80.69	$432.90	$357.21	$85.97	$443.18

Member Months

Plan	2016	2017	2018	2019
Uniform Medical Plan CDHP	185,600	204,358	238,269	250,925
Uniform Medical Plan Classic	1,894,098	1,899,019	1,851,275	1,816,365
Uniform Medical Plan Plus	139,027	204,588	320,160	374,181
Kaiser Permanente of Washington CDHP	50,956	55,043	61,157	60,814
Kaiser Permanente of Washington Sound Choice	22,314	28,838	36,811	65,643
Kaiser Permanente of Washington Value	556,988	543,771	513,386	469,046
Kaiser Permanente of Washington Classic	365,675	340,402	321,244	306,975
All CDHP	236,556	259,401	299,426	311,739
All Accountable Care	161,341	233,426	356,971	439,824
All Classic and Value	2,816,761	2,783,192	2,685,905	2,592,386
All Plans	3,214,658	3,276,019	3,342,302	3,343,949

Utilization Per 1,000

	2016			2017			2018			2019		
Plan	Medical	Pharmacy	Total	Medical	Pharmacy	Total	Medical	Pharmacy	Total	Medical	Pharmacy	Total
Uniform Medical Plan CDHP	43,343	284,152	327,495	41,976	293,277	335,252	46,959	311,399	358,358	50,903	335,221	386,124
Uniform Medical Plan Classic	88,592	697,839	786,431	89,606	703,146	792,752	101,927	720,961	822,889	105,790	721,713	827,503
Uniform Medical Plan Plus	72,896	552,763	625,659	73,880	517,386	591,266	78,656	529,050	607,706	78,077	518,632	596,709
Kaiser Permanente of Washington CDHP	32,447	201,607	234,054	29,038	213,846	242,884	25,274	218,204	243,478	32,143	229,708	261,851
Kaiser Permanente of Washington Sound Choice	29,881	290,886	320,768	30,864	279,541	310,405	32,733	281,606	314,339	34,941	311,589	346,531
Kaiser Permanente of Washington Value	56,725	487,924	544,649	55,033	474,712	529,745	54,702	480,340	535,042	55,319	473,205	528,524
Kaiser Permanente of Washington Classic	83,767	774,463	858,230	83,739	850,285	934,024	90,943	800,095	891,038	87,095	781,443	868,538
All CDHP	40,996	266,371	307,367	39,231	276,422	315,653	42,530	292,364	334,894	47,243	314,638	361,881
All Accountable Care	66,947	516,545	583,492	68,566	488,002	556,568	73,920	503,533	577,454	71,639	487,731	559,371
All Classic and Value	81,664	666,278	747,942	82,134	676,511	758,645	91,587	684,434	776,020	94,445	683,823	778,268
All Plans	77,933	629,335	707,268	77,770	631,400	709,169	85,305	629,988	715,294	87,045	623,614	710,659

PEBB - Exhibit 1
CDHP LEG Report
PEBB Health Plan Cost and Service Utilization Trends for 2016 Through 2019
Non-Medicare Risk Pool

Utilization Trend

	2016 to 2017			2017 to 2018			2018 to 2019		
Plan	Medical	Pharmacy	Total	Medical	Pharmacy	Total	Medical	Pharmacy	Total
Uniform Medical Plan CDHP	-3.2%	3.2%	2.4%	11.9%	6.2%	6.9%	8.4%	7.7%	7.7%
Uniform Medical Plan Classic	1.1%	0.8%	0.8%	13.8%	2.5%	3.8%	3.8%	0.1%	0.6%
Uniform Medical Plan Plus	1.4%	-6.4%	-5.5%	6.5%	2.3%	2.8%	-0.7%	-2.0%	-1.8%
Kaiser Permanente of Washington CDHP	-10.5%	6.1%	3.8%	-13.0%	2.0%	0.2%	27.2%	5.3%	7.5%
Kaiser Permanente of Washington Sound Choice	3.3%	-3.9%	-3.2%	6.1%	0.7%	1.3%	6.7%	10.6%	10.2%
Kaiser Permanente of Washington Value	-3.0%	-2.7%	-2.7%	-0.6%	1.2%	1.0%	1.1%	-1.5%	-1.2%
Kaiser Permanente of Washington Classic	0.0%	9.8%	8.8%	8.6%	-5.9%	-4.6%	-4.2%	-2.3%	-2.5%
All CDHP	-4.3%	3.8%	2.7%	8.4%	5.8%	6.1%	11.1%	7.6%	8.1%
All Accountable Care	2.4%	-5.5%	-4.6%	7.8%	3.2%	3.8%	-3.1%	-3.1%	-3.1%
All Classic and Value	0.6%	1.5%	1.4%	11.5%	1.2%	2.3%	3.1%	-0.1%	0.3%
All Plans	-0.2%	0.3%	0.3%	9.7%	-0.2%	0.9%	2.0%	-1.0%	-0.6%

Unit Cost and Mix Trend

	2016 to 2017			2017 to 2018			2018 to 2019		
Plan	Medical	Pharmacy	Total	Medical	Pharmacy	Total	Medical	Pharmacy	Total
Uniform Medical Plan CDHP	10.7%	14.4%	6.0%	1.2%	12.2%	6.6%	-10.9%	8.3%	-7.8%
Uniform Medical Plan Classic	1.4%	7.6%	2.8%	-6.3%	3.3%	2.6%	1.7%	6.9%	5.3%
Uniform Medical Plan Plus	1.9%	8.8%	9.0%	-5.0%	0.1%	-1.4%	6.9%	9.4%	8.2%
Kaiser Permanente of Washington CDHP	44.3%	10.7%	23.8%	-28.1%	56.4%	-32.1%	-18.2%	0.0%	-3.2%
Kaiser Permanente of Washington Sound Choice	1.7%	-1.8%	7.2%	15.5%	3.8%	19.0%	-21.1%	2.0%	-21.2%
Kaiser Permanente of Washington Value	5.0%	3.4%	4.6%	-2.3%	2.1%	-2.9%	-9.0%	5.0%	-5.1%
Kaiser Permanente of Washington Classic	1.2%	-2.1%	-6.1%	-6.6%	8.7%	6.5%	-5.3%	1.8%	-5.4%
All CDHP	16.8%	13.9%	9.5%	-6.5%	17.3%	-2.0%	-11.8%	7.3%	-7.2%
All Accountable Care	1.8%	8.6%	9.0%	-4.1%	0.8%	-0.3%	5.3%	7.2%	5.6%
All Classic and Value	1.6%	6.1%	1.8%	-6.2%	4.3%	2.4%	-0.9%	6.6%	2.8%
All Plans	2.3%	6.2%	2.6%	-5.9%	4.2%	2.4%	-0.7%	6.5%	2.7%

Total Allowed PMPM Trend

	2016 to 2017			2017 to 2018			2018 to 2019		
Plan	Medical	Pharmacy	Total	Medical	Pharmacy	Total	Medical	Pharmacy	Total
Uniform Medical Plan CDHP	7.2%	18.0%	8.5%	13.2%	19.1%	14.0%	-3.4%	16.6%	-0.7%
Uniform Medical Plan Classic	2.5%	8.5%	3.7%	6.6%	5.9%	6.5%	5.5%	7.1%	5.8%
Uniform Medical Plan Plus	3.3%	1.8%	3.1%	1.1%	2.4%	1.3%	6.1%	7.2%	6.3%
Kaiser Permanente of Washington CDHP	29.1%	17.5%	28.4%	-37.5%	59.6%	-32.0%	4.0%	5.3%	4.1%
Kaiser Permanente of Washington Sound Choice	5.1%	-5.6%	3.8%	22.5%	4.6%	20.5%	-15.8%	12.8%	-13.1%
Kaiser Permanente of Washington Value	1.9%	0.6%	1.7%	-2.9%	3.3%	-2.0%	-8.0%	3.4%	-6.3%
Kaiser Permanente of Washington Classic	1.1%	7.5%	2.1%	1.4%	2.3%	1.6%	-9.3%	-0.6%	-7.8%
All CDHP	11.7%	18.2%	12.4%	1.3%	24.1%	3.9%	-2.1%	15.5%	0.3%
All Accountable Care	4.2%	2.6%	4.0%	3.4%	4.0%	3.5%	2.0%	3.9%	2.3%
All Classic and Value	2.2%	7.7%	3.2%	4.6%	5.5%	4.8%	2.2%	6.5%	3.1%
All Plans	2.1%	6.6%	2.9%	3.2%	4.0%	3.3%	1.3%	5.4%	2.1%

PEBB - Exhibit 2
CDHP LEG Report
Demographic Summary

Average Members*

	Uniform Medical Plan CDHP				Uniform Medical Plan Classic				Uniform Medical Plan Plus				Kaiser Permanente of Washington CDHP				Kaiser Permanente of Washington Sound Choice			
Demographic Group	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
Gender																				
Male	7,397	8,131	9,467	9,908	72,868	72,940	70,910	69,578	5,196	7,606	12,027	14,037	2,096	2,247	2,500	2,486	862	1,139	1,451	2,573
Female	8,069	8,899	10,389	11,003	84,973	85,312	83,363	81,786	6,389	9,443	14,653	17,145	2,151	2,340	2,597	2,582	997	1,265	1,616	2,898
Total	15,467	17,030	19,856	20,910	157,842	158,252	154,273	151,364	11,586	17,049	26,680	31,182	4,246	4,587	5,096	5,068	1,860	2,403	3,068	5,470
Age Band																				
Under 25	5,514	5,969	6,853	7,217	49,972	50,256	48,984	48,183	3,762	5,570	8,783	10,302	1,449	1,533	1,667	1,609	619	759	981	1,761
25 to 29	1,243	1,427	1,609	1,660	7,766	7,886	7,454	7,292	852	1,486	2,212	2,563	481	531	572	586	166	270	328	606
30 to 34	1,418	1,576	1,816	1,908	9,260	9,207	8,826	8,652	1,144	1,780	2,759	3,231	507	556	642	618	209	278	371	681
35 to 39	1,422	1,546	1,775	1,876	10,969	11,109	10,937	10,763	1,107	1,703	2,597	3,062	372	409	456	475	168	217	278	553
40 to 44	1,294	1,411	1,678	1,807	11,293	11,449	11,332	11,345	967	1,452	2,325	2,739	339	376	418	396	164	199	258	455
45 to 49	1,312	1,487	1,734	1,758	13,150	13,228	12,708	12,299	973	1,344	2,054	2,428	311	365	398	413	162	206	256	408
50 to 54	1,155	1,265	1,461	1,611	13,862	13,688	13,315	13,098	803	1,167	1,923	2,168	316	310	337	338	115	157	199	344
55 to 59	1,109	1,227	1,487	1,547	15,966	15,748	15,226	14,750	867	1,125	1,764	2,082	238	260	311	310	109	135	172	285
60 to 64	856	945	1,198	1,254	17,779	17,555	17,089	16,452	777	1,001	1,572	1,757	196	206	243	261	106	131	164	273
Over 65	143	176	246	272	7,825	8,127	8,402	8,530	334	420	691	849	37	43	51	62	43	53	62	104
Total	15,467	17,030	19,856	20,910	157,842	158,252	154,273	151,364	11,586	17,049	26,680	31,182	4,246	4,587	5,096	5,068	1,860	2,403	3,068	5,470
Member Type																				
Employee	7,220	8,101	9,599	10,108	76,991	77,147	75,383	73,862	5,765	8,630	13,350	15,540	2,166	2,391	2,689	2,740	929	1,281	1,643	2,877
Dependent	8,247	8,929	10,257	10,803	80,851	81,105	78,890	77,501	5,820	8,420	13,330	15,641	2,080	2,196	2,407	2,328	931	1,122	1,424	2,593
Total	15,467	17,030	19,856	20,910	157,842	158,252	154,273	151,364	11,586	17,049	26,680	31,182	4,246	4,587	5,096	5,068	1,860	2,403	3,068	5,470
Avg Demographic Factor**	0.933	0.938	0.953	0.955	1.139	1.138	1.143	1.143	1.007	0.977	0.980	0.979	0.894	0.898	0.909	0.920	0.952	0.945	0.941	0.928

*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				Uniform Medical Plan Plus				Kaiser Permanente of Washington CDHP				Kaiser Permanente of Washington Sound Choice			
Demographic Group	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
Gender																				
Male	48%	48%	48%	47%	46%	46%	46%	46%	45%	45%	45%	45%	49%	49%	49%	49%	46%	47%	47%	47%
Female	52%	52%	52%	53%	54%	54%	54%	54%	55%	55%	55%	55%	51%	51%	51%	51%	54%	53%	53%	53%
Age Band																				
Under 25	36%	35%	35%	35%	32%	32%	32%	32%	32%	33%	33%	33%	34%	33%	33%	32%	33%	32%	32%	32%
25 to 29	8%	8%	8%	8%	5%	5%	5%	5%	7%	9%	8%	8%	11%	12%	11%	12%	9%	11%	11%	11%
30 to 34	9%	9%	9%	9%	6%	6%	6%	6%	10%	10%	10%	10%	12%	12%	13%	12%	11%	12%	12%	12%
35 to 39	9%	9%	9%	9%	7%	7%	7%	7%	10%	10%	10%	10%	9%	9%	9%	9%	9%	9%	9%	10%
40 to 44	8%	8%	8%	9%	7%	7%	7%	7%	8%	9%	9%	9%	8%	8%	8%	8%	9%	8%	8%	8%
45 to 49	8%	9%	9%	8%	8%	8%	8%	8%	8%	8%	8%	8%	7%	8%	8%	8%	9%	9%	8%	7%
50 to 54	7%	7%	7%	8%	9%	9%	9%	9%	7%	7%	7%	7%	7%	7%	7%	7%	6%	7%	7%	6%
55 to 59	7%	7%	7%	7%	10%	10%	10%	10%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	5%
60 to 64	6%	6%	6%	6%	11%	11%	11%	11%	7%	6%	6%	6%	5%	4%	5%	5%	6%	5%	5%	5%
Over 65	1%	1%	1%	1%	5%	5%	5%	6%	3%	2%	3%	3%	1%	1%	1%	1%	2%	2%	2%	2%
Member Type																				
Employee	47%	48%	48%	48%	49%	49%	49%	49%	50%	51%	50%	50%	51%	52%	53%	54%	50%	53%	54%	53%
Dependent	53%	52%	52%	52%	51%	51%	51%	51%	50%	49%	50%	50%	49%	48%	47%	46%	50%	47%	46%	47%

PEBB - Exhibit 2
CDHP LEG Report
Demographic Summary

Average Members*

	Kaiser Permanente of Washington Value				Kaiser Permanente of Washington Classic				All CDHP				All Accountable Care				All Classic and Value				All Plans			
Demographic Group	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
Gender																								
Male	21,953	21,420	20,249	18,610	14,463	13,504	12,764	12,206	9,493	10,378	11,967	12,394	6,058	8,744	13,478	16,609	109,284	107,864	103,924	100,393	124,835	126,985	129,369	129,396
Female	24,463	23,895	22,533	20,477	16,010	14,862	14,006	13,376	10,220	11,239	12,985	13,585	7,387	10,708	16,270	20,043	125,447	124,069	119,901	115,639	143,053	146,016	149,156	149,266
Total	46,416	45,314	42,782	39,087	30,473	28,367	26,770	25,581	19,713	21,617	24,952	25,978	13,445	19,452	29,748	36,652	234,730	231,933	223,825	216,032	267,888	273,002	278,525	278,662
Age Band																								
Under 25	15,879	15,443	14,511	13,372	9,132	8,331	7,759	7,363	6,963	7,502	8,520	8,826	4,381	6,330	9,764	12,064	74,984	74,030	71,254	68,917	86,328	87,861	89,539	89,807
25 to 29	2,908	2,766	2,561	2,212	1,541	1,492	1,446	1,464	1,725	1,958	2,181	2,246	1,017	1,755	2,540	3,169	12,215	12,144	11,460	10,968	14,957	15,857	16,181	16,383
30 to 34	3,883	3,739	3,426	2,938	1,817	1,713	1,605	1,555	1,924	2,133	2,459	2,526	1,352	2,057	3,130	3,912	14,959	14,659	13,857	13,144	18,235	18,849	19,445	19,583
35 to 39	3,861	3,823	3,728	3,435	1,957	1,842	1,797	1,802	1,794	1,955	2,230	2,352	1,275	1,921	2,874	3,615	16,787	16,773	16,462	16,000	19,857	20,649	21,567	21,967
40 to 44	3,630	3,582	3,436	3,241	2,010	1,894	1,839	1,766	1,633	1,787	2,096	2,202	1,132	1,651	2,583	3,194	16,932	16,925	16,607	16,352	19,696	20,363	21,286	21,749
45 to 49	3,796	3,780	3,618	3,266	2,394	2,203	2,093	1,977	1,623	1,852	2,132	2,171	1,136	1,550	2,310	2,836	19,340	19,211	18,420	17,542	22,098	22,612	22,861	22,548
50 to 54	3,702	3,558	3,320	3,040	2,804	2,546	2,339	2,243	1,472	1,574	1,798	1,949	917	1,324	2,122	2,512	20,368	19,792	18,974	18,382	22,756	22,691	22,894	22,843
55 to 59	3,927	3,825	3,565	3,254	3,388	3,105	2,910	2,722	1,347	1,487	1,798	1,856	976	1,260	1,935	2,367	23,281	22,677	21,701	20,726	25,604	25,424	25,435	24,949
60 to 64	3,563	3,507	3,320	3,075	3,742	3,558	3,256	3,026	1,052	1,151	1,441	1,515	883	1,132	1,736	2,030	25,084	24,619	23,665	22,553	27,019	26,903	26,841	26,098
Over 65	1,269	1,292	1,297	1,254	1,688	1,684	1,726	1,664	180	218	298	334	377	473	754	953	10,782	11,102	11,426	11,448	11,339	11,793	12,477	12,736
Total	46,416	45,314	42,782	39,087	30,473	28,367	26,770	25,581	19,713	21,617	24,952	25,978	13,445	19,452	29,748	36,652	234,730	231,933	223,825	216,032	267,888	273,002	278,525	278,662
Member Type																								
Employee	21,809	21,274	20,113	18,344	15,480	14,607	13,937	13,447	9,386	10,492	12,288	12,848	6,694	9,911	14,993	18,417	114,279	113,027	109,433	105,654	130,359	133,430	136,714	136,919
Dependent	24,607	24,041	22,669	20,743	14,993	13,760	12,833	12,134	10,327	11,125	12,664	13,131	6,751	9,542	14,754	18,235	120,451	118,905	114,392	110,378	137,529	139,572	141,811	141,744
Total	46,416	45,314	42,782	39,087	30,473	28,367	26,770	25,581	19,713	21,617	24,952	25,978	13,445	19,452	29,748	36,652	234,730	231,933	223,825	216,032	267,888	273,002	278,525	278,662
Avg Demographic Factor**	1.017	1.021	1.024	1.027	1.175	1.185	1.188	1.183	0.924	0.929	0.944	0.948	0.999	0.973	0.976	0.971	1.120	1.121	1.126	1.127	1.099	1.095	1.093	1.090

*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

	Kaiser Permanente of Washington Value				Kaiser Permanente of Washington Classic				All CDHP				All Accountable Care				All Classic and Value				All Plans			
Demographic Group	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
Gender																								
Male	47%	47%	47%	48%	47%	48%	48%	48%	48%	48%	48%	48%	45%	45%	45%	45%	47%	47%	46%	46%	47%	47%	46%	46%
Female	53%	53%	53%	52%	53%	52%	52%	52%	52%	52%	52%	52%	55%	55%	55%	55%	53%	53%	54%	54%	53%	53%	54%	54%
Age Band																								
Under 25	34%	34%	34%	34%	30%	29%	29%	29%	35%	35%	34%	34%	33%	33%	33%	33%	32%	32%	32%	32%	32%	32%	32%	32%
25 to 29	6%	6%	6%	6%	5%	5%	5%	6%	9%	9%	9%	9%	8%	9%	9%	9%	5%	5%	5%	5%	6%	6%	6%	6%
30 to 34	8%	8%	8%	8%	6%	6%	6%	6%	10%	10%	10%	10%	10%	11%	11%	11%	6%	6%	6%	6%	7%	7%	7%	7%
35 to 39	8%	8%	9%	9%	6%	6%	7%	7%	9%	9%	9%	9%	9%	10%	10%	10%	7%	7%	7%	7%	7%	8%	8%	8%
40 to 44	8%	8%	8%	8%	7%	7%	7%	7%	8%	8%	8%	8%	8%	8%	9%	9%	7%	7%	7%	8%	7%	7%	8%	8%
45 to 49	8%	8%	8%	8%	8%	8%	8%	8%	8%	9%	9%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
50 to 54	8%	8%	8%	8%	9%	9%	9%	9%	7%	7%	7%	8%	7%	7%	7%	7%	9%	9%	8%	9%	8%	8%	8%	8%
55 to 59	8%	8%	8%	8%	11%	11%	11%	11%	7%	7%	7%	7%	7%	6%	7%	6%	10%	10%	10%	10%	10%	9%	9%	9%
60 to 64	8%	8%	8%	8%	12%	13%	12%	12%	5%	5%	6%	6%	7%	6%	6%	6%	11%	11%	11%	10%	10%	10%	10%	9%
Over 65	3%	3%	3%	3%	6%	6%	6%	7%	1%	1%	1%	1%	3%	2%	3%	3%	5%	5%	5%	5%	4%	4%	4%	5%
Member Type																								
Employee	47%	47%	47%	47%	51%	51%	52%	53%	48%	49%	49%	49%	50%	51%	50%	50%	49%	49%	49%	49%	49%	49%	49%	49%
Dependent	53%	53%	53%	53%	49%	49%	48%	47%	52%	51%	51%	51%	50%	49%	50%	50%	51%	51%	51%	51%	51%	51%	51%	51%

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

		Year 2017							
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	$496.86	0.51	0.73	$186.23	95.6%	$194.75	$272.40	$276.72
UMP	Uniform Medical Plan Plus	$496.86	0.82	0.87	$355.06	96.3%	$368.73	$499.26	$473.80
UMP	Uniform Medical Plan Classic	$496.86	1.07	0.88	$471.12	96.0%	$490.81	$669.34	$671.65
KPNWA	Kaiser Permanente of Washington CDHP	$420.19	0.55	0.81	$185.40	79.6%	$233.05	$317.63	$215.60
KPNWA	Kaiser Permanente of Washington Sound Choice	$420.19	0.50	0.82	$173.30	84.4%	$205.35	$273.50	$419.74
KPNWA	Kaiser Permanente of Washington Value	$420.19	0.87	0.88	$321.37	87.9%	$365.67	$507.10	$497.30
KPNWA	Kaiser Permanente of Washington Classic	$420.19	1.32	0.91	$505.04	91.5%	$551.66	$735.82	$754.62
All	CDHP Totals			0.75	$186.05		$202.87	$282.17	$263.52
All	All Accountable Care			0.87	$332.60		$348.55	$471.06	$467.05
All	Classic and Value Totals			0.89	$446.01		$473.80	$646.53	$648.58
All	All Plans			0.88	$417.35		$443.42	$605.56	$605.56

		Year 2018							
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	$520.47	0.55	0.75	$216.59	95.6%	$226.50	$312.17	$287.76
UMP	Uniform Medical Plan Plus	$520.47	0.80	0.87	$361.80	96.3%	$375.73	$505.01	$459.86
UMP	Uniform Medical Plan Classic	$520.47	1.09	0.89	$506.06	96.0%	$527.21	$711.39	$722.30
KPNWA	Kaiser Permanente of Washington CDHP	$411.20	0.50	0.76	$155.73	79.6%	$195.75	$290.88	$280.62
KPNWA	Kaiser Permanente of Washington Sound Choice	$411.20	0.57	0.87	$203.67	84.4%	$241.32	$352.53	$367.65
KPNWA	Kaiser Permanente of Washington Value	$411.20	0.87	0.88	$316.05	87.9%	$359.61	$546.45	$534.61
KPNWA	Kaiser Permanente of Washington Classic	$411.20	1.35	0.92	$508.43	91.5%	$555.37	$810.50	$828.86
All	CDHP Totals			0.75	$204.16		$220.22	$307.74	$286.27
All	All Accountable Care			0.87	$345.49		$361.87	$489.06	$450.21
All	Classic and Value Totals			0.89	$470.02		$498.54	$692.55	$700.10
All	All Plans			0.88	$432.90		$459.01	$636.68	$636.68

		Year 2019							
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	$545.30	0.54	0.74	$219.19	95.6%	$229.22	$311.00	$304.57
UMP	Uniform Medical Plan Plus	$545.30	0.80	0.88	$384.18	96.3%	$398.98	$528.90	$473.07
UMP	Uniform Medical Plan Classic	$545.30	1.10	0.89	$539.02	96.0%	$561.55	$746.02	$758.41
KPNWA	Kaiser Permanente of Washington CDHP	$378.07	0.52	0.77	$150.29	79.6%	$188.92	$307.95	$305.46
KPNWA	Kaiser Permanente of Washington Sound Choice	$378.07	0.60	0.88	$201.46	84.4%	$238.71	$388.09	$376.56
KPNWA	Kaiser Permanente of Washington Value	$378.07	0.88	0.88	$290.63	87.9%	$330.69	$557.23	$553.65
KPNWA	Kaiser Permanente of Washington Classic	$378.07	1.37	0.92	$473.89	91.5%	$517.63	$835.15	$843.32
All	CDHP Totals			0.75	$205.75		$221.36	$310.38	$304.75
All	All Accountable Care			0.88	$356.91		$375.06	$507.62	$458.49
All	Classic and Value Totals			0.90	$486.37		$514.58	$723.31	$732.35
All	All Plans			0.89	$443.18		$468.89	$656.78	$656.78

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

Year 2017

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	$272.40	0.660	$413.03	$55.42	$468.44	$550.04	$525.00	-$56.56	$25.00	$106.62	-$25.06	**$81.56**
UMP	Uniform Medical Plan Plus	$499.26	0.867	$575.52	$0.00	$575.52	$590.77	$525.00	$50.52	$66.00	$18.72	-$3.24	**$15.48**
UMP	Uniform Medical Plan Classic	$669.34	1.074	$623.30	$0.00	$623.30	$618.93	$525.00	$98.30	$94.00	-$14.50	$10.19	**-$4.30**
KPWA	Kaiser Permanente of Washington CDHP	$317.63	0.548	$579.81	$56.14	$635.95	$549.87	$525.00	$110.95	$25.00	$47.64	-$133.59	**-$85.95**
KPWA	Kaiser Permanente of Washington Sound Choice	$273.50	0.650	$420.83	$0.00	$420.83	$571.08	$525.00	-$104.17	$46.00	$171.26	-$21.10	**$150.17**
KPWA	Kaiser Permanente of Washington Value	$507.10	0.835	$607.36	$0.00	$607.36	$594.09	$525.00	$82.36	$69.00	$22.84	-$36.19	**-$13.36**
KPWA	Kaiser Permanente of Washington Classic	$735.82	1.125	$653.82	$0.00	$653.82	$671.80	$525.00	$128.82	$147.00	-$50.15	$68.33	**$18.18**
All	All CDHP	$282.17		$449.04	$55.57	$504.61	$550.00	$525.00	-$20.39	$25.00	$93.88	-$48.49	**$45.39**
All	All Accountable Care	$471.06		$556.19	$0.00	$556.19	$588.31	$525.00	$31.19	$63.00	$37.78	-$5.97	**$31.81**
All	Classic and Value Totals	$646.53		$624.06	$0.00	$624.06	$620.76	$525.00	$99.06	$96.00	-$11.79	$8.73	**-$3.06**
All	All Plans	$605.56		$605.56	$4.32	$609.88	$612.92	$525.00	$84.88	$88.00	$0.00	$3.12	**$3.12**

Year 2018

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	$312.17	0.669	$466.34	$55.66	$522.01	$576.11	$551.00	-$28.99	$25.00	$87.82	-$33.83	**$53.99**
UMP	Uniform Medical Plan Plus	$505.01	0.841	$600.14	$0.00	$600.14	$595.54	$551.00	$49.14	$45.00	$21.71	-$25.85	**-$4.14**
UMP	Uniform Medical Plan Classic	$711.39	1.085	$655.57	$0.00	$655.57	$652.84	$551.00	$104.57	$102.00	-$17.07	$14.50	**-$2.57**
KPWA	Kaiser Permanente of Washington CDHP	$290.88	0.555	$523.98	$56.16	$580.14	$576.02	$551.00	$29.14	$25.00	$103.91	-$108.05	**-$4.14**
KPWA	Kaiser Permanente of Washington Sound Choice	$352.53	0.624	$564.97	$0.00	$564.97	$602.09	$551.00	$13.97	$51.00	$98.90	-$61.87	**$37.03**
KPWA	Kaiser Permanente of Washington Value	$546.45	0.852	$641.21	$0.00	$641.21	$628.50	$551.00	$90.21	$78.00	$30.59	-$42.80	**-$12.21**
KPWA	Kaiser Permanente of Washington Classic	$810.50	1.143	$709.28	$0.00	$709.28	$713.37	$551.00	$158.28	$162.00	-$65.09	$68.81	**$3.72**
All	All CDHP	$307.74		$478.35	$55.77	$534.11	$576.09	$551.00	-$16.89	$25.00	$91.17	-$49.29	**$41.89**
All	All Accountable Care	$489.06		$596.46	$0.00	$596.46	$596.23	$551.00	$45.46	$45.00	$29.79	-$30.25	**-$0.46**
All	Classic and Value Totals	$692.55		$659.44	$0.00	$659.44	$655.67	$551.00	$108.44	$105.00	-$14.00	$10.55	**-$3.44**
All	All Plans	$636.68		$636.68	$4.90	$641.57	$642.25	$551.00	$90.57	$91.00	$0.00	$0.43	**$0.43**

Year 2019

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	$311.00	0.669	$465.07	$55.73	$520.80	$587.11	$562.00	-$41.20	$25.00	$97.60	-$31.40	**$66.20**
UMP	Uniform Medical Plan Plus	$528.90	0.855	$618.65	$0.00	$618.65	$612.10	$562.00	$56.65	$50.00	$31.11	-$37.76	**-$6.65**
UMP	Uniform Medical Plan Classic	$746.02	1.093	$682.48	$0.00	$682.48	$668.88	$562.00	$120.48	$107.00	-$21.91	$8.43	**-$13.48**
KPWA	Kaiser Permanente of Washington CDHP	$307.95	0.579	$531.62	$56.34	$587.95	$587.02	$562.00	$25.95	$25.00	$116.55	-$117.51	**-$0.95**
KPWA	Kaiser Permanente of Washington Sound Choice	$388.09	0.644	$602.42	$0.00	$602.42	$597.24	$562.00	$40.42	$35.00	$95.54	-$100.97	**-$5.42**
KPWA	Kaiser Permanente of Washington Value	$557.23	0.838	$664.75	$0.00	$664.75	$650.28	$562.00	$102.75	$88.00	$24.73	-$39.48	**-$14.75**
KPWA	Kaiser Permanente of Washington Classic	$835.15	1.147	$728.05	$0.00	$728.05	$727.42	$562.00	$166.05	$165.00	-$66.13	$65.08	**-$1.05**
All	All CDHP	$310.38		$478.43	$55.85	$534.28	$587.09	$562.00	-$27.72	$25.00	$101.40	-$48.68	**$52.72**
All	All Accountable Care	$507.62		$616.19	$0.00	$616.19	$609.85	$562.00	$54.19	$48.00	$40.85	-$47.04	**-$6.19**
All	Classic and Value Totals	$723.31		$684.86	$0.00	$684.86	$672.68	$562.00	$122.86	$111.00	-$18.99	$7.13	**-$11.86**
All	All Plans	$656.78		$656.78	$5.10	$661.89	$656.50	$562.00	$99.89	$94.00	$0.00	-$5.89	**-$5.89**