

Blue Cross and Blue Shield of Vermont
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1. Purpose

Blue Cross and Blue Shield of Vermont (BCBSVT) performs association health plan (AHP) rating on a case-by-case basis. Rating is accomplished through a formulaic approach that blends recent group experience with a manual rate according to a credibility formula. Formula results may be adjusted for underwriting judgment and/or management decisions. This filing establishes the formula, manual rate, and accompanying factors that will be used for renewals beginning upon approval of this filing, most notably January 2020 renewals.

Once approved, this filing will be used for AHP renewals prepared for business under the jurisdiction of the Green Mountain Care Board (GMCB) until superseded by a subsequent filing. In the event that renewals require factors with effective dates or experience periods beyond those explicitly presented in this filing, we will calculate appropriate factors using the same base data and methodology used in this filing. This filing will apply beginning with rates communicated five business days after the date of its approval, and continuing until five business days after the date of approval of the next BCBSVT AHP Rating Program Filings. The term “communicated,” for this purpose, means a written proposal delivered to an association health plan account.

2. Overview

This filing includes a description of the renewal formula and the development of each of the factors used in it. We will describe in detail the formula used in the renewals. We will then detail the factors applicable to all insured AHPs. The factors in the build-up of the projected claims cost include the trend factors, benefit relativities, manual rate, and large claims factors. In addition to the projected claims cost, we will explain the calculation of administrative charges, the net cost of reinsurance, contribution to reserve, and state and federal assessments, all of which are included in the rate development.

3. Formula Description

Benefit-Adjusted Projected Single Claims Rate

A sample calculation of the benefit-adjusted single claims rate can be found as Exhibit 1A. We start the rating with a twelve-month experience period with at least two months of runout¹. We determine a pooling point based on the size of the case at the end of the runout period and split the experience period claims (line A) into amounts above (line B) and below (referred to as capped claims, line C) the pooling point.

¹ For first year renewals, where twelve months of experience is not available, we generally use claims incurred in nine months with no runout.

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We apply completion factors (line D) developed from the monthly financial reporting process (best estimates before margin) to capped claims to produce completed capped claims (line E). We use the formula and factors described in Milliman's 2017 *Health Cost Guidelines - Reinsurance* to calculate expected claims above the pooling limit (line F). The expected claims above the pooling limit are added to the completed capped claims to produce large-claim-adjusted experience period claims. We then multiply the large-claim-adjusted experience claims by an adjustment factor (line G) to reflect structural changes in the benefit plan from the experience period to the rating period. This is to adjust for such things as mandated benefit changes, contractual provision changes, etc., that, in the judgment of the underwriter, are necessary to make the experience appropriate for the estimation of the expected claims in the rating period. We divide the result (line H) by the number of member months during the experience period (line I) to produce adjusted experience period claims per member per month (line J).

The adjusted experience period claims per member per month (PMPM) is then divided by a seasonally adjusted benefit relativity value to neutralize any effect of seasonality and benefits on the paid claims. To determine this factor, we first determine a benefit relativity factor for each benefit plan (using the factors described in section 5) and contract tier type (single, 2-person, family, etc.). Based on the seasonal patterns observed as part of the reserving process for each calendar month, we determine seasonal factors for CDHPs and for non-CDHPs and normalize them so that they total to 12. We combine these factors to calculate seasonal benefit relativity factors for each combination of benefit plan, contract tier type, and month. We apply these factors to the number of contracts for each benefit plan, contract tier type, and month in the experience period. We total the results and divide the resultant sum by the number of member months in the experience period. The seasonal factors are applied regardless of the length of experience period, but if there is a 12-month experience period and there are no changes in benefits or enrollment, the normalization of the seasonality factors would cause the seasonal adjustment to be 1.000. This produces the average experience period seasonally adjusted benefit relativity factor (line K).

We adjust for any change in the demographics of the group between the experience period and the rating period by calculating the average demographic factor for each period and applying the ratio of projection to experience (line L). The adjusted experience period claims PMPM (line J) is multiplied by the demographic normalization factor and divided by the average experience period seasonally adjusted benefit relativity factor (line K) to produce the benefit-adjusted experience period single claims rate (line M), which is the expected cost for a single contract in the experience, neutral of benefit and seasonality. We then multiply this by a trend factor (line P, as calculated in section 4) to project the claims from the experience period to the rating period. We also multiply by a factor (line Q) to account for differences in contracted pharmacy discounts between the experience period and the projection period.

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The resulting projected single contract rate (line R) is then blended, using the credibility formula described below, with the adjusted manual rate (line S, as described in section 6.1).

The credibility factor (line T) is calculated as follows:

$$Credibility = \sqrt{\frac{Member\ Months}{Upper\ Bound}}$$

The underwriter will determine an appropriate pooling limit based on the size of the association health plan. A list of upper bound member months by pooling point is provided in Exhibit 1C.

If member months are greater than the upper bound, the credibility factor will be 1.

To blend the projected single contract rate with the adjusted manual rate, we use the following equation:

$$Benefit-Adjusted\ Projected\ Single\ Claims\ Rate = Projected\ Single\ Contract\ Rate \times (Credibility) + Adjusted\ Manual\ Rate \times (1 - Credibility)$$

Required premium by Plan, Tier Type

A sample calculation of premium can be found as Exhibit 1B. For each plan and contract tier type anticipated in the rating period, we calculate projected claims (line B1) as the product of the benefit-adjusted projected single claims rate (S) and the benefit relativity factor (as described in section 5) for the plan and contract tier (line A).

The members per contract tier during the last month of the runout period is the basis for the projected members per tier in the rating period. The underwriter will adjust this ratio if, in their opinion, the result is not representative of the expected values in the rating period.²

The calculation for the total required premium by (plan, tier) is as follows:

² E.g., the number of contracts in a particular tier may be small (or even 0). In such instances, the underwriter should use appropriate values based on total block of business or other appropriate source.

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{ Projected Claims by Plan and Tier (line B1)	+
Expected Net Cost of Reinsurance (line B2, as described in section 6.4)	-
Projected Pharmacy Rebates (line B3, as described in section 6.5)	+
Administrative Charges (line D, as described in section 6.3)	+
State Mandates and Federal Assessments (line C1 to C4, as described in sections 6.7 and 6.8)	/
{ 1 - Contribution to Reserve (line F, as described in section 6.6) - Broker Commissions (line E) - Federal Insurer Fee (line G, as described in section 6.8)}	=
Required Premium by Plan and Tier (line H)	

Underwriting Judgment Adjustments

If, in the underwriter’s professional judgment, the specific properties of the case being rated are such that the standard formula would not produce appropriate rates for the rating period, the underwriter will make such modifications as needed to produce appropriate rates. The underwriter will document in the case file the reason(s) for the adjustment(s) and the method of determining the appropriate adjustment(s).

Management Discretionary Adjustments

For marketing or other reasons, management may decide to modify the rates on a specific case or block of cases. The underwriter will document in the case file the adjustment(s) made, along with a description of the nature of the adjustment(s).

4. Trend Factors

4.1. Medical Trend Development

The source of the data is BCBSVT’s data warehouse, except where noted below. To ensure accuracy of claims information, the data used has been reconciled against internal reserving, enrollment, and other financial reports. The data includes claims from BCBSVT Cost Plus groups, BCBSVT ASO Groups of under 5,000 members, BCBSVT insured large groups, BCBSVT insured small groups, TVHP insured small groups, and TVHP insured large groups. CDHP and non-CDHP claims were combined. Large ASO groups and ASO groups with special pricing arrangements were excluded. Claims from Medicare Primary members were excluded.

BCBSVT and TVHP cover substantially similar populations under similar benefit packages. Combining these homogeneous populations creates greater consistency and credibility within the trend factor development.

Using the historical contracted reimbursement schedules, we calculated network factors that represent the different contracts and modify the claims to reflect a single

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contract. By making these adjustments we can observe the historical cost increases using all claims information.

Medical trend is composed of three pieces: cost, utilization, and intensity. In our analysis, we combined utilization and intensity within the utilization metric and analyzed the unit cost separately. Historical experience was normalized for contract changes and then analyzed to derive a utilization trend in the absence of unit cost changes. Future unit cost trends were developed on a discrete basis using the most recent round of contract negotiations as a starting point. The overall trend is the product of these two components.

4.1.1. Unit Cost

Unit cost trends were largely derived from observations of recent contracting and provider budgetary changes. During the year ended June 2018, roughly 52 percent of total claims dollars were provided by Vermont facilities and providers directly affected by the hospital budget review process of the Green Mountain Care Board (GMCB). We started with the assumption that the GMCB would approve hospital budgets for October 1, 2019 and October 1, 2020 that support identical commercial increases as those approved for October 1, 2018.

Similarly, we assumed for other providers within the BCBSVT service area that overall 2019 and 2020 budget increases would be identical to those implemented during calendar year 2018. The provider contracting and actuarial departments worked together to assess the impact these increases would have on contracts for BCBSVT Managed Care. Unit cost increases for providers outside the BCBSVT service area were derived from the Fall 2018 Blue Trend Survey, which is a proprietary and confidential dissemination of the BlueCross BlueShield Association.

Claims were normalized to the June 2018 contract at each unique provider by applying a factor equal to the product of the impact of each contracting change from the experience month through June 2018. The derived trend for other claims was assumed to increase monthly on a continuous basis. Please see Exhibit 2A for an illustration of this approach.

Contract normalized claims were trended forward using expected increases. Unit cost trend was calculated by dividing claims year-ending December 2020 by claims year-ended June 2018 and converting to an annual factor.

The results of the analysis are summarized in the below chart:

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Medical Unit Cost Trend	
	BCBSVT Managed Care
Vermont facilities and providers impacted by GMCB's Hospital Budget Review	2.6%
Other facilities and providers	3.0%
Total	2.8%

4.1.2. Utilization & Intensity

Historical utilization trend patterns were examined by first normalizing claims for unit cost increases. Contract changes for the entirety of the experience period were measured explicitly for each facility within our service area as well as the three largest physician groups. We removed all claims from members who exceeded \$500,000 in paid medical claims in 12-month periods preceding June 30, 2018. As the utilization component includes intensity, high cost claimants can unduly impact the year-over-year, time series, and regression calculations.

Increases were measured for fee schedules and other chargemasters by applying each schedule to a market basket of services. The market basket was defined by using Current Procedural Terminology (CPT) codes and CPT modifier combinations that were present in each of the effective periods the schedules covered. Using the same experience period data used throughout the trend analysis, total allowed costs for the selected CPT and CPT modifier combinations were compared under each schedule to estimate the percentage increase. For contracts under Diagnosis Related Group (DRG) arrangements, we compared the charge for the 1.000 DRG service for each period. Finally, for services under a discount of charge arrangement, we used the contracted chargemaster increase provided by our provider contracting department.

This accounted for 78 percent of allowed claims dollars during the experience period. Costs for other claims were primarily for out-of-area services. Contracting changes for these claims were derived from the Fall 2018 Blue Trend Survey, which is a proprietary and confidential dissemination of the BlueCross BlueShield Association.

Exhibit 2B, Page 1 shows the resulting array of allowed PMPM claims costs, before and after normalization for contract changes. We performed regressions and time series on monthly PMPM costs. We also calculated a year-over-year rolling-12 PMPM utilization trend of 3.9 percent for the year ended June 2018. The regression and time series calculations are provided in Exhibit 2B, Pages 2 to 11. Certain time series methods, such as those assuming no trend or those for which there is not sufficient historical

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data³, are not included, as these are inappropriate for use in trend development and/or for the data available.

We select a utilization trend of 3.5 percent. Though utilization trend between facility and professional services are interdependent, the historically high trend warrants an in-depth examination of trends that is best performed categorically. We believe a 2.5 utilization trend selection on facility claims and a 5.5 percent utilization trend selection on professional claims represent reasonable and appropriate trends. The total trend produced from these components is in line with the trends from measures that combine all medical services, and informs our selection of an overall utilization trend of 3.5 percent.

Certain measures suggest a much higher utilization trend, which is primarily driven from abnormally high professional utilization and mix-of-services trends. Professional visits increased 3.4 percent year-over-year, which, in conjunction with an increase in services per visit and an increase in the cost of the mix of services, underlies the atypically high year-over-year professional utilization trend of 6.3 percent. Professional utilization trend is being driven by significant increases across the spectrum of professional services, including increases in primary care services, mental health and substance abuse services, labs and radiology services, and labs and radiology mix of services. Our selection of 5.5 percent is lower than the majority of trends provided in the regression and time series analysis for professional claims. We believe certain BCBSVT programs will be effective at mitigating high professional trends, and implicitly account for these programs through a selection of a lower trend to reflect the anticipated success of appropriate care management strategies.

Year-over-year inpatient days per 1,000 members remained stable. Historically, inpatient days per 1,000 members had decreased as services moved away from an inpatient setting, which helped to offset increases in utilization and intensity trend in other areas. We believe inpatient utilization will continue to remain stable in the future and will no longer offset other components of utilization trend. Inpatient cost per admit normalized for contract changes increased 6.0%. This reflects an increasing cost in the mix of services, which is another major driver of total utilization trend. Components of hospital services, such as drugs and injectables administered in a facility, continue to be a main component of the increasing cost of the inpatient and outpatient mix of services. We anticipate the cost and utilization of drugs will continue to drive high inpatient intensity trends.

The components of increasing utilization trend have been corroborated by our Chief Medical Officer. Increasing utilization and intensity is also corroborated by hospital actual-to-budget narratives. The impact of low cost trend changes are largely offset by

³ The seasonal additive, seasonal multiplicative, single moving average, and single exponential smoothing methods are not used since they assume no trend. The double moving average method is not used due to insufficient historical data.

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increasing utilization and intensity, which is acknowledged as a main driver of hospital budget overages.

4.1.3. Induced Utilization

We investigated the impact of benefit changes throughout the experience period on utilization. Previously, large groups engaged in a benefit buy-down strategy as a means of limiting rate increases. This may have manifested itself in a lower actuarial value over time and a dampening effect on trend due to decreases in induced utilization. A development of the impact of induced utilization is shown in the table below:

Year Ended	Paid-to-Allowed Ratio	Induced Utilization	Percent Change
July 2015	74.7%	1.0509	
July 2016	74.1%	1.0483	-0.2%
July 2017	74.2%	1.0483	0.0%
July 2018	73.8%	1.0468	-0.1%

Given the impact of induced utilization has been minimal over the past few years, we do not make an adjustment to utilization trend.

The concept of induced utilization is discussed further in section 5.1. Exhibit 2C shows the development of the induced utilization factor.

4.1.4. Total Medical Trend

The total medical trend factors are the product of the utilization trend and the unit cost trend factors.

Component	BCBSVT Managed Care
Cost Trend	2.8%
Utilization Trend	3.5%
Total Medical Trend	6.4%

4.2. Pharmacy Trend Development

The source of the data is BCBSVT’s data warehouse, except where noted below. To ensure accuracy of claims information, the data used has been reconciled against internal reserving, enrollment and other financial reports. The data includes claims from BCBSVT Cost Plus groups, BCBSVT ASO groups, BCBSVT insured large groups, BCBSVT insured small groups, TVHP insured small groups, and TVHP insured large groups. Combining these homogeneous populations creates greater consistency and credibility within the trend factor development. Claims from Medicare Primary

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members were excluded. Compound drugs claims were excluded. The data from ASO groups whose pharmacy benefits are not administered through the BCBSVT contract with ESI were excluded. Large ASO groups who offer benefits atypical to the large group marketplace were excluded. We used claims incurred from July 1, 2014 to June 30, 2018, paid through September 30, 2018. Completion factors were applied to estimate the ultimate incurred claims for each period shown in the exhibits.

ESI has been the pharmacy benefits manager for BCBSVT since July 2009. The initial ESI contract was for a period of three years; new contracts became effective July 2012, July 2015, and January 2018. We base our cost trend calculation on Average Wholesale Price (AWP) and apply a factor to the rating formula to account for the contracting changes. We analyzed the components of trend (cost and utilization) separately for brand and generic drugs. We estimated the impact of brand drugs going generic based on the brand drugs that are scheduled to lose patent in the projection period. Specialty drugs are very high cost drugs with low utilization. Because of their relative infrequency, it is more appropriate to look at the overall PMPM trends for these drugs rather than separate cost and utilization components. The overall pharmacy trend is calculated by combining the separate projections.

Non-Specialty Drugs

Exhibit 2D provides the monthly and the 12-month rolling data, along with the corresponding year-over-year and exponential regression trends, for non-specialty drugs. These are shown separately for the generic cost, brand cost, and overall non-specialty utilization categories. The number of days supply, rather than the number of scripts, was used to normalize for changes in the days supply per script (e.g. increased use of 90-day fills). Because there are several popular brand drugs that have become generic during the experience period, or will become generic during the projection period, we combined the data for generic and brand drugs for the purpose of analyzing utilization patterns. The regressions use 24 data points on the monthly data in order to best capture an adequate amount of the most recent history of drug costs. We select annual trends of 3.5 percent for generic cost, 5.9 percent for brand cost, and 0.0 percent for total non-specialty utilization.

Instead of explicitly projecting a generic dispensing rate, we separated the drugs into six categories:

- Generics
- Brands going Generic: brands that are expected to become available in generic form in the projection period, based on a list from our pharmacy benefit manager
- Vaccines
- Over the Counter (OTC)
- Compounds
- All other Brands

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As shown in Exhibit 2F, each category days supply is trended forward at the same rate of 0.0 percent. Exhibit 2F summarizes the trends for non-specialty drugs and calculates the total non-specialty allowed drug trend as 1.5 percent.

Specialty Drugs

The introduction of certain new specialty drugs requires an adjustment to the specialty drug trend calculation. High-cost or high-utilization drugs have entered the market recently, such as Orkambi, a treatment for cystic fibrosis with an annual cost of almost \$250,000, and PCSK9 inhibitors like Repatha, used to treat high cholesterol in patients with the genetic disease familial hypercholesterolemia (FH) who have failed one statin and patients who have suffered a heart attack and failed two different statins. To accurately capture the effect of these new drugs on specialty trend, we removed their claims from the experience to calculate a trend rate to apply to these non-excluded claims. We trended those claims forward at the calculated rate for 30 months, then added back in our projections of claims for the new treatments (Orkambi, Ocrevus, and PCSK9 inhibitors). We used the total restated projected claims to calculate a restated specialty trend. Any cost estimates for excluded drugs developed using demographic estimates are calculated using the same membership and/or claims underlying pharmacy trend development.

Exhibit 2E, Page 1 shows the calculation of specialty trend both for all specialty drugs and for specialty drugs excluding the new treatments described above. For our regressions, we chose 24 points of 12-month rolling data to capture the most recent history of drug costs. A rolling 12-months regression is more appropriate for specialty drugs because of the low-frequency, high-cost nature of these drugs. The total specialty trend is 18.5 percent. Removing the large cost increases associated with the new treatments results in an 18.4 percent trend for the remaining specialty drugs.

PCSK9 inhibitors such as Repatha are used to treat high cholesterol. BCBSVT's current policy is to approve PCSK9 inhibitors for the treatment of familial hypercholesterolemia (FH), a genetic disease characterized by very high levels of cholesterol in the blood, after failure of one high-dose statin for 60 days. Current incidence studies suggest that 200 persons per 100,000 lives are diagnosed with FH. Another indication for these drugs is for patients who have had a heart attack and then failed two different high-dose statins for 60 days. Based on current membership, we project 19 members will use a PCSK9 inhibitor in 2020. With an average annual cost from the trend experience of about \$14,176, the projected total is \$269,351.

Orkambi is a drug used in the treatment of cystic fibrosis. In particular, it is used to treat a specific mutation of the disease that is found in roughly 50 percent of cystic fibrosis patients. Orkambi is prescribed to patients age 12 and older. In previous filings, we assumed that 50 percent of our members diagnosed with cystic fibrosis who are at least age 12 will take Orkambi. Three members in the experience period had claims for Orkambi. Given the length of time the drug has been available, we expect we will see

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no change in utilization and add in \$388,607, which is the annual experience cost of the claimants.

Ocrevus is a drug used in the treatment of multiple sclerosis (MS). We estimate 15 percent of our members currently taking medication for MS would move to Ocrevus. We therefore excluded 15 percent of the average annual cost of MS medications from specialty claims to reflect this shift, and added in the estimated cost of Ocrevus. No adjustment was made to the experience used to develop the non-exclusion specialty trend, since only a proportion of claims are removed.

To calculate the restated specialty trend, we started with the pharmacy claims from the year ended June 30, 2018 experience period and removed the claims for PCSK9 inhibitors, Orkambi, and MS drugs to be replaced by Ocrevus. We then trended the remaining claims at an 18.4 percent rate for 30 months and added the incremental cost of PCSK9 inhibitors, Orkambi, and Ocrevus for a total restated projected claims. Using this method, the restated specialty drug trend is 18.0 percent. See Exhibit 2E, Page 2 for details. The impact of excluding certain specialty drugs has had an increasingly small impact on specialty trend. We will continue to monitor the impact of the introduction of new specialty drugs on trend, but will consider removing this adjustment in subsequent filings if the impact remains inconsequential.

Total Pharmacy Trend

Using the PMPM claims as weights between non-specialty and specialty claims for the 12 months ended June 2018, we applied the annual trends for 30 months and calculated the following:

Allowed Pharmacy Trend	
Category	Annual Trend
Generic	3.5%
Brand	5.9%
Brands Going Generic	-43.4%
Specialty	18.0%
Total	9.1%

Please note that contract changes are applied separately from trend in order to accurately capture the timing for each renewal.

Contract Adjustment Factors

For drug claims in the year ended June 30, 2018, we took the AWP of the claims and applied the contracted discounts and dispensing fees, if applicable, for each potential renewal experience period and rating period to calculate adjusted allowed charges. The contract adjustment factor for each experience and rating period combination is the ratio of the adjusted allowed charges.

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Applying the discount adjustment from the experience used to develop trend to a 12-month rating period, we calculated a 7.8 percent effective annual trend.

Exhibits 3G contains the contract adjustment factors that will be applied to the drug claims in a group's renewal. These factors assume that both the experience period and rating period are 12 months. For cases where this is not true, or for periods not provided in the exhibit, we will calculate an appropriate factor using an analogous methodology.

4.3. Overall Total Trend

Using the year ended September 2018 claims experience for the groups included in the manual rate (see section 6.1), the overall allowed trend is

Category	Allowed PMPM	Allowed Trend
Medical	\$ 453.25	6.4%
Pharmacy	\$ 96.72	7.8%
Total	\$ 549.97	6.6% ⁴

While we have included no implicit or explicit margin in our trend selections, we recognize that an environmental change may create a significant shift in either direction. We would submit an interim trend filing should information become available that meaningfully differs from the underpinnings of the trend analysis in this filing.

4.4. Leveraged Trends

The above trends are based on allowed charges and do not account for the leveraging effect of deductibles and copays. We measured the correlation between historical leverage factors the actuarial values (AVs) of the benefits and fit a curve to the results. For medical leverage, we fit a line to all medical products, including the medical portion of integrated CDHP benefits. For drug leverage, we found that using different lines for different types of drug benefits produced the best fits. We produced three lines: one for drug cards, one for CDHPs with wellness drugs covered at 100%, and one for all other CDHPs. The formulas for leverage are below:

Leverage Formulas	
Medical	$-0.0385 \times (AV) + 1.0389$
Drug Card	$-0.0680 \times (AV) + 1.0691$
Drug - CDHP 100% Wellness	$-0.0559 \times (AV) + 1.0564$
Drug - All Other CDHP	$-0.0723 \times (AV) + 1.0722$

See Exhibits 3E and 3F for examples of leverage factors.

⁴ The allowed trend without the pharmacy contract adjustment is 6.9%.

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Applying the leverage factors for benefits present in the year ended September 2018 for the groups included in the manual rate, we calculate the following paid trends:

Category	Paid PMPM	Paid Trend
Medical	\$ 367.85	7.2%
Pharmacy	\$ 85.18	8.6%
Total	\$ 453.03	7.5% ⁵

5. Benefit Factors

To determine standardized claims rate relationships, also called relativities, BCBSVT has created models that simulate the impact of member benefits for all types of plans. The models determine the allowed charges for the 12 months of claims included in the study and “re-adjudicate” the claims, thereby simulating the impact of member cost sharing for a given benefit plan.

Claims data is from BCBSVT’s data warehouse. To ensure accuracy, the claims data used has been reconciled against internal reserving, enrollment and other financial reports. The starting point of the analysis is allowed charges as determined by the BCBSVT claims adjudication system. The claims data includes benefit codes that enable us to identify the services and benefit structures (copays, deductibles, and coinsurance) for each claim.

Incurred allowed charges from July 2017 to June 2018, paid through September 2018, were used in the models. The allowed charges were trended 30 months to the 12-month period that begins January 1, 2020.

The data includes claims from BCBSVT Cost Plus groups, BCBSVT ASO groups, BCBSVT insured large groups, BCBSVT insured small groups, and TVHP insured large groups. Combining these homogeneous populations creates greater consistency and credibility within the relativity factor development. Claims from certain large ASO groups were excluded, as the rich benefits offered by those groups were not in line with the leaner offerings of most insured large groups. CDHP and non-CDHP claims were combined. We also excluded groups that have special benefits. This predominantly refers to groups that have specific reimbursement with particular providers outside of BCBSVT’s contracts and/or claims processing function. We excluded claims from groups that do not have pharmacy coverage through BCBSVT.

For each benefit plan, the models produce the simulated PMPM values of the benefits. The PMPM for each plan is then divided by the average trended paid claims rate from the BRV experience period to produce its benefit relativity (BRV). Relativities are included for medical only plans, Rx only plans, and integrated CDHP plans.

⁵ The paid trend without the pharmacy contract adjustment is 7.7%.

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5.1. Models for Active Employees

Benefit Relativity Model: Medical

The trends used were the total medical trend, by type of service. Cost trends for each type of service were calculated by the discrete unit cost trend method above, while separate utilization trends were developed for facility and professional services (see section 4.1.2).

Using the contracted reimbursement schedules, we calculated network factors that represent the different network contracts. Using these factors, we can include all claims in each of the three networks by adjusting each claim to the basis of a single network. This enables us to combine all the experience for each plan design.

The claims were categorized according to how benefits are paid, and one record was generated for each member, date of service, and type of service. Each record was then assigned a cost share (deductible/coinsurance, copay, covered in full) for each plan modeled. For all products, claims for preventive mandated benefits were assigned a “covered in full” cost share, independently of the product that is being modeled.

The model tests one benefit design at a time. It determines the member portion of the allowed charges, and from this, a total simulated paid PMPM for each benefit design. The impact of copay, deductible, coinsurance, out-of-pocket maximum, and preventive mandated benefits are all considered. If the average allowed cost of a category is less than the copay being examined, it is assumed that the member paid the full cost of the service.

BCBSVT offers products on several different networks based on the two provider contracts (BCBSVT Managed Care and BCBSVT Non-Managed Care). Depending on the network, there may be more than one tier of coverage (generally referred to as in-network and out-of-network) and different networks may have different providers in each tier. Below is a chart showing which providers are in which tiers on many of BCBSVT’s common networks. Providers who accept the indicated provider contract are considered to be in-network. For providers in the BlueCard® network and non-participating providers, ‘In’ indicates coverage for these providers on the in-network tier of coverage, and ‘Out’ indicates coverage for these providers on the out-of-network tier of coverage.

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Network Name	Provider Contract	BlueCard Providers	Non-Participating Providers
VHP Select	BCBSVT Managed Care	N/A	N/A
VHP	BCBSVT Managed Care	Out	Out
EPO PCP	BCBSVT Managed Care	In	N/A
VHP Open Access	BCBSVT Managed Care	In	Out
EPO	BCBSVT Non-Managed Care	In	N/A
PPO	BCBSVT Non-Managed Care	In	Out
Indemnity	BCBSVT Non-Managed Care	In	In

If BCBSVT were to quote a product not on one of the networks listed above, or one featuring different provider networks for selected services, we would modify the base data in the BRV models to correspond to the desired changes (for example, excluding certain providers or modifying allowed amounts) before simulating the benefit impact.

We use BRVs in two places in the rating formula described in section 3. The average experience period seasonally adjusted benefit relativity factor (line K in Exhibit 1A) is calculated using BRVs for the benefits in the experience period, while the projected claims for the rating period (line B1 in Exhibit 1B) uses BRVs for the benefits in the rating period.

The relativities for active employees for some medical products currently in our book of business are displayed on Exhibits 3A and 3B.

Benefit Induced Utilization: Medical

Our factors for the impact of induced utilization (IU) are a blend of factors developed by the federal Department of Health and Human Services (HHS) for use with Qualified Health Plans and factors developed from BCBSVT data. The HHS factor receives a weight of 0.75 and the BCBSVT factor receives a weight of 0.25.

We found the curve of best fit for the HHS factors of $IU = AV^2 - AV + 1.24$, where AV is the actuarial value of the benefit plan. The HHS IU factors are based on combined medical/pharmacy AV, but as we develop BRVs separately for medical and pharmacy plans, we will apply the formula to medical-only AVs. We normalized the curve such that the average AV underlying the base BRV experience period returns a utilization adjustment of 1.00. In other words, if a simulated benefit has an AV less than the average AV, then utilization will be reduced (i.e. factor < 1.00). If a simulated benefit has an AV greater than the average AV, then the benefit will have induced utilization (i.e. factor > 1.00).

We performed an independent analysis to measure the correlation between the benefit design and the overall health care spending. The correlation uses the actuarial value as the independent variable and the total allowed charges (capped at \$30,000 per member per year) as the dependent variable. A 2nd order polynomial best fits the data. The polynomial was normalized such that the average actuarial value underlying the base

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BRV experience returns a utilization adjustment of 1.00. The resulting formula is *Medical Utilization* : $3.2737 \times (AV)^2 - 3.6701 \times (AV) + 1.8316$. The BCBSVT IU factor from this curve is blended with the IU factor from the HHS curve to calculate the IU factor used in the BRV model, with a minimum set at 0.74 and a maximum of 1.20.

Benefit Relativity Model: Pharmacy

The trends used were the total trend, by type of drug, as described above (section 4.2) for brand, generic, and specialty drugs.

Within the model, all pharmacy scripts, including specialty, were assigned to one of six categories: retail generic, retail preferred brand, retail non-preferred brand, mail generic, mail preferred brand, and mail non-preferred brand. We applied flags to identify several categories of drugs that are either required to be covered in full (ACA contraceptives and vaccines) or for which a group may purchase a rider to offer additional coverage (some fertility drugs) or exclusion (lifestyle drugs). We also flagged drugs for which a group may offer special cost-sharing arrangements, such a diabetic medications and wellness drugs. We assigned these flags by National Drug Codes as reported to us by ESI.

The experience period data was adjusted to reflect the major brands that are expected to become generic during 2019 and 2020. The list was based on a report provided by ESI.

For these brands, in the first six months (the exclusivity period), we reduced the Average Wholesale Price (AWP) by 10 percent and kept the brand discount. For the months after the exclusivity period, we reduced the AWP by 10 percent and changed the discount to the generic discount. The 10 percent reduction in AWP is based upon industry standard assumptions, supported by our own analysis of AWP changes for drugs that have moved from brand to generic over the past several years.

One record was created for each member and date of service combination. One record can have more than one script category. The model tests one benefit design at a time. It determines the member portion of the allowed charges and a total simulated paid PMPM for each benefit design. The impact of the deductible, coinsurance, copays and out-of-pocket maximum (OOPM) is considered. Following the ACA, contraceptives and vaccines are excluded from the cost sharing. If the average allowed cost of a category is less than the copay being examined, it is assumed that the member pays only the full cost of the script. With Vermont Act 171, all pharmacy benefits effective January 1, 2019 or later will have an OOPM of \$1,350. It is possible that this limit will increase effective January 1, 2020, following the IRS rules for Health Savings Account and High Deductible Health Plans. The exhibits include the \$1,350 OOPM on pharmacy benefits.

The relativities for active employees for some pharmacy products currently in our book of business are displayed on Exhibit 3D.

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Benefit Induced Utilization: Pharmacy

We performed an independent analysis to measure the correlation between the benefit design and the quantity of pharmacy prescriptions consumed. The pharmacy benefits are adjusted in two ways. First, the generic utilization varies with the benefit design. Claims and membership data from January 2014 through June 2018 were used to create a table to adjust the base generic utilization up or down depending on the difference in the generic and brand copays of the member's drug plan.

Second, we performed a separate analysis to adjust for the overall pharmacy benefit. A modeled actuarial value was assigned to every benefit in the experience period. The correlation uses the actuarial value as the independent variable and days supply as the dependent variable. A 2nd order polynomial best fits the data. The curve was normalized such that the actuarial value underlying the base BRV benefit returns a utilization adjustment of 1.00. The resulting formula is *Pharmacy Utilization* : $0.8389 \times (AV)^2 - 0.1048 \times (AV) + 0.4346$, with a minimum set at 0.74 and a maximum of 1.24.

Although we use two steps to calculate the induced utilization, we are not adjusting the data twice. The adjustment for difference in generic/brand copays changes the mixture of scripts (i.e. generic dispensing rate) without adjusting the overall frequency of scripts. The richness or leanness of the plan, as measured by the actuarial value, drives an adjustment to the overall frequency of scripts without changing the mixture of scripts.

As the model includes claims from both CDHPs and drug cards, we also adjust for the type of benefit being modeled. Claims incurred on a CDHP have a lower cost per script than claims incurred on a drug card. We calculate a factor for each benefit type by taking the ratio of the cost per script for that type and the cost per script from all claims in the model. For CDHPs, the factor is 0.9301 and for drug cards the factor is 1.0554.

Benefit Relativity Model: Integrated (CDHP)

The CDHP model combines both the medical and pharmacy models described above. One record was created for each member, date of service and type of service combination. A separate medical and pharmacy actuarial value is calculated, and the appropriate utilization adjustment is made.

The relativities for active employees for some CDHP products currently in our book of business are displayed on Exhibit 3C.

5.2. Tier Factors

The BRV models calculate the average paid claims of a single member on a particular benefit design. BCBSVT sells products with rate tiers for multiple members. These rate tiers feature family deductibles and out-of-pocket maximums either in addition to or in

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place of the individual limits. We refer to products that have family limits in addition to individual limits as stacked, and to products with only family limits as aggregate. For products renewing after January 1, 2016, members on aggregate plans are subject to the federal maximum allowed individual out-of-pocket, even if the aggregate out-of-pocket maximum is higher. We refer to these plans as hybrid.

To price benefits for rate tiers with multiple members, we calculated tier factors to apply to the BRV for the benefit. We used the BRV models to calculate member paid amounts for each member in the model and used every combination of members to create “families” in the following categories:

- One Adult
- Two Adults
- One Adult and One Child, ... , One Adult and Seven Children
- Two Adults and One Child, ... , Two Adults and Seven Children

For each category of family, we calculated the average plan paid amount subject to the family cost sharing. Then we combined the categories of families into rate tiers using the proportion of each category in the experience period membership as a weight. The ratio of plan paid amount for each rate tier to the plan paid amount for the single rate tier is the tier factor. For aggregate and hybrid factors, we grouped products together into three ranges of out-of-pocket maximums and calculated tier factors for each range. We calculated different factors for products with separate medical and drug benefits and for products with integrated benefits (CDHPs). The hybrid factors are applicable to benefits with a \$7,900 individual out-of-pocket maximum. This is the 2019 individual out-of-pocket maximum set by HHS. Upon release of the 2020 individual out-of-pocket maximum, we will calculate factors using identical data, assumptions, and methodology and adjust the groupings of out of pocket maximums if necessary. The tier factors calculated for each range and type of benefit are shown in Exhibit 3H.

Separate factors are provided for stacked plans with family multipliers of two, two-and-a-half, and three for deductibles and out-of-pocket maximums. The aggregate and hybrid factors assume a family multiplier of two. If a group requests a benefit with a non-standard multiplier, out-of-pocket maximum, tier structure, or individual out-of-pocket maximum (for a hybrid plan) that is not in the exhibit, identical data, assumptions and methodology as described above will be used to calculate appropriate tier factors for the requested benefit.

5.3. Formulary & Pharmacy Options

BCBSVT offers groups a selection of formularies. Groups can select either the BCBSVT Open Formulary or the National Preferred Formulary. Groups electing the National Preferred Formulary receive greater rebates than those on the BCBSVT Open Formulary. To calculate the impact of the change, rebate-eligible claims for the large groups impacted by this filing were identified. Rebate totals were calculated under the contracted terms of each formulary. For groups changing formularies, the below factors

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are applied to projected rebates. The factors will be adjusted proportionately if the experience period includes a mix of formularies.

Experience Formulary	Rating Formulary	Rebate Multiplier
BCBSVT Open Formulary	National Preferred Formulary	1.256
National Preferred Formulary	BCBSVT Open Formulary	0.796

BCBSVT offers groups an Active Choice pharmacy program. This program requires an active choice regarding the way members obtain their maintenance prescription drugs. For groups electing this program, the simulated paid pharmacy claims in the BRV calculation will be decreased by \$0.43 PMPM.

BCBSVT offers groups an Express Scripts Specialty Pharmacy Exclusive option. Groups electing this option receive greater discounts and rebates on specialty drugs. Pharmacy contract factors for this option are calculated using an analogous method to the standard contract factors, as described in Section 4.2. Exhibit 3G Page 2 provides the discount factors for the Express Scripts Specialty Pharmacy Exclusive option. The factors below are applicable to the projected rebates. The factors were developed assuming the entirety of the experience period is on the non-exclusive specialty option and the entirety of the rating period is Express Scripts Specialty Pharmacy Exclusive option. For groups with a mix of specialty options in their experience period, the factors will be adjusted using an analogous methodology proportionately to the programs in effect.

Formulary	Specialty	Rebate Multiplier
BCBSVT Open Formulary	Express Scripts Specialty Pharmacy Exclusive	1.158
National Preferred Formulary	Express Scripts Specialty Pharmacy Exclusive	1.134

5.4. Riders

BCBSVT files riders with the Vermont Department of Financial Regulation (DFR) that allow large groups to add or modify covered services. These riders include, but are not limited to, the Benefit Enhancement Rider, Acupuncture Benefits Rider, and Wellness Drug Rider. For riders that modify covered services, the benefit relativity model is used to price the rider. For riders that cover an optional service, allowed charges are developed from groups who offer that coverage and adjusted to the group's benefit, or a reasonable approximation of allowed charges is used if no experience data exists. If, in the underwriter's professional judgment, the election of a rider will create material

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anti-selection, the underwriter will modify the rate as necessary using underwriting judgment, as described in section 3.

6. Other Factors Applicable to All Association Health Plans

6.1. Manual Rate

The manual rate for active members is the paid claims PMPM incurred between October 1, 2017 and September 30, 2018 and paid through November 30, 2018 from BCBSVT insured small groups who do not have their entire enrollment on a platinum plan, trended to calendar year 2020 using the trends and pharmacy contracts adjustments described in section 4. This population was chosen as it is anticipated to be analogous to the associated health plan line of business.

Calculation of the Manual Rate (Actives)		
Experience Paid Claims, capped at \$800,000 and completed	A	\$ 143,182,114
Overall Paid Trend factor (7.7% for 27 months)	B ₁	1.182
Pharmacy Contract Adjustment	B ₂	0.996
Projected Total Paid Claims	C = A x B ₁ x B ₂	\$ 168,669,887
Total Member Months	D	314,615
Manual Rate	E = C / D	\$ 536.12

The manual rate is adjusted to reflect a group's particular characteristics, as demonstrated in Exhibit 4A. An adjustment is made for the average age/gender factor (line B) of the group. We used factors from the SOA's report *Health Care Costs - From Birth to Death*⁶. The factors were normalized such that the membership in the manual rate experience period has an age/gender factor of one. Finally, a contract conversion factor (line D) is calculated based on member distribution and tier factors in order to convert from a PMPM to a single rate basis (necessary because the adjusted manual rate (line S of Exhibit 1A) is blended with the projected single contract rate (line R of Exhibit 1A), which is not on a PMPM basis).

6.2. Large Claims Factors

BCBSVT will use the formula and factors in Milliman's 2017 *Health Cost Guidelines - Reinsurance* to calculate expected claims above the pooling limit. The contents of the *Guidelines* are proprietary and confidential. This filing will provide a general description of the formula but will not include any of the factors.

⁶ <https://www.soa.org/research-reports/2013/research-health-care-birth-death/>
The factors for the age curve are in Chart 1 of the databook linked on the page.

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Claim costs above a particular pooling point are developed separately for children and adults on a PMPM basis. The basis for each rate is a starting claim cost that varies with the pooling point and the out-of-pocket limit for the benefit. The starting claim costs are based on national data and factors are applied to adjust to our Vermont service area and the details of our contracts with local providers. An adjustment for demographics is applied, as is a trend factor to adjust the starting claim costs for the experience period of the renewal. The starting claim costs are also adjusted for the network of the benefit to account for claims from out-of-network providers, if appropriate for the benefit.

The adjusted adult and child claims rates by benefit are multiplied by the number of adult and child member months in the experience for that benefit to develop the total expected claims above the pooling level.

6.3. Administrative Charges

The sources of actual expense data in this filing are BCBSVT's data warehouse and accounting records. As this is a new line of business, BCBSVT and TVHP large group experience is used to approximate estimated administrative expenses. The experience period for this filing is November 2017 to October 2018. Actual BCBSVT and TVHP administrative expenses for the experience period were compiled on a GAAP reporting basis. During 2015, BCBSVT completed a comprehensive cost accounting study. The results were refreshed during 2017 to reflect known operational changes. Allocations to specific lines of business on a GAAP reporting basis were updated for the results of this study, beginning in December 2015. Exhibit 5A provides a reconciliation of the experience period to restated GAAP financial report data.

Experience Base of Actual Expenses

Administrative expenses are allocated under BCBSVT's cost accounting system to lines of business. Overhead expenses are allocated to lines of business on the basis of relative capital requirements, which were measured as each line's relative impact on Risk-Based Capital (RBC). We used BCBSVT insured large group and TVHP insured large group information for the base administrative charges.

The cost accounting data by cost center is allocated into cost categories for purposes of determining administrative charges for each specific group account, given that account's characteristics. The group cost categories align with the rules used in the cost allocation model. The group cost categories include:

Account – those expenses that are allocated to specific group accounts on a per group account basis.

Member - those expenses that are allocated on a per member basis.

Contract - those expenses that are allocated on a per contract (subscriber) basis.

Medical Claims - those expenses that are allocated on a per medical claim basis.

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Total Projected Claims - those expenses that are allocated via a percent of claims factor.

For each of the group cost categories described above, the respective number of unit months during the experience period was tabulated for BCBSVT and TVHP insured large groups. These segments are combined in this filing for marketing considerations. The unit months include the number of account months, number of member months, number of contract months, and number of medical claims by months. For the expenses allocated on a capital requirement basis, the experience administrative charges were divided by total projected paid claims to calculate a percent of claims factor.

Reclassifications reflected in Exhibit 5A include the removal of federal fees (these are added to premium rates separately; see section 6.8), GMCB billback (these are added to premium rates separately; see section 6.7) and fees paid to our vendor Health Equity for the administration of Health Savings Accounts and Health Reimbursement Accounts linked to our insurance products (participation in this service is optional and we assign these fees to groups who select the service). We also removed any expenses incurred due to one-time, non-recurring events, as these fees are not expected to continue to occur in the projection period. These include transitional costs associated with the conversion to a new technology platform. Decreasing membership has reduced total variable costs, but BCBSVT has delayed reducing its administrative budget in order to support transition activities. This transition will be complete by the end of 2019, so we have reflected a transitional savings of \$0.91 PMPM in 2020 for the large group line of business.

Using the adjusted experience period administrative expenses and unit months, per unit per month (PUPM) values were calculated. For the group segments included in this filing, there are four such PUPM values and one percent of claims value – one for each of the cost categories indicated above.

The experience period administrative expenses PUPM are shown in Exhibit 5B, line C.

Projection Factors

Actual administrative costs PUPM from the experience period were projected to each of the rating periods. Projection factors are based on a 2.5 percent annual trend. These projection factors are intended to make reasonable but modest provision for increases in overall operating costs PUPM. Note that there are no known extraordinary or mandate-related costs at this time which require separate provision for the rating periods involved in this filing.

We are assuming that personnel costs (wages and benefits) will increase by three percent, the budgeted wage increase for 2019, over the projection period. Other operating costs are assumed to remain flat. Based on year-to-date October 2018 information, we have calculated that 83.5 percent of our administrative costs are for

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salaries and benefits. We are therefore increasing our total projected administrative expenses by the weighted average of 2.5 percent per annum.

Development of Administrative Charges Trend			
		YTD Oct 2018	Percent of Total
Employee costs	A	\$37,186,172	56.4%
Purchased service	B	\$21,376,708	32.4%
Other operating costs	C	\$7,353,106	11.2%
Subtotal administrative expenses	D = A+B+C	\$65,915,986	100.0%
Total Personnel Cost	E = A / (A + C)		83.5%
Trend for Personnel Cost	F		3.0%
Total Trend	G = {(1+F) x E + (1.00) x (1-E)} - 1		2.5%

For 2019, we project total BCBSVT membership will decrease, resulting in an increase in admin charges PMPM. We calculated PMPM admin charges with experience period enrollment and projected 2019 enrollment and found they increased by 2.0 percent with the projected 2019 enrollment. We assumed that variable costs represent half of the increase, and therefore applied an increase of 1.0 percent to the base PUPM charges to account for the reduction in membership.

Charges for Group Accounts

The administrative charge PUPM figures shown in Exhibit 5B are the values to be applied on an account by account basis, along with each group account's corresponding unit count, to produce account-specific administrative charges. These amounts will then be expressed as equivalent PMPM amounts for each group account.

Amounts for special items or unique services not part of BCBSVT standard scope of administrative services (e.g., special booklets, certificates, or reports) are to be determined and applied separately on an account-specific basis. Commissions based on the commission scale applicable to the account are not reflected in the schedule of admin charges in Exhibit 5B and will be calculated and applied separately.

6.4. Net Cost of Reinsurance

BCBSVT has purchased reinsurance for claims in excess of \$800,000 for 2019, and expects to purchase similar reinsurance in future years with limits approximately equal to the 2019 limit increased by trend. We estimate that the target loss ratio for the reinsurance is approximately 75 percent, which implies a cost of reinsurance of approximately 33 percent of claims above the reinsurance limit. For each pricing period starting quarter, we determined an annual cost of reinsurance for the trended reinsurance limit by multiplying the expected annual claims cost above the limit by 33 percent. Dividing this by 12 produces the PMPM cost of reinsurance.

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Pricing Period Starting Quarter
Q1 2020
\$1.71

6.5. Pharmacy Rebates

Pharmacy rebates are calculated by taking the experience period rebates and trending them using the brand cost trend (from Exhibit 2F). Pharmacy rebates are paid with an average seven-month delay from the time of the original claims. For months in the experience for which we do not have detailed rebate information, an estimated rebate amount is included in the calculation.

6.6. Contribution to Reserve

As directed by management, we included the following contribution to reserve factors in the rate calculation:

Contribution to Reserve	
BCBSVT Insured AHPs	1.5% of premium

6.7. State Mandates and Assessments

Vermont Vaccine Purchasing Program Payments

The Vermont Vaccine Purchasing Program⁷ offers health care providers state-supplied vaccines at no charge by collecting payments from Health plans, insurers, and other payers. The program's assessment is a PMPM for each Vermont resident. We estimate that the 2020 rates will be 60 percent of the original 2018 rates of \$8.15 per child and \$0.72 per adult. We will update these rates once the actual 2020 rates are known.

New Hampshire Purchasing Program Payments

The New Hampshire Purchasing Program⁸ offers health care providers state-supplied vaccines at no charge by collecting payments from health plans, insurers, and other payers. The assessment for 2019 is \$6.47 for each child that is a New Hampshire resident. The current best estimate of the 2020 rate is \$7.20 per assessable life per month. We will use these rates until a new rate is approved.

⁷ <http://www.vtvaccine.org/>

⁸ <https://nhvaccine.org/>

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New York State Health Care Reform Act

BCBSVT pays the New York GME Covered Lives Assessment⁹ for all members who are New York residents as part of the New York State Health Care Reform Act. The assessment varies based on the county of residence. We will use the approved 2019 rates until new rates are approved.

Maine Guaranteed Access Reinsurance Association

BCBSVT will pay the Maine Guaranteed Access Reinsurance Association Assessment¹⁰. The 2019 assessment is \$4.00 per member per month for each member that is a Maine resident. We will use the 2019 rates until new rates are approved.

Health Care Claims Tax

The Health Care Claims Tax of 0.999 percent applies to all claims or capitations incurred by members with Vermont zip codes. We use the percentage of current members with Vermont zip codes to estimate the percentage of rating period claims expected to be incurred by Vermont members. Act 73 of 2013 sunset the 0.199 percent assessment for the Health IT-Fund. Given this fee has twice been extended close to its sunset date, we will include it in the calculation and update the charge if new information becomes available.

Blueprint

BCBSVT participates in the Vermont Blueprint for Health program. The current assessments for this program, applied to members who are attributed to a Blueprint provider as of the month the renewal is produced, are \$2.77 PMPM for the Community Health Team and \$3.00 PMPM for the Patient Centered Medical Homes (PCMH). PCMH are eligible for up to \$0.50 for performance. We project that our total PMPM for PCMH will be \$3.24. The projected performance payment is based on the average payment for large groups from October 2017 to November 2018. Any updates made to the Blueprint Manual¹¹ will be incorporated in renewals.

Green Mountain Care Board Billback

BCBSVT is assessed a billback from the Green Mountain Care Board. As this is a new line of business, BCBSVT and TVHP large group experience is used to approximate the estimated billback. Billback amounts from the administrative charges experience period described in section 6.3 were applied to projected member months to develop the charge of \$2.30 PMPM. The portion of the assessment for nonprofit hospital and medical service corporations is increasing from 24 percent to 29.6 percent¹². Accordingly, we apply a factor to reflect the increase in allocation.

⁹ <https://www.health.ny.gov/regulations/hcra/gmecl.htm>

¹⁰ <http://www.mgara.org/>

¹¹ <http://blueprintforhealth.vermont.gov/>

¹²

<https://legislature.vermont.gov/Documents/2020/WorkGroups/House%20Ways%20and%20Means/GMCB/W-Jean%20Stetter-Green%20Mountain%20Care%20Board%20Presentation-2-8-2019.pdf>

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GMCB Billback Calculation	
BCBSVT Projected Large Group Billback	\$210,917
TVHP Projected Large Group Billback	\$122,154
Total Large Group Billback	\$333,071
Projected Member Months	178,387
Billback Charge Before Allocation Change	\$1.87
Allocation Increase	0.296/0.24 = 1.23
Billback Charge PMPM	\$2.30

Other Assessments

Other state mandates and assessments will be included in the calculation as applicable.

6.8. Federal Assessments

Federal Insurer Fee

The Federal Insurer Fee is intended to help pay for some provisions in the Affordable Care Act. This fee is only applicable to Fully Insured & Refund Eligible Groups. H.R.195 temporarily suspended this fee for 2019 only. For 2020 and 2021, we project the fee to be 2.2% of premium. The fee will be weighted proportionally to the applicable fee by months in the rating period.

The IRS Annual Fee on Health Insurance Providers for 2018 Invoice, dated August 29, 2018, calculated the BCBSVT portion of the total assessment as:

$$\frac{\text{Net premiums taken into account for BCBSVT}}{\text{Net premiums taken into account for all covered entities}} =$$

$$\frac{\$554,571,682.00}{\$712,963,700,661.11} = 0.078\%$$

The numerator of the calculation reflects premiums collected in 2017. BCBSVT experienced losses in membership in 2018, which will reduce the amount of premium collected by BCBSVT proportionate to the net premium for all covered entities. Accordingly, we apply an adjustment to the BCBSVT portion of the total assessment by applying the following factor:

$$\frac{\text{2019 projected net premiums taken into account for BCBSVT}}{\text{2018 invoice net premiums taken into account for BCBSVT}} =$$

$$\frac{\$481,458,818}{\$554,571,682} = 0.868$$

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The calculation of the fee is provided below, which uses the estimated 2019 industry assessment prior to the suspension of the fee. This calculation will be updated if additional information is received. BCBSVT will continue to update the rating formula in the event of a suspension of this fee.

Federal Insurer Fee Calculation			
		2018 Actual	2019 Projected
Projected Fully Insured Premium subject to the Federal Insurer Fee	a	\$554,571,682	\$481,458,818
Total Industry Assessment for Federal Insurer Fee	b	\$14,300,000,000	\$15,600,000,000
BCBSVT and TVHP Portion of Total Assessment (based on 2018 information)	c	0.078%	0.068%
Premium Adjustment	d	1.000	0.868
Projected BCBSVT and TVHP Federal Insurer Fee	e = b x c x d	\$11,123,112	\$10,534,558
Estimated Required Charge as a percent of Total Premium	f = e / a	2.0%	2.2%

Other Assessments

Other federal mandates and assessments will be included in the calculation as applicable.

7. Medical Loss Ratio Projection

We use the factors and formula in this filing to project a Medical Loss Ratio (MLR) for 2020. Using the manual rate as a proxy for projected claims, we project a 2020 MLR of 89.3 percent.

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BCBSVT MLR			
(A)	Manual Rate	\$536.12	Exhibit 4A
(B)	Rebates	\$11.52	2017 MLR Filing, untrended
(C)	Estimated HCQ	\$2.88	2017 MLR Filing, untrended
(D)	State Mandates and Assessments	\$9.78	Calculation as described on Exhibit 1B, using latest actual PMPM as needed
(E)	MLR Numerator	\$537.26	= (A) - (B) + (C) + (D)
(F)	Projected Claims	\$534.38	= (A) - (B) + (D)
(G)	Net Cost of Reinsurance	\$1.71	Actuarial Memorandum, Section 6.4
(H)	Administrative Charge	\$48.51	Calculation as of January 2020, from Exhibit 5B
(I)	GMCB Billback	\$2.30	Calculation using 2019 Charges
(J)	Subtotal	\$586.90	= (F) + (G) + (H) + (I)
(K)	Total Premium	\$615.06	= (J) / (1-0.022-0.009-0.015)
(L)	Federal Insurer Fee	\$13.53	= (K) x 2.2% (from Actuarial Memorandum, Section 6.8)
(M)	Commissions	\$5.40	= (K) x 0.9% (from 2017 MLR filing)
(N)	Contribution to Reserve	\$9.23	= (K) x 1.5% (from Actuarial Memorandum, Section 6.6)
(O)	MLR Denominator	\$601.53	= (K) - (L)
(P)	MLR	89.3%	= (E) / (O)

The above calculations represent estimates assuming that all pricing assumptions hold true, and assuming no change from 2017 values for various quantities (e.g. rebates, commissions).

8. Act 193 Information

This is the first filing for Association Health Plans. As the plans did not exist in 2018, there is no basis for determining an increase in prescription drug spending.

The table below shows the percentage of the 2020 manual rate for generic, brand, and specialty drugs. The percentages were calculated as the experience drug claims (October 2017 - September 2018, paid through November 2018), trended to 2020 and adjusted to the pharmacy contract in force for 2020, divided by the 2020 manual rate of \$536.12.

Drugs Processed Under the Pharmacy B	
Type	Percent of 2020 Manual Rate
Generic	2.3%
Brand	5.9%
Specialty	12.1%

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Please see Addendum A for the specialty formulary as of 1/1/2019.

Drugs administered in an outpatient setting and covered by the medical benefit represent 6.9 percent of the 2020 manual rate. Outpatient drug claims from the experience period were trended to 2020 and divided by the 2020 manual rate of \$536.12.

The pharmacy benefits for AHPs will be administered by Express Scripts (ESI). ESI will manage claims processed through the pharmacy benefit but not claims processed through the medical benefit for use in a facility.

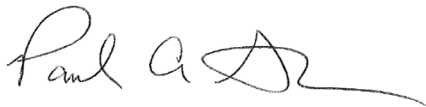
9. Actuarial Opinion

The purpose of this filing is to establish the formula, manual rate, and accompanying factors that will be used for renewals of Blue Cross and Blue Shield of Vermont association health plans. This filing is not intended to be used for other purposes.

The data used in this analysis has been reviewed for reasonableness and consistency; however, it has not been audited.

It is my opinion that the rating formula and factors presented in this filing are reasonable, and have been prepared in accordance with applicable Actuarial Standards of Practice. The formula and factors will produce premium rates that are reasonable in relation to the benefits provided, and will not be excessive, deficient or unfairly discriminatory.

I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries, and I meet the Academy's Qualification Standards to render this opinion.



Paul A Schultz, F.S.A., M.A.A.A.

February 20, 2019