

**BLUE CROSS BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

Table of Contents

1. GENERAL INFORMATION	3
1.1. Company Identifying Information	3
1.2. Company Contact Information.....	3
1.3. Scope and Purpose	3
1.4. Proposed Rate Increase(s).....	4
1.5. Reason for Rate Increase(s)	4
1.6. Historical Financial Results.....	6
1.7. Health Care Reform.....	7
2. PROPOSED BENEFITS	9
2.1. Description of Benefits	9
2.2. AV Metal Values	9
3. EXPERIENCE RATING	10
3.1. Experience Period Premium and Claims.....	10
3.2. Benefit Categories.....	11
3.3. Index Rate.....	11
3.4. Projection Factors.....	12
3.4.1. Change in the Definition of Small Group	12
3.4.2. Membership Projections	12
3.4.3. Changes in the Morbidity of the Population Insured.....	13
3.4.4. Changes in Benefits.....	14
3.4.5. Changes in Demographics	14
3.4.6. Other Adjustments	15
3.4.7. Trend Factors (cost/utilization):	18
3.4.7.1. Medical Trend Development	18
3.4.7.2. Pharmacy Trend Development	22
3.4.7.3. Vision and Dental Trend Development.....	25
3.4.7.4. Overall Total Trend	26

**BLUE CROSS BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

3.5.	Credibility of Experience	26
3.6.	Credibility manual rate development	26
3.7.	Market Adjusted Index Rate	27
3.7.1.	Projected Risk Adjustment Transfer PMPM:	27
3.7.2.	Exchange User Fees	28
3.8.	Plan Adjusted Index Rates	28
3.8.1.	Plan Adjustment - Actuarial Value and Cost Sharing adjustment	28
3.8.1.1.	Benefit Richness Adjustment	28
3.8.1.2.	Paid to Allowed Ratio	29
3.8.2.	Provider Network, Delivery System and Utilization Management adjustment:	29
3.8.3.	Adjustment for benefits in addition to the EHBs:	29
3.8.4.	Impact of specific eligibility categories for the catastrophic plan	29
3.8.5.	Adjustment for distribution of the administrative costs	30
3.8.5.1.	Administrative Expense Load:.....	30
3.8.5.3.	Taxes and Fees:.....	33
3.8.7.	Calibration.....	34
3.8.8.	Projected Loss Ratio	34
3.9.	Consumer Adjusted Premium Rate Development	34
3.10.	Small Group Plan Premium Rates.....	35
4.	ADDITIONAL INFORMATION	35
4.1.	Terminated Products	35
4.2.	Plan Type	35
4.3.	Warning Alerts	35
5.	RELIANCE AND ACTUARIAL CERTIFICATION.....	35
5.1.	Reliance	35
5.2.	Actuarial Certification	35

**BLUE CROSS BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

1. GENERAL INFORMATION

1.1. Company Identifying Information

Company Legal Name: Blue Cross and Blue Shield of Vermont
State: Vermont
HIOS Issuer ID: 13627
Market: Combined
Effective Date: January 1, 2019

1.2. Company Contact Information

Primary Contact Name: Paul A. Schultz, FSA, MAAA
Primary Contact Telephone Number: 1-(802)-371-3763
Primary Contact Email Address: schultzp@bcbsvt.com

1.3. Scope and Purpose

The purpose of this rate filing is to provide the rates and a description of the rate development for the ACA-compliant plans for the Vermont Individual and Small Group merged market that Blue Cross and Blue Shield of Vermont (BCBSVT) proposes to offer for the 2019 benefit year. This rate filing applies to plans both On-Exchange and Off-Exchange.

This filing is intended to comply with the following laws:

- Vermont State Law 8 V.S.A. § 4062
- Vermont State Law 8 V.S.A. § 4512
- Vermont State Law 33 V.S.A. § 1806
- Vermont State Law 33 V.S.A § 1811
- Vermont State Law 33 V.S.A. § 1812.
- DFR Order establishing tier rate structure and multipliers (Docket No. 13-002-I)
- Vermont Agency of Human Services Health Benefits Eligibility and Enrollment Rule, Parts 1 and 2
- Green Mountain Care Board, Rule 2.000
- Federal Regulation 45 C.F.R. Part 147
- Federal Regulation 45 C.F.R. Part 153
- Federal Regulation 45 C.F.R. Part 154
- Federal Regulation 45 C.F.R. Part 155
- Federal Regulation 45 C.F.R. Part 156
- Federal Regulation 45 C.F.R. Part 158
- Federal Regulation 26 IRC § 223

**BLUE CROSS BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

1.4. Proposed Rate Increase(s)

The average increase for plans other than Silver Level Exchange plans - that is, the average increase that will actually be experienced by Vermont individuals and small businesses - is 5.3 percent.

Increases for specific plans range from 3.5 percent to 6.8 percent, except for the Catastrophic plan, which is increasing by 1.2 percent. Silver Level Exchange plans will increase an average of 16.0 percent, with increases for specific plans ranging from 14.6 percent to 18.9 percent. Across all plans, the average increase is 7.5 percent.

1.5. Reason for Rate Increase(s)

The starting point of any renewal rate analysis is an assessment of actual to expected experience results. The basis for this rate filing is calendar year 2017 experience. While the claims experience matched the expectation embedded within the 2018 filing, our current estimate of 2017 risk adjustment is significantly better than expected, leading to a 1.3 percent decrease in 2019 rates.

Medical and pharmacy trend had by far the largest impact on rates. The 2018 filing included assumptions for trend from 2017 to 2018, including a medical utilization trend that was reduced to 1.0 percent from the 2.0 percent filed by BCBSVT and considered by the GMCB's consulting actuary to be the best estimate. The 2019 filing reexamines these assumptions. Restating the expected trend from 2017 to 2018 had a 1.3 percent impact on rates:

2017 to 2018 Trend Component	Approved 2018	Filed 2019	2019 Rate Impact
Medical Utilization	1.0%	2.0%	0.8%
Medical Unit Cost	2.6%	2.6%	-0.1%
Pharmacy	8.9%	13.3%	0.7%
Dental	10.3%	7.2%	0.0%
Vision	0.0%	0.0%	0.0%
Total			1.3%

The two largest impacts are the restoration of medical utilization trend to 2.0 percent and the significant increase in pharmacy trend, driven by specialty pharmaceutical utilization. See section 3.4.7 for a detailed discussion of trend assumptions.

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

An additional year of projected trend applies from 2018 to 2019. The overall anticipated increase in rates due to the additional year of projection is 6.0 percent:

2018 to 2019 Trend Component	Filed 2019	2019 Rate Impact
Medical Utilization	2.0%	1.5%
Medical Unit Cost	2.7%	2.1%
Pharmacy	13.3%	2.3%
Dental	7.2%	0.0%
Vision	0.0%	0.0%
Total		6.0%

Population changes have a 1.4 percent impact on rates, driven by an observed increase in average claims costs due to the loss of healthy members that is not expected to be fully offset by an increase in risk adjustment receivable, along with a 0.5 percent increase for the ongoing aging of the single risk pool.

Benefit changes made by the Department of Vermont Health Access for standard plans and by BCSBVT for non-standard plans almost exactly offset the impacts of benefit leverage. Altogether, factors related to plan design, actuarial value and induced utilization marginally decreased rates by 0.3 percent.

Administrative charges and other fees increase premiums by 1.0 percent. The main contributor to this total is a 0.6 percent increase in premiums due to BCSBVT administrative costs, which nonetheless continue to be less than seven percent of total premium.

Restoration of the contribution to reserves to its necessary level adds 1.5 percent to rates.

The Tax Reform legislation passed in late 2017 eliminated federal income tax requirement for the BCSBVT legal entity starting with the 2018 tax year. These savings have been fully passed through to customers via a reduction in premium rates through two mechanisms: the contribution to reserves was decreased by 0.5 percent and the estimate for the federal insurer fee was reduced by 0.6 percent because it was no longer necessary to account for the disadvantageous tax impact of the fee. The premium savings due to Tax Reform totals 1.1 percent.

Two changes at the federal level had a nearly offsetting rate impact. The federal insurer fee was suspended for 2019. Because this tax was in force in 2018, this leads to a 2.0 percent reduction in 2019 rates. However, recent federal legislation also eliminated the penalty associated with the individual mandate. As a result, it is expected that a number of healthy individuals will choose to forgo coverage and leave the single risk pool. This is expected to exert an upward pressure of 2.2 percent on premium rates.

BCSBVT has embarked on numerous efforts to mitigate premium increases. In addition to passing 100 percent of federal income tax savings to consumers, BCSBVT has continued to work closely

**BLUE CROSS BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

with its pharmacy benefit manager to improve network pricing and maximize rebates. These pharmacy initiatives have similar impacts totaling a 2.3 percent decrease in premium. Additionally, BCBSVT is working closely with our network providers and OneCare Vermont to maximize our collaborative clinical reach focusing on reducing the overall medical costs. We expect these efforts to exert a downward pressure of just over one percent on medical utilization trend, driving a 0.8 percent rate reduction. Altogether, BCBSVT rate mitigation is leading to a reduction of rates of 4.2 percent, or a projected \$15.7 million.

1.6. Historical Financial Results

BCBSVT has been offering QHP products since the start of the program in 2014. Prior to offering QHPs, BCBSVT offered Individual and Small Group products. All Vermonters that were previously purchasing Individual and Small Group products were required to move to a QHP in 2014. The State allowed individuals and small groups to remain in their 2013 products through the first quarter of 2014. All financial information below includes only the QHP experience in 2014.

	CY 2014	CY 2015	CY 2016	CY 2017	Cumulative
Member Months	638,492	768,293	835,541	820,156	3,062,482
Filed Contribution to Reserve	1.0%	1.0%	2.0%	2.0%	1.6%
Approved Contribution to Reserve*	-0.1%	1.0%	0.8%	1.0%	0.7%
Actual Contribution to Reserve	1.0%	-1.4%	-3.2%	-0.5%	-1.2%

*Includes explicit cuts to CTR as well as reductions to actuarial factors that were beyond those recommended by the Board's contracted actuary.

The actual contribution to reserve was calculated by restating financial results to include the impacts of Transitional Reinsurance, Risk Adjustment and other prior year events in the year they were incurred, rather than the year when they were booked.

The contribution to reserve necessary to have maintained the December 31, 2013 level of Risk Based Capital (RBC) over this four year period solely for increases in claims was 1.6 percent per year.

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

1.7. Health Care Reform

All Payer Model

The All Payer Model agreement between the State and CMS began a formal pilot year program on January 1, 2017. The pilot year served as a test year for a Medicaid risk contract with OneCare Vermont, LLC (“OneCare”), an Accountable Care Organization (“ACO”). Additionally, the 2017 statewide medical spend experience serves as a baseline year for measurement of performance of the five-year agreement officially beginning in 2018. Under this new model, Medicare, Medicaid, and Commercial payers all enter into risk sharing agreements with the ACO, focusing on transitioning to value based reimbursement methodologies. All beneficiaries keep their current benefit and provider choice – there are no network or benefit restrictions. Through deployment of new care models, the All Payer Model requires that the ACO strive to reduce cost and meet three health improvement goals: improved access to primary care, reduced deaths from suicide and drug overdose, and reduced prevalence and morbidity of chronic disease.

BCBSVT is a proponent of health care payment reform and the goals of the All Payer Model. In preparation for the All Payer Model, BCBSVT continued testing a shared savings ACO program in 2017. BCBSVT did not experience savings during 2017 through the shared savings program, but the pilot period served to establish the necessary operations and communications work between BCBSVT and OneCare Vermont (OneCare).

In 2018, BCBSVT entered into its first shared-risk/shared-savings ACO program with OneCare. The BCBSVT ACO program is aligned with Medicaid’s program and the All Payer Model agreement. Importantly, the agreement between BCBSVT and OneCare aligns the ACO expected spend target with GVCB approved premiums. If actual medical spend is higher or lower than medical component of the premium, the ACO will share in 50 percent of the savings or risk to a maximum of 6 percent.

BCBSVT’s agreement with OneCare is an annual agreement with three additional one-year option years. In expectation of a 2019 program, BCBSVT is working closely with our network providers and OneCare to maximize our collaborative clinical reach focusing on reducing overall medical costs. Savings across the entire single risk pool for this initiative has been reflected in this filing (see section 3.4.7.1). It would be inappropriate to include an expectation of additional savings due to ACO operations, as this would undermine the alignment of target to premium. Any actual savings generated by BCBSVT risk contracts will be reflected through experience in future rate filings.

Cost Share Reduction Funding and the Vermont Silver Solution

As part of the Affordable Care Act, the federal Cost Share Reductions (CSR) program is available to benefit low income Vermonters. The CSRs reduce out-of-pocket expenses through lower deductibles, copayments and out-of-pocket maximums if the member enrolls in a Silver Level Plan. These plans, which must meet specific metal actuarial values (AVs), have historically been available at the same premium as the non-CSR Silver plans. The federal government administered the program directly through the carrier, rather than the beneficiary, and used monthly advance payments with an annual reconciliation process to reimburse issuers for the difference between claims incurred by enrollees and the estimated payments.

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

On October 12, 2017, the federal government stopped funding plans for the claims incurred within the CSR program. Vermont carriers were not permitted to resubmit rates to recoup the CSR benefits expected to be utilized by members for 2018.

In preparation for the ongoing lack of federal CSR funding, Vermont passed Act 88¹, an act allowing silver-level nonqualified health benefit plans to be offered outside the Vermont Health Benefit Exchange (sometimes referred to as the “Silver Solution”). This Act allows issuers to “load” Silver plans by including the estimated CSR cost into the premium for Silver Level Exchange Plans and offer non-loaded off exchange “Reflective Silver Plans.” This strategy, used by the majority of states, takes advantage of the federal advanced premium tax credit program to offset the loss of CSR funding and protect all Vermont Exchange enrollees.

Vermont State Legislature

The rates submitted reflect current law coverage, benefits and cost sharing amounts in place for 2019. The Vermont legislature is currently in session, and there are a number of bills being considered that could impact the 2019 rates described in this filing. If any of these bills pass and become effective for the 2019 plan year, BCBSVT expressly reserves the right to amend these submitted rates to reflect any changes required by new law.

Other Marketplace Issues

The federal government has taken steps to introduce alternatives to ACA-compliant plans into the individual and small group markets. These alternatives, most notably Association Health Plans and Short Term Limited Duration plans, could significantly disrupt the single risk pool.

Federal and state regulation is still pending for these alternatives. While their availability in 2019 remains uncertain, various actuarial studies suggest that these plans could have a detrimental impact on rates for the ACA-compliant plans. We have chosen not to adjust 2019 rates for the emergence of these alternative plans, as the absence of regulation makes their potential impact on the single risk pool unclear. Depending on the timing and content of expected regulation, it is more likely that these plans will have an impact on the single risk pool beginning in 2020.

¹ <https://legislature.vermont.gov/assets/Documents/2018/Docs/ACTS/ACT088/ACT088%20As%20Enacted.pdf>

**BLUE CROSS BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

2. PROPOSED BENEFITS

2.1. Description of Benefits

BCBSVT will be offering two types (Standard and Non-Standard) of plans to the Individual and Small Group market in 2019. These plans include coverage for all Essential Health Benefits (EHBs). All plans are on the Exclusive Provider Organization (EPO) network and offer members access to a nationwide network of providers, including 92 percent of the providers in Vermont.

BCBSVT Standard Plans: BCBSVT is providing rates for the Standard Plans with benefits as approved by the Green Mountain Care Board, which are outlined in Exhibit 1A - "State of Vermont Standard Plan Designs." The form filings for these products can be found under BCVT-131415918 for Non-CDHP plans and BCVT-131416317 for CDHP Plans.

BCBSVT Blue Rewards (Non-Standard) Plans: BCBSVT is providing rates for two health and wellness-based non-standard products that we have named Blue Rewards and Blue Rewards CDHP. Please see Exhibit 1B - "Blue Rewards (Non-Standard) Plan Designs" for details on the benefit structure. The form filings for these products can be found under BCVT-131416286 for Non-CDHP plans and BCVT-131416310 for CDHP Plans. BCBSVT Blue Rewards plans also offer a wellness program with incentives up to \$300 per year for each adult member for completing a health assessment, having a physical exam, participating in a workshop or challenge, or having a routine eye or dental exam or clinically appropriate screening. BCBSVT is introducing a new Blue Rewards Silver CDHP plan effective January 1, 2019.

Reflective Silver Plans

As described in section 1.7, pursuant to Act 88, BCBSVT will be offering silver plans off-exchange only for the 2019 plan year. These plans will be "reflective" of the on-Exchange plans and only have a \$5 copayment, 5% coinsurance or \$25 deductible difference from the on-Exchange plan.

Uniform Compliance

All of the renewing benefits are in compliance with 45 CFR §147.106. Specifically, all renewing benefits continue to be offered on BCBSVT's Exclusive Provider Organization (EPO) network and continue to cover the same service area. Some cost sharing levels were modified to maintain the same metal tier levels. Each product covers the same benefits as covered for plan year 2018.

2.2. AV Metal Values

Standard plans are designed by the State of Vermont and offered by all issuers of QHPs. Please see *Attachment A - Standard Plans AV Certification - 2019* for the certification provided by the State.

Blue Rewards (Non-Standard) plans are designed by BCBSVT. The metal values included in the Unified Rate Review Template (URRT) were calculated using an alternate methodology, as allowed by 45 CFR §156.135. Multiple benefit designs offered in BCBSVT's Non-Standard plans are not supported by the AV Calculator. Please see *Attachment B - Blue Rewards (Non-Standard) Plans AV Certification - 2019*, for the actuarial certification, which includes the process used to develop the AV Metal Values.

**BLUE CROSS BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

3. EXPERIENCE RATING

3.1. Experience Period Premium and Claims

The experience period used is 2017 experience of Blue Cross and Blue Shield of Vermont (BCBSVT) Individual and Small Group markets. This population will be referred to as the Single Risk Pool.

We used claims incurred January 1, 2017 through December 31, 2017 and paid through March 31, 2018. Both the paid claims and the allowed charges were completed using BCBSVT's monthly reserving models that underlie the financial statement reserves (best estimates before margin). These methods are subject to review by independent auditors and examination by Vermont Department of Financial Regulation (DFR). For the purpose of calculating completion factors, the reserving method categorizes claims by reporting/payment process (Local, BlueCard, Pharmacy, Medicare Supplement, etc.). Completion factors are calculated separately for each category. We also included an estimate of IBNR for the outstanding pharmacy rebates.

The paid claims and allowed charges come directly from claim records in BCBSVT's data warehouse. For Fee-for-Service claims, we combined plan payment with member cost sharing to calculate the allowed charges. For claims under a capitation arrangement, we combined capitation paid to the provider with the member cost sharing to generate allowed charges.

The table below shows details underlying the Incurred Claims and Allowed Claims (from URRT, Section I of Worksheet 1) for the Experience Period.

	Incurred Claims	Allowed Claims
Claims incurred and paid through December 31, 2017	\$372,876,941	\$456,629,973
Estimate of IBNR as of March 31, 2018 for Claims	\$1,558,026	\$1,825,602
Estimate of IBNR as of March 31, 2018 for Pharmacy Rebates	(\$2,345,740)	(\$2,345,740)
Total Claims	\$372,089,227	\$456,109,835
Member Months	819,824	819,824
Total Per Member Per Month (PMPM)	\$453.86	\$556.35

The experience period total allowed charges PMPM are \$556.35.

In the experience period, the earned premium was \$408,055,901. BCBSVT will not be required to pay Minimum Loss Ratio (MLR) rebates for the 2017 calendar year.

**BLUE CROSS BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

3.2. Benefit Categories

Medical claims are initially categorized into two categories based on the type of claim form the provider submitted: UB-04/CMS 1450 (Facility Inpatient/Outpatient) or HCFA/CMS 1500 (Professional/Other). Facility claims are then divided into the Inpatient and Outpatient categories in Worksheet 1, Section II of the URRT by the place of service listed on the UB-04 claim form.

Professional and Other medical claims are subdivided based on whether the provider is a medical professional or medical supplier as submitted on the HCFA 1500 claim form.

The prescription drug benefit category was populated for claims processed through our pharmacy benefit manager.

The capitation benefit category was populated with claims that run through our internal capitation system. The capitation category uses “Benefit Period” as a utilization description and the units represent the number of capitations in a given year.

3.3. Index Rate

The Index Rate is equal to the experience period allowed charges for EHB. As shown in section 3.1, the total allowed charges per member per month in the experience is \$556.35. In 2017, BCBSVT removed an exclusion for routine circumcision (see section 3.8.3 for details). Those services are not considered EHB and must be removed from the experience to calculate the Index Rate.

	PMPM
Allowed Claims in section 1 of worksheet 1 of URRT	\$556.35
Allowed Claims for Non-EHB	\$0.08
Experience Index Rate	\$556.27

The experience index rate for 2017 is \$556.27.

To calculate the Projected Period Index Rate, we first excluded pharmacy rebates, BlueCard fees, and payments to the Blueprint program. These claims are not dependent on benefits and are not subject to the projection factors described in the following sections. They will be added back into the Projected Period Index Rate (as described in section 3.4.6.).

BCBSVT has access to the detailed claims information underlying capitated claims. Since capitated payments are routinely adjusted to target 100 percent of FFS claims, using the FFS equivalent represents the expected payment better than does the capitation.

These adjustments are included in the “Other” factor in the section 2 of worksheet 1 of the URRT.

**BLUE CROSS BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

	Total Dollars	PMPM
Allowed Claims in section 1 of worksheet 1 of URRT	\$456,109,835	\$556.35
Remove BlueCard Fees	(\$1,612,162)	(\$1.97)
Remove Pharmacy Rebates	\$10,456,519	\$12.75
Remove Payments to Blueprint Program	(\$3,086,284)	(\$3.76)
Replace Capitation with FFS equivalent	\$565,236	\$0.69
Line A of Exhibit 5	\$462,433,145	\$564.06

3.4. Projection Factors

The 2017 Tax Cuts and Jobs eliminated the penalty associated with the individual mandate for plan years 2019 and beyond. The elimination of the penalty is expected to impact both enrollment and claims cost as some healthy members will choose to forgo insurance. The removal of the penalty impacts our membership projection (section 3.4.2.), morbidity of the population insured (section 3.4.3.) and the administrative costs (section 3.8.5.1). The premium impact totals 2.2 percent, which is within the best estimate range suggested by a study published jointly by the GMCB and DFR². We will describe each of the impact separately.

3.4.1. Change in the Definition of Small Group

As of the first renewal date on or after January 1, 2016, the Vermont definition of Small Group changed to include groups with 51-100 employees. All small groups in the experience period were already part of the single risk pool, therefore the factor (1+b₁ on Exhibit 5) to adjust for the change in the definition of Small Group is 1.000.

3.4.2. Membership Projections

As of March 2018, BCBSVT had 53,664 members enrolled in the single risk pool, either individually through Vermont Health Connect or directly as individuals or small group employees.

We used this information as the starting point to project the 2019 enrollment and the distribution by plan, including movement between plans and into the new proposed plans.

An adjustment was made to the starting point enrollment for the expected membership losses due to the elimination of the individual mandate. We assumed that all members that receive a premium subsidy as well as all members that are enrolled through their small group employer will remain in the market. That leaves the individual members that do not receive a premium subsidy as the population that could consider dropping their insurance due to the elimination of the mandate. We believe within this population those who do not use their benefit or only have preventive care services will leave the market. Over the last three calendar years we observed an average of 11.8 percent of member months in this sub-population (or 2 percent of the overall population) fall into the category of using no benefits or preventive care only benefits. Applying

² <http://gmcboard.vermont.gov/sites/gmcb/files/Individual%20Mandate-%20impact%20in%20Vermont.pdf>

BLUE CROSS BLUE SHIELD OF VERMONT

2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

ACTUARIAL MEMORANDUM

this factor to our 2019 starting point results in an expected loss of 1,073 members, or a 2019 projected enrollment of 52,591.

Experience has shown us that over time we will see movement to less expensive plans due to rate increases in the market. We expect this will result in movement from Gold to Silver and to some extent from Silver to Bronze.

As described in section 1.7, Vermont is now offering Off-Exchange silver plans (also called Reflective plans). Members that are not eligible for subsidies are expected to move from the On-Exchange Silver plans to the Reflective plans.

BCBSVT filed a Blue Rewards Silver CDHP benefit design as part of the form filing submitted to DFR in March. This plan is very similar to plans that were very popular in Small Group prior to 2014. We assumed that some members in either the Blue Rewards Gold CDHP or in other Silver plans would enroll in the new Blue Rewards Silver CDHP.

Based on these factors, our best estimate for the 2019 BCBSVT Individual and Small Group population by plan and market can be found on Exhibit 2A.

The total member months expected to be covered by this filing is 643,968.

This projected membership was also used to adjust our Index Rate for demographics, morbidity, benefit changes, and other allowable adjustments described below.

3.4.3. Changes in the Morbidity of the Population Insured

Our experience period is based on calendar year 2017. Using March 2018 enrollment, we grouped members into broad categories of Active and Canceled. Canceled members can be further divided into two categories: voluntary cancelation and cancelation due to death. Voluntary cancelations can be further broken down by aging out, cancellations from normal group turnover, and individual cancellations. Individuals aging out are captured in our demographic adjustment (see section 3.4.5). In past filings, we assumed that group turnover leads to the hiring of similarly-situated individuals and therefore, we only adjusted for the impact of individual cancellations. In 2018, we experienced far larger than typical cancelations in the Small Group segment. To reflect this, we are also adjusting for Small Group members leaving BCBSVT. If all members in a group canceled, we are excluding them under the assumption that the entire group moved to a different carrier. If members that canceled were part of a group that is still with BCBSVT, we assumed that group turnover will lead to the hiring of similarly-situated individuals; therefore, an adjustment is not needed for such members.

We split the experience claims costs based on these categories in order to compare the different populations. We adjusted the allowed charges from the experience period to reflect the average claims cost of members who did not voluntarily terminate or are part of a small group still enrolled with BCBSVT prior to the end of calendar year 2017.

**BLUE CROSS BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

	Voluntary Cancellation in the Individual Market	Members in Groups that are no longer with BCBSVT	All Other Members	Total
Experience Period Allowed	\$37,911,937	\$39,657,452	\$384,863,755	\$462,433,145
Member Months	68,283	84,643	666,898	\$819,824
PMPM	\$555.22	\$468.53	\$577.10	\$564.06

The factor (1+b₉ on Exhibit 5) to adjust for the change in pool morbidity is $\$577.10/\$564.06 = 1.0231$.

We also adjusted the projected allowed charges (1+b₃ on Exhibit 5) for the impact of members that were new to the single risk pool in 2018. We assumed that these members would have claims levels similar to members enrolled the same line of business in 2017. The impact of the Newly Insured is 1.0005, as shown on Exhibit 2B.

The claims impact of eliminating the individual mandate penalty (1+b₇ on Exhibit 5) represents the increase in the allowed charge PMPM when the expected low cost individuals leave the market. As discussed in section 3.4.2, approximately 2 percent of member months came from members that had no claims or had preventive care only claims within the individual market not receiving premium assistance. This leaves the BCBSVT pool with 2 percent less member volume with very nearly the same expected total claims. Therefore an adjustment of 1.02 has been used as the claims impact of eliminating the individual mandate.

3.4.4. Changes in Benefits

The impact of benefit changes (1+c₁ line on Exhibit 5), represents the anticipated change in the average utilization of services due to the change in average cost sharing in the projection period compared to the experience period. To calculate this factor, we first calculated the PMPM allowed charges by metal level. To ensure that high claims were not skewing the relationship between metals, we removed claims above \$500,000 and replaced these by the average PMPM for claims above that threshold. We then compared the PMPM by metal to the average to get allowed charge relativities. Using the experience member months and the projected membership by metal, we calculated an average allowed charge relativity for each and compared the two averages to calculate the impact of changes in benefits. The impact of the movement between benefits is 1.0075, as shown on Exhibit 2C.

3.4.5. Changes in Demographics

To develop the change in demographic factor (factor 1+c₃ on Exhibit 5), we used the age-gender factors from the SOA's report Health Care Cost - From Birth to Death³. In previous filings, we applied these factors to both the experience membership and the projected membership and compared the average factors. In 2018, we experienced a higher than historical shift in the

³ <https://www.soa.org/Research/Research-Projects/Health/research-health-care-birth-death.aspx>

**BLUE CROSS BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

demographics of the single risk pool. This has already be accounted for in the $1+b_9$ factor (section 3.4.3). To avoid double-counting for this shift but to also reflect the expected future aging of the population, we used the three year average increase in age-gender factor for the period from 2014 through 2017 as our projected annual increase due to changes in demographics.

Year	Average Age-Gender Factor	Annual Increase
2014	1.2476	
2015	1.2512	1.0028
2016	1.2575	1.0051
2017	1.2666	1.0072
2018	1.2880	1.0169

The demographic adjustment ($1+c_3$ on Exhibit 5) is 1.0101, which reflects two years of aging from the experience period to the projection period at the average annual increase from 2014 to 2017.

3.4.6. Other Adjustments

The buildup of the Projected Index Rate also includes a factor to reflect new pharmacy contracts, a factor to reflect the impact of selection on allowed costs, a factor to reflect the impact of the elimination of the individual mandate, and adjustments for non-system claims⁴.

Changes in Provider Network ($1+c_2$)

Since the experience period claims and the projection period claims are both on the EPO network, the factor for the change in provider networks (factor $1+c_2$ on Exhibit 5) is 1.000

Changes in Pharmacy Contracts ($1+c_5$)

BCBSVT established a new contract with its pharmacy benefit manager, ESI, with discount improvements effective January 1, 2018, that will impact the projected pharmacy allowed charges. To calculate this factor, we applied the contracted discounts and dispensing fees for each type of drug (Generic, Brand and Specialty) to calendar year 2017 claims for both the experience period and the projected period contract provisions. The contract adjustment factor for each type of drug, calculated by taking the ratio of the projected pharmacy claims under each contract, was applied to the projected pharmacy claims (see Exhibit 3G for details). The adjusted projected pharmacy claims were then added to the projected medical claims to calculate the overall impact of the contract changes, as shown on Exhibit 3H. The total impact of the change in pharmacy contracts is 0.9875, as shown on line $1+c_5$ of Exhibit 5.

Impact of Selection ($1+c_6$)

Subscribers will make financial decisions that are right for them. Typically, this manifests itself in healthier subscribers selecting low-cost plans while less healthy subscribers select richer benefits. While we do not reflect selection in the plan-level adjustments, as per the

⁴ Non-system claims are payments that are not processed through the claims adjudication system.

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

instructions, it can be demonstrated that total premium will be understated without adjusting the index rate to spread the impact of selection across all plans (see Exhibit 2D). This is due to the plan share of allowed costs being greater for richer plan designs, which demonstrably experience antiselection in excess of benefit richness adjustments. The top section of Exhibit 2D shows the build-up of paid claims from allowed charges using actual plan-level adjustments described in Section 3.8 of this Memorandum. The bottom section of the same exhibit demonstrates the impact on total paid claims of using benefit richness adjustments that instead reflect actual 2017 single risk pool experience. The ratio of weighted average projected paid claims calculated via each of these two approaches produces a factor that must be included in the index rate so that application of the various plan-level adjustments results in the correct total paid claims across all plans. The total impact of selection is 1.0132, as shown in Exhibit 2D.

Impact of VHC Adjustments (1+b₈)

VHC has made significant strides in improving the accuracy of their membership data. The observed impact on 2016 data for retro cancellations and 2017 data for claims without membership is immaterial, and we do not expect further improvements. The total factor on line 1+b₈ of Exhibit 5 is therefore 1.000.

Non-System Claims (e₁ - e₇)

Other costs were added in the buildup of the Projected Index Rate to account for non-system claims (Items e₁-e₅ on Exhibit 5). As previously explained in section 3.3, these non-system claims are claims that are independent from the benefits.

- Pharmacy Rebates (e₁):

The experience period pharmacy rebates are estimated to be \$12.75 PMPM. This number is a combination of actual rebates and estimates using our contractual rebate guarantee since we have not yet received the details underlying the rebate payment for part of the 2017 calendar year. Pharmacy rebates are expected to trend at the same rate as Brand Drugs. As shown on Exhibit 3G, the projected cost trend for Brand drugs is 12.3 percent, which brings projected pharmacy rebates to \$16.09 PMPM prior to adjusting for the new formulary BCBSVT started using on January 1, 2018.

As of January 1, 2018, BCBSVT moved this line of business from its current formulary to ESI's National Preferred Formulary. With this new formulary, we expect rebates to increase significantly. To estimate the increase in rebates, ESI provided a projected rebate amount for each brand drug. Using our experience brand drug scripts, we calculated the projected total amount of additional rebates. These additional rebates of \$1.94 PMPM were then trended using the Brand cost trend of 12.3 percent for a total of \$2.44 PMPM. The total projected rebates are therefore \$18.53 PMPM.

- Blueprint Payments (e₂):

BCBSVT participates in the Vermont Blueprint for Health⁵ program. The Vermont Blueprint for Health Manual, effective January 1, 2016, details the funding for both portions of the program: Community Health Teams (CHT) and Patient Centered Medical Homes (PCMH). We do not expect the funding for either CHT or PCMH to change in 2019. Therefore, we assumed that the experienced PMPM of \$3.76 would continue to 2019.

⁵ <http://blueprintforhealth.vermont.gov/>

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

- Interplan Teleprocessing System (ITS) (e₃):
The BlueCard® Program gives BCBSVT members healthcare coverage wherever they go across the country and around the world. The fees associated with this program are independent of the amount of the claims and therefore solely dependent on utilization of BlueCard participating providers. As described below, we believe that the medical annual utilization trend, before the impact of the cost containment strategy, is 2.0 percent; therefore, these fees are expected to increase at 2.0 percent. The experience period fees (\$1.97 PMPM) are projected to grow to \$2.05 PMPM in 2019.
- Vermont Vaccine Purchasing Program Payments (e₄):
The Vermont Vaccine Purchasing Program⁶ offers health care providers state-supplied vaccines at no charge by collecting payments from health plans, insurers and other payers. This assessment is now based on a PMPM charge, which is a change from the previous year when it was based on claims. We applied the 2018 rates of \$8.15 per child and \$0.72 per adult to the experience period membership. On March 23, 2018, the Vermont Vaccine Purchasing Program released a memo explaining that they ended the fiscal year 2017 with an unobligated balance much higher than anticipated. On April 5, 2018, they amended the remaining 2018 rates⁷ to be \$0.01 PMPM and noted that “For planning purposes, we would like payers to be aware that the 2019 assessment rate is expected to remain somewhat below normal. The 2019 assessment rate will be set in the fall of 2018.” We estimate that the 2019 rates will be 60 percent of the original 2018 rates. The average PMPM for the experience period of \$1.65, was multiplied by 0.60 to calculate the projected period PMPM of \$0.99.
- Net Cost of Reinsurance (e₅):
BCBSVT uses reinsurance to protect itself against very high claims. Included in the Projected Index Rate is the net cost (reinsurance premium less expected reinsurance claims) of reinsurance. This PMPM cost of \$1.36 was calculated in BCBSVT Large Group Rating Program Filing (SERFF #BCVT-131424513).
- OneCare Coordination Fee (e₆):
BCBSVT is paying OneCare VT a PMPM care coordination fee for attributed BCBSVT members to directly support ACO providers, including community providers, as they deploy new care models. This model mirrors the investment Medicaid has made in the ACO provider network and supports the comprehensive care models being tested within the ACO program. The monthly PMPM for members attributed to OneCare is \$3.25. This fee will be included as a claims expense in the risk sharing calculation that is subject to a 50 percent shared risk/savings. As of March 2018, 37.4 percent of the Single Risk Pool was attributed to OneCare. The projected PMPM is therefore \$0.61 = \$3.25 x 0.5 x 0.374.
- ESI Additional Administration Fees (e₇):
ESI offers additional services to BCBSVT for clinical management programs. These programs include prior authorizations, step therapy, quantity reviews, copay reviews, and pharmacy vaccination programs, as well as ESI’s RationalMedSM program, which protects patients against

⁶ <http://www.vtvaccine.org/>

⁷ [http://www.vtvaccine.org/vtvaccine.nsf/documents/2018AssessmentRateChangeNoticeAndLetterFromTheCommissioner.html/\\$File/2018%20VVPP%20Committee%20Recommendation%20letter%20and%20Notice%20of%20Assessment.pdf](http://www.vtvaccine.org/vtvaccine.nsf/documents/2018AssessmentRateChangeNoticeAndLetterFromTheCommissioner.html/$File/2018%20VVPP%20Committee%20Recommendation%20letter%20and%20Notice%20of%20Assessment.pdf)

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

potentially harmful drug interactions. The total PMPM in the experience period was \$0.56 PMPM for these services, and is projected to be the same in 2019 since the contractual rates will remain the same.

3.4.7. Trend Factors (cost/utilization):

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. Claims incurred between January 1, 2015 and December 31, 2017, completed through March 31, 2018, were used in the analysis. Completion factors, based on best estimates from financial reporting before margin for conservatism, are applied to estimate the ultimate incurred claims for each period shown in the exhibits.

The data includes claims from the Single Risk Pool and the non-QHP experience for groups with 51-100 employees that joined the Single Risk Pool in 2016, when Vermont changed the definition of Small Group to include groups with 51-100 employees. Over the past few years, we have experienced membership retroactivity, primarily associated with members enrolled through VHC. This retroactivity causes some claims to no longer be associated with active membership. The data excludes claims that are no longer associated with active enrollment.

3.4.7.1. Medical Trend Development

Using the historical contracted reimbursement schedules, we calculated network factors that represent the various contracts. Using these factors, we can modify the claims to reflect only one contract. From there, 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 combine utilization and intensity within the utilization metric and analyze the unit cost separately. Historical experience is normalized for contract changes and then analyzed to derive a utilization trend in the absence of unit cost changes. Future unit cost trends are 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.

Unit Cost

Unit cost trends were largely derived from observations of recent contracting and provider budgetary changes. During calendar year 2017, about 53 percent of total medical claims dollars occurred at Vermont facilities and providers impacted by the hospital budget review process of the GMCB. The starting point of our calculation assumes that the GMCB will approve hospital budgets for October 1, 2018 and October 1, 2019 that support identical commercial increases as those approved for October 1, 2017, with the exception of hospitals that publicly announced⁸ a different intended commercial rate increase. Based upon those assumptions, the provider contracting and actuarial departments worked together to assess the impact such an increase would have on contract negotiations specific to the EPO network used for Qualified Health Plans.

⁸ <http://gmcboard.vermont.gov/sites/gmcb/files/A17N99%20NARR.pdf>

**BLUE CROSS BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

Similarly, we assumed for other providers within the BCBSVT service area that overall 2018 and 2018 budget increases would be identical to those implemented during calendar 2017, with the exception that if we have learned more recent information from our early negotiations with providers, the more recent information is reflected. Again, the provider contracting and actuarial departments worked closely together to assess the impact these increases would have on contract negotiations specific to the EPO network used for Qualified Health Plans.

Finally, unit cost increases for providers outside the BCBSVT service area were derived from the Fall 2017 Blue Trend Survey, which is a proprietary and confidential dissemination of the Blue Cross and Blue Shield Association.

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

Annual Reimbursement Changes due to Budget Increases and Contracting Season	Percent of Total Allowed Medical Claims in Experience	Cost Trend from 2017 to 2018	Cost Trend from 2018 to 2019	Total Annual Cost Trend
Vermont facilities and providers impacted by GMCB’s Hospital Budget Review	53.2%	2.3%	2.1%	2.2%
Other facilities and providers	46.8%	2.9%	3.5%	3.2%
Total	100.0%	2.6%	2.7%	2.7%

Utilization & Intensity

Historical utilization trend patterns were examined by first normalizing 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.

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 & 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 combinations of CPT and CPT modifier 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 about 84 percent of allowed claims dollars during the experience period. Costs for other claims are primarily for out-of-area services. Contracting changes for these claims were derived from the Fall 2017 Blue Trend Survey, which is a proprietary and confidential dissemination of the Blue Cross and Blue Shield Association.

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

Claims were normalized to the December 2017 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 December 2017. The derived trend for other claims was assumed to be continuous. Please see Exhibit 3A for an illustration of this approach.

Shown on page 1 of Exhibit 3B is the resulting array of allowed PMPM claims costs, before and after normalization for contract changes. Inpatient and Outpatient claims were grouped together since we have observed a shift from Inpatient to Outpatient.

Utilization is influenced by the richness of a product and, when benefits get richer over time, the utilization will increase. To adjust for this phenomenon, we calculated the average induced utilization factor based on the actuarial values of the plans in the experience and adjusted each month to reflect the benefits in place in December 2017.

Utilization is also influenced by age. Using SOA's report Health Care Cost - From Birth to Death factors, we calculated the average age-gender factors for the members included in the development. We adjusted each month in to reflect the age-gender factor evident in December 2017.

Since early 2014, BCBSVT implemented many new programs to combat fraud, waste and abuse (FWA). As shown in the table below, the return of FWA programs has increased drastically in the past four years for ACA-Compliant Individual and Small Group business.

Calendar Year	Percent of claims recovered as part of FWA programs
2014	0.09%
2015	0.75%
2016	1.05%
2017	1.10%

This increase in recoveries is skewing the trend calculation downward. We have therefore adjusted the claims to reflect 2017 recovery rates. We expect that the percentage of claims recovered through these programs will remain at approximately one percent of total allowed claims through 2019. We have accordingly not adjusted the trend for future improvements in FWA efforts.

Given that our standard methodology produced atypically high utilization trends, we removed all claims from members who exceeded \$250,000 in allowed medical claims a calendar year. As the utilization component includes intensity, an increase in high cost claimants can disproportionately impact the year-over-over and regression calculations. Exhibit 3B, Page 4 shows the resulting array of allowed PMPM claims costs after this adjustment.

Using the array of PMPM claims costs, adjusted for contract, benefits, aging, FWA programs and high claimants, shown on Exhibit 3B, Pages 5 to 11, we performed 24-month regression, 36-month regression and time series calculations. Certain time series methods, such as those

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

assuming no trend or those for which there is not sufficient historical data⁹, are not included, as these are inappropriate for use in trend development and/or for the data available.

We have selected an overall utilization trend of 2.0 percent.

We approached our trend utilization selection two different ways. First, we looked at facility and professional claims separately and then at all claims combined.

When observing facility and professional separately, we believe that 1.0 percent for facility and 4.0 percent for professional are reasonable trend selections. When taking a weighted average of those trends, the total utilization trend calculates to 1.945 percent.

For facility claims, the two year trend was 1.0 percent after removing claimants in excess of \$250,000. The regressions and Holt-Winters and Damped Trend Seasonal time series all range between 0.0 percent and 1.2 percent. The regression results, which in past years have been the basis of our trend selections, are at the high end of that range. We believe that a 1.0 percent trend is the best representation of future increases in facility claims utilization and intensity. Increasing utilization and intensity of facility services is corroborated by hospital actual-to-budget narratives. The impact of low cost trend changes are counteracted to some extent by increasing utilization and intensity, which is acknowledged as a main driver of hospital budget overages.

Professional claims utilization has been ramping up over the last year. This is expected as care continues to be shifted to more appropriate setting. For example, we observed a 7.0 percent increase in professional mental health services, much of which is likely replacing inpatient and ER visits. The calendar year 2017 over calendar year 2016 PMPM was 4.0 percent and the average of the regressions and time series results averaged 4.1 percent. We have accordingly selected a professional utilization trend of 4.0 percent.

When selecting overall utilization trend, 2.0 percent is aligned with observations of year-over-year results, regressions and time series results performed on the overall PMPMs. The results of the regressions, Holt-Winters and Damped Trend Seasonal time series range from 1.3 percent to 2.3 percent with an average of 1.9 percent.

Finally, the resulting overall utilization trend derived from the selected facility and professional trends is 1.945 percent. This is very closely aligned with observations, regressions, and time series results for overall utilization trend, and virtually matches our selected overall utilization trend assumption of 2.0 percent. Because of the close synchronicity of our two methods, we believe 2.0 percent is an appropriate medical utilization trend.

The components of increasing utilization trend have been corroborated by our Chief Medical Officer. Primary drivers include pharmaceuticals dispensed in a medical setting, office visits and preventive services, and diagnostic services, including outpatient labs, x-rays and high-dollar imaging. Medical pharmaceutical claims are up some 14.3 percent year-over-year, driven by high-cost cancer, rheumatoid arthritis and immunodeficiency medications. Similar to retail

⁹ The seasonal additive, seasonal multiplicative, single moving average, and single exponential smoothing methods cannot be used since they assume zero trend. The double moving average method requires three times the amount of historical data as projection periods, and therefore should not be used for this analysis.

BLUE CROSS BLUE SHIELD OF VERMONT

2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

ACTUARIAL MEMORANDUM

specialty drugs, innovation and utilization for these expensive therapies is not expected to subside in the near future. Office visits and preventive services increased by 3.6 percent and 7.5 percent respectively from 2016 to 2017. Primary drivers included professional mental health services, as noted above, and a significant increase in colonoscopy screenings, both of which we see as positive developments toward moving care to the most appropriate clinical setting and providing clinically appropriate preventive care that will reduce health care spend in the long term. Finally, diagnostic services were up nearly seven percent from 2016 to 2017, likely driven by the increase in office and preventive visits. We anticipate that each of these primary drivers of medical utilization trend will continue to escalate in the immediate future.

The selected 2.0 percent overall utilization trend is lower than the trend calculated by our standard methodology, but is in the range of trends produced by the time series analysis. A 2.0 percent utilization trend is consistent with our filing assumption from last year, and is lower than the utilization trend observed for other Vermont insured populations.

Cost Containment Strategy

BCBSVT is working closely with our network providers and OneCare Vermont to maximize our collaborative clinical reach focusing on reducing the overall medical costs. Using many programs, we have two specific goals for 2019. We target reducing overall inpatient admissions by four percent by reducing readmissions, and we also target reducing emergency room visits by five percent. This will be achieved through enhanced collaborative care coordination support to our members with a goal of redirecting care to primary care providers when appropriate.

Using calendar year 2017 data, we estimated that 101 inpatient admissions with an average cost of \$30,300 would be replaced by office visits, outpatient labs and non-specialty scripts. The average replacement cost for all these services is \$3,400, with \$2,200 of that for medical claims. The additional expected scripts are added to the projected total days supply on Exhibit 3G (see section 3.4.7.2 for details). We estimated that 764 emergency visits with an average cost of \$1,741 would be replaced by a PCP visit with an average cost of \$107, for a total savings of \$1.25 million. The total projected savings of \$4.08 million create a reduction of medical claims of 1.1 percent. This reduces the medical utilization trend from 2018 to 2019 to 0.9 percent. Please see Exhibit 3C for details.

Overall Medical Trend

After adjusting the utilization trend from 2018 to 2019 for the savings expected from the cost containment strategy, the overall medical trend assumption is 4.1 percent.

3.4.7.2. Pharmacy Trend Development

With the emergence of new and expensive specialty drugs, as well as the increasing shift to generics as more brand drugs come off patent, we analyzed the components of trend (cost and utilization) separately for Brands, Generics, and Specialty drugs. We have projected the generic dispensing rate (GDR) based on the brand drugs that are scheduled to lose patent in the next few years. 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 then calculated by combining the separate projections.

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

Non-Specialty Drugs Utilization

Exhibit 3D provides the monthly and the 12-month rolling data, along with the corresponding year-over-year and exponential regression trends, for non-specialty drugs utilization. The number of days supply, rather than the number of scripts, is 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 have combined the data for generic and brand drugs for the purpose of analyzing utilization patterns.

As described above, utilization trends should be adjusted for changes in benefits and aging. We adjusted each month to reflect benefit and aging adjustment. Using the array of PMPM after adjustments, we performed 24-month and 36-month regressions.

The regression results are higher than the most recent year over year results. We believe that they are skewed due to the significant seasonal increase in pharmacy utilization in the fourth quarter of each year. We therefore selected 2.1 percent, the calendar year 2017 PMPM over calendar year 2016 PMPM results, as the non-specialty drugs utilization trend.

This year, instead of projecting a Generic Dispensing Rate, we separated the drugs into seven categories:

- Generics: Drugs that have been generic since at least January 2015
- New Generics: Generic drugs that have been in the market for less than 36 months (January 2015 to December 2017)
- 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

As shown on Exhibit 3G, each category days supply is trended forward at the same rate of 2.1 percent.

As discussed in the previous section, BCBSVT is working closely with our network providers and OneCare Vermont towards reducing inpatient admissions. It is expected that avoided admissions would be replaced by office visits, labs and prescription drugs. We added the additional generic and brand days supply expected to result from this initiative to the experience days supply, then applied trend to the projection period.

Generic Cost Trend

To ensure that the generic cost trend is not skewed by the arrival of new generic drugs, we performed a 24-month regression on monthly Average Wholesale Price (AWP) per days supply on non-new generics only.

Brands that are going generic will be subject to the generic discounts. We do not expect that the AWP for these drugs will significantly change from the experience period due to the lack of

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

generic competition for the main drugs in this category. We adjusted the price to reflect the different experienced effective discounts between brands and generics.

Exhibit 3E, page 1, shows monthly cost per days supply and the 24 and 36-months regressions. We select the 24-month regression result of 3.5 percent for the generic cost trend.

Brand Cost Trend

To ensure that the brand cost trend is not skewed by brands going generic, vaccines, over the counter and compound drugs AWP, we performed a 24-month regression on monthly AWP cost per days supply on the all other brand category only.

Over the counter drugs are not expected to follow the overall Brand cost trend. Based on historical data, we selected a 0.0 percent cost trend for OTC drugs.

Exhibit 3E, page 2, shows monthly cost per days supply and the 24 and 36-months regressions. We selected the 24-month regression result of 12.3 percent for the brand cost trend.

Specialty Drugs

The introduction of certain new specialty drugs requires an adjustment to the trend calculation for specialty drugs. The high cost and variable utilization of the drugs skews the specialty trend, making it lower than we believe is warranted. Other high-cost or high-utilization drugs have also 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). 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 24 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.

In previous filings, we excluded hepatitis C claims and added them in discretely based on projected claimants. On January 1, 2018, BCBSVT expanded its prior approval criteria for hepatitis C drugs. Given the change in criteria, the methodology used in previous filings is no longer appropriate for projecting the number of claimants. Due to the difficulty in estimating claimants with the expanded criteria, hepatitis C claims were not excluded from the standard specialty regression in this filing. Given that hepatitis C drug claims are in the entire experience period used to develop the specialty trend, their inclusion does not unduly impact specialty trend.

In July 2015, we renewed our contract with our pharmacy benefit manager ESI and our discount off AWP for specialty drugs increased. We adjusted months prior to July 2017 to reflect the new contract.

For the same reasons stated in the medical trend section, we adjusted each month to reflect aging. Using the array of PMPM claims costs after adjustments, we performed 24-month regressions on monthly and rolling 12 data.

Exhibit 3F, 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

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

points of 12-month rolling data to capture the most recent history of drug costs. Rolling 12-month regressions are more appropriate for specialty drugs because of the low-frequency, high-cost nature of these drugs. Removing the large swings in specialty drug spend associated with the new treatments results in a 20.1 percent trend for the remaining specialty drugs.

PCSK9 inhibitors such as Repatha and Praluent 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. Current incidence studies suggest that 200 persons per 100,000 lives are diagnosed with FH after failure of one high-dose statin for 60 days. 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 2019. With an annual cost of about \$13,975, the projected total is \$0.27 million.

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 would take Orkambi. Only six members in the experience period had claims for Orkambi. Given the length of time the drug has been available, we expect we will see no change in utilization. Orkambi has an annual cost of \$253,000, and we project that 6 members will continue to use it. The projected cost for those members is therefore \$1.5 million.

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 effective trend, we started with the pharmacy claims from the calendar year 2017 and removed the claims for PCSK9 inhibitors, Orkambi and MS medications. We then trended the remaining claims at a 20.1 percent rate for 24 months, added the incremental cost of PCSK9 inhibitors, Orkambi, and Ocrevus for a total restated projected claim amount. Using this method, the restated effective specialty drug trend is 20.3 percent. See Exhibit 3F, Page 3 for details.

Overall Pharmacy Trend

Exhibit 3G summarizes the trends calculates our total allowed pharmacy trend as 13.3 percent. Note that changes in pharmacy contracts are discussed separately in section 3.4.6.

3.4.7.3. Vision and Dental Trend Development

Dental Trend

The pediatric dental benefit was a new benefit provided by BCBSVT in 2014 as part of the Essential Health Benefits (EHB). The allowed PMPM trend has been high and continues to increase as members become more familiar with the benefit.

**BLUE CROSS BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

Calendar Year	PMPM	Trend
2014	\$1.49	
2015	\$1.65	11.0%
2016	\$1.85	12.1%
2017	\$1.94	4.9%

We blended the 2017 and 2016 increases with a 2:1 ratio. The total projected trend is therefore 7.2 percent. For the purpose of the index rate build up, we split the total projected trend equally between cost and utilization.

Vision Trend

The pediatric vision benefit was also introduced in 2014 as part of the EHB. Some groups had previous vision coverage but members previously in an individual product did not get vision benefits through BCBSVT. The allowed PMPMs have been very consistent since 2014 and we believe that they will continue to be consistent in the future. The total projected trend for pediatric vision is 0.0 percent.

Calendar Year	PMPM
2014	\$0.11
2015	\$0.11
2016	\$0.10
2017	\$0.10

3.4.7.4. Overall Total Trend

To adjust the Experience Period Index Rate for the trend factors described above, we started with the experience period claims and applied cost and utilization to Medical, Pharmacy, Dental and Vision claims. The resulting factors (1+d₁ and 1+d₂ on Exhibit 5) are calculated on Exhibit 3H.

3.5. Credibility of Experience

BCBSVT’s experience period had 819,824 member months and is therefore fully credible.

3.6. Credibility manual rate development

Since BCBSVT’s experience is fully credible, no manual rate was needed in the development of rates for the experience period claims.

3.6.1. Source and Appropriateness of Experience Data Used: Not Applicable

3.6.2. Adjustments Made to the Data: Not Applicable

3.6.3. Inclusion of Capitation Payments: Not Applicable

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

3.7. Market Adjusted Index Rate

The Market Adjusted Index Rate (line H of Exhibit 5) is \$646.29. This is calculated by adjusting the Projected Index Rate (line F of Exhibit 5, \$662.94) for allowable market-wide modifiers described below.

3.7.1. Projected Risk Adjustment Transfer PMPM:

On April 27, 2018, CMS published an Interim Summary Report on Risk Adjustment for the 2017 benefit year¹⁰. The BCBSVT data included in the report represents claims incurred in 2017 and paid through December 31, 2017. We received information from Lewis & Ellis on May 2, 2018 that MVP's interim submission included four quarters of data, which we have interpreted to mean that the data submissions are consistent between the two carriers. The final 2017 report will include supplemental diagnosis files and will also include the impact of claims runout. We estimated the impact of the BCBSVT supplemental diagnosis file and claims runout by comparing the original CMS-generated Risk Adjustment Transfer Elements Extract (RATEE) file used in the Interim Summary Report to the Plan Liability Risk Score (PLRS) factor within the RATEE report generated on May 1, 2018 by CMS with claims paid and supplemental diagnoses through April 18, 2018. The impact of claims runout and supplemental diagnoses for MVP was estimated based on the relationship of their final PLRS score in the 2016 Final Summary Report relative to the MVP PLRS in the 2016 Interim Summary Report¹¹.

A large amount of membership disenrolled from BCBSVT during the 2018 annual enrollment period. Presumably, some portion of these members enrolled in an MVP individual or small group plan. Two adjustments were made to the estimated 2017 risk adjustment transfer to reflect the shift in membership in our projection of the 2018 risk adjustment transfer. We assumed that the members that were in BCBSVT in 2017 and are no longer with BCBSVT in 2018 have migrated to MVP, and will have the same risk scores in 2018 as they experienced in 2017. Also, the state average monthly premium factor was adjusted to reflect the changing market share between the two carriers.

The 2019 risk adjustment assumes that the market-wide PLRS and membership are the same in 2019 as in the adjusted 2018 projection. The 2019 projection assumes the market-wide premium PMPM will increase by a factor of 1.075, the average premium increase across all plans in this filing, which results in a 2019 risk adjustment transfer of \$8.62M or \$13.66 PMPM.

The approach to calculate the projected 2018 transfer was necessarily something of a blunt instrument due to the significant delay in the CMS release of the interim payment report. We did examine a number of more complex methodologies that produced results of a transfer to BCBSVT ranging from \$5.7 million to \$13.6 million. The methodology we selected for the filing produces an estimate near the midpoint of this range, and we therefore believe that the result is reasonable and appropriate.

¹⁰ <https://www.cms.gov/CCIIO/Programs-and-Initiatives/Premium-Stabilization-Programs/Downloads/Interim-RA-Report-BY2017.pdf>

¹¹ Information received from Lewis & Ellis on April 25, 2017 indicated that the MVP data included in the 2016 interim report also included four quarters of data.

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

Since the Market Adjusted Index Rate is on an allowed claims basis, we adjusted the net projected risk adjustment payment by the average paid to allowed ratio (from Exhibit 6C).

As described in the Final Notice of Benefits and Payment Parameters for 2019 rule, the per capita risk adjustment user fee, used to fund the HHS-risk adjustment program, is \$1.80 per enrollee per year. See 83 Fed. Reg. 16930 (April 17, 2017).

The overall market-wide adjustment (line g₁ of Exhibit 5) for the risk adjustment program is -\$16.65 PMPM as shown on Exhibit 4.

3.7.2. Exchange User Fees

BCBSVT does not expect Vermont Health Connect to charge a user fee for 2019.

3.8. Plan Adjusted Index Rates

3.8.1. Plan Adjustment - Actuarial Value and Cost Sharing adjustment

This plan adjustment, as shown on Exhibit 6A, is informed by two factors:

- Benefit Richness Adjustment
- Paid to Allowed Ratio

The experience used to calculate the benefit richness adjustment and the paid to allowed ratio is our calendar year 2017 data trended to calendar year 2019 using the trend factors described in section 3.4.7. The model re-adjudicates claims by starting with the allowed charges and applying appropriate cost sharing for each service. For plans that have an aggregate deductible, subscribers that had a 2-person or family contract were pooled together to determine the impact of the family deductible and out-of-pocket on the paid to allowed ratio. The model generates the projected average paid claims for each benefit, which is used to calculate a paid to allowed ratio. The model is calibrated to 2017 experience, and is able to reproduce the experience paid to allowed ratio to within 0.1 percent.

3.8.1.1. Benefit Richness Adjustment

The Benefit Richness Adjustment is the counterpart of the Change in Benefit projection factor (1+c₁ line on Exhibit 5) described in Section 3.4.4. This factor represents the different projected utilization for each plan based solely on benefit design.

For this factor, we summarized the data described above by subscribers within each metal level and re-adjudicated the claims for each plan to calculate a subscriber level paid to allowed ratio. We then applied the HHS Induced Utilization formula ($IU=AV^2-AV+1.24$) to the base paid to allowed ratio.

These factors were normalized using the projected membership to ensure that the total adjustment was 1.000. The plan level adjustment for benefit richness is calculated by applying the benefit richness adjustment by base benefit and applying a factor of 1.000 for non-system claims and market-wide adjustments. See Exhibit 6B for details.

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

3.8.1.2. Paid to Allowed Ratio

To calculate the paid to allowed ratio, we adjusted the starting allowed charges described in the previous section by the benefit richness adjustment and re-adjudicated the benefits for each plan across the entire single risk pool. The paid to allowed ratios include the impact of family deductibles and out of pocket maximums, and reflect the impact of federal Cost Sharing Reductions. They do not reflect the impact of Vermont cost sharing reductions, as this program continues to be funded by Vermont and is not part of the Silver Solution. We then added the additional EHB paid and allowed, and the non-system claims and market-wide adjustment amounts in both paid and allowed. Finally, we calculated the overall expected paid to allowed ratio. Please see details in Exhibit 6C.

In the URRT, the Paid to Allowed Average Factor is the weighted average expected claims cost, including non-EHB benefit and excluding market-wide adjustments (\$537.66) divided by projected allowed charges (\$663.04). As shown in Section 3 of Worksheet 1 of the URRT, the paid to allowed average factor is 81.1 percent.

3.8.2. Provider Network, Delivery System and Utilization Management adjustment: Not Applicable

3.8.3. Adjustment for benefits in addition to the EHBs:

As of January 1, 2017, BCBSVT removed an exclusion for routine circumcision. Based on recent information from the American Academy of Pediatrics, there is new evidence that “the health benefits of newborn male circumcision outweigh the risks, but the benefits are not great enough to recommend universal newborn circumcision.”¹² On the basis of this evidence, our Medical Directors have recommended that we add coverage for this procedure. Based on the experience period claims and expected trend, we estimate the additional cost to be \$0.10 PMPM of allowed charges. Applying the same paid to allowed ratio to this benefit as to the EHB benefit, we calculate an adjustment of 1.0002, as shown on Exhibit 6A.

3.8.4. Impact of specific eligibility categories for the catastrophic plan

This plan adjustment includes two components of the impact of the specific eligibility categories for the catastrophic plan. Both of these adjustments are based on the eligible population. The eligible population includes Vermont residents that are under age 30 and residents age 30 and over who are granted a hardship exemption by Vermont Health Connect. We used our current enrollment in the Catastrophic plan as a proxy for eligibility and adjusted the projected members that would qualify under the hardship rule to account for the increase in premiums. We project that 98.6 percent of the population eligible for this product will be under age 30.

To adjust for the eligible population, we first calculated the adjustment for the impact on the pricing actuarial value of the expected lower allowed charges of the group eligible to enroll in the catastrophic plan. This was calculated by splitting the experience used to calculate the Pricing Actuarial Value into two populations (Under and Over 30) and re-adjudicating for the catastrophic benefit. Using the projected eligible members as weights, we calculated that the overall expected allowed charges are 0.5656 of the total allowed charges. We then adjusted the

¹² <https://www.aap.org/en-us/about-the-aap/aap-press-room/pages/newborn-male-circumcision.aspx>

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

paid to allowed ratio based on the weighted average paid to allowed ratio from both populations. This factor is 0.9214.

These factors were applied to the EHB portion of the Projected Period Index Rate. Because this adjustment doesn't impact the Non-System claims and Market Wide Adjustment, we calculated the Expected Claims cost and backed into the plan level adjustment for the impact of eligibility.

The total adjustment for the specific eligibility categories for the catastrophic plan is 0.4938. See Exhibit 6D for details.

3.8.5. Adjustment for distribution of the administrative costs

3.8.5.1. Administrative Expense Load:

BCBSVT Administrative Expense load was not initially calculated as a percent of premium adjustment. This adjustment is the sum of the following fees:

BCBSVT Base Administrative Charges

To develop the Base Administrative Expenses PMPM, we used calendar year 2017 data from both individual and small group members. The starting PMPM for the base administrative charges is \$35.02 PMPM. The single risk pool population is comprised of individuals who can choose to enroll through the Vermont Health Connect (VHC) website or directly with BCBSVT, and small groups that enroll directly with BCBSVT. The experience period base administrative for individuals was \$39.83 PMPM compared to \$31.83 PMPM for members in small groups.

For this filing, we have removed expenses totaling \$0.32 PMPM that were incurred due to one-time, non-recurring events, as these fees are not expected to continue into the projection period.

The remaining charges (\$34.70 PMPM) are projected to 2019 using a 2.5 percent annual trend. This projection factor is intended to make reasonable but modest provision for increases in overall operating costs PMPM. We assume that personnel costs (wages and benefits) will increase by 3 percent annually, the budgeted wage increase for 2018, over the projection period. Other operating costs are assumed to remain flat. We have calculated that 83.5 percent of our administrative costs are for salaries and benefits. We are therefore increasing our projected administrative expenses by the weighted average of 2.5 percent per annum.

**BLUE CROSS BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

Administrative trend calculation		BCBSVT Totals	Percent of Total
Employee costs:	$A = a_1 + a_2$	\$44,807,919	59.2%
Salaries and taxes	a_1	\$32,968,684	
Benefits	a_2	\$11,839,235	
Purchased services	B	\$21,959,698	29.0%
Other operating costs	C	\$8,867,317	11.7%
Total Administrative Expenses	$D = A + B + C$	\$75,634,934	100.0%
BCBSVT Personnel Cost	$E = A / (A + C)$		83.5%
Projected Personnel Cost Increase	F		3.0%
Projected Administrative Cost Increase	$G = (E \times (1+F) + (1-E)) - 1$		2.5%

In 2018, BCBSVT experienced a large membership decrease. To calculate the impact of a smaller membership base, we calculated a total enterprise administrative charge PMPM and adjusted by the ratio of 2017 and projected 2019 membership. The latter was estimated as March 2018 enterprise membership less the 1,073 members assumed to drop coverage due to the elimination of the penalty associated with the individual mandate (see section 3.4.2.). We assumed that variable costs represent half of that increase, and therefore applied an increase of 3.4 percent to the base PMPM to account for the reduction in membership.

Calculation of impact of membership losses		Total BCBSVT Enterprise
Total CY 2017 Administrative Expenses	A	\$75,634,934
Total CY 2017 Member Months	B	2,424,372
CY 2017 PMPM	$C = A / B$	31.20
Projected Member Months	D	2,268,552
Projected PMPM before adjustment for variable cost	$E = A / D$	\$33.34
Variable Cost PMPM	$F = 0.5 \times (E - C)$	\$1.07
Projected PMPM after adjustment for variable cost	$G = C + F$	\$32.27
Increase in PMPM due to Membership Losses	$H = G / C - 1$	3.43%

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

To calculate the projected based administrative charges, we multiplied the experience PMPM, net of non-recurring expenses, by 2.5 percent for two years for trend and by 3.4 percent for the impact of membership losses.

Projected Administrative Charges Calculation		PMPM
Experience Base Administrative Charges	A	\$35.02
Exclusion of non-recurring expenses	B	(\$0.32)
Trend Projection (2 years)	C	1.0507
Impact of Membership losses	D	1.0343
Projected Base Administrative Charges (Exhibit 7A)	$E = (A-B) \times C \times D$	\$37.72

The projected base administrative charges PMPM of \$37.72 is 6.5 percent of premium.

Charges for Outside Vendors

- **CBA Dental and VSP Vision**
These benefits are being administered by third party administrators. The administrative fees are charged for eligible members only. The ratio of eligible members to total members, based on the projected single risk pool split between adult and child, was applied to get the per member per month charge.
- **Health Equity**
All single risk pool members are eligible for HRA and/or HSA Integration service. For plans with an HSA-compatible benefit design, we offer a service to integrate with the mechanics of depositing monies into and paying for claims out of Health Savings Accounts (HSA). All plans are also eligible for this service with Health Reimbursement Accounts (HRA). To calculate these fees, we used the experience of members that are already enrolled in this program and compared it to all members enrolled in the single risk pool in the first quarter of 2018.
- **Blue Rewards Program**
Under this program, BCBSVT will reward members with credits via a debit card for the following wellness activities:
 - Completing an online health assessment
 - Participate in the workshop or challenge
 - Having a physical exam or appropriate screenings
 - Having a routine eye or dental exam

Based on participation projection from the Marketing and Product department, we estimate that the cost of this program to be \$6.81 PMPM for Blue Rewards plans only.

The total of all administrative charges outlined in this section is 6.9 percent of premium. The details of the administrative charges are on Exhibit 7A.

**BLUE CROSS BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

3.8.5.2. Profit (or Contribution to Reserves) & Risk Margin:

Contribution to Reserves

As directed by BCBSVT management, the filed rates include a 1.5 percent contribution to reserves (CTR). A contribution to reserves is required in order to maintain an adequate level of surplus. Surplus is a critical consumer protection that is required by the Vermont Department of Financial Regulation. In the event of unforeseen adverse events that may otherwise impact BCBSVT’s ability to pay claims, surplus allows subscribers to receive needed care and providers to continue to receive payments.

A memo from BCBSVT senior management regarding the requested level of CTR can be found as Attachment C.

Other Risk Margin

Under the ACA, enrollees who are receiving Advance Premium Tax Credits (APTC) have a three-month grace period to pay premiums, while enrollees who are not receiving APTC have a one-month grace period. For both these populations, the State requires the insurer to pay for claims incurred in the first month of the grace period even if premium is never collected. This uncollected premium is considered bad debt. To ensure that BCBSVT collects enough premium from the total pool to cover the 30-day grace periods, we need to include a risk margin for bad debt. We have added a margin of 0.10 percent, which is both the 4-year average and the actual 2017 amount of uncollected premium due to the grace periods.

Bad Debt	Uncollected Premium	Total Billed Premium	Percent of Billed Premium
2014	\$646,000	\$255,227,839	0.25%
2015	\$800,840	\$334,014,191	0.24%
2016	\$207,098	\$386,247,850	0.05%
2017	\$415,186	\$408,055,901	0.10%
Total	\$2,069,124	\$1,383,545,781	0.10%

Details of Contribution to Reserve and Risk Margin for Bad Debt by product are on Exhibit 7B.

3.8.5.3. Taxes and Fees:

The proposed rates include on average 1.2 percent in taxes and fees. These taxes and fees are imposed by both the state and federal government.

Green Mountain Care Board Billbacks

Based on information provided by the GMCB on April 11, 2018, BCBSVT estimates that the total GMCB billback to BCBSVT for 2019 will be \$1,238,000. Based on 2018 projected premium, the Vermont Individual and Small Group market will be allocated 83.84 percent of the total GMCB billback amount for BCBSVT. We assume that this percentage allocation will remain the same into 2019, leading to a projected 2019 Individual and Small Group billback of \$1,037,939. Using the projected membership of 631,092 member months, the 2019 calendar year PMPM for GMCB billback comes to \$1.92.

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

Health Care Claims Tax

The Health Care Claims Tax (HCCT) levied by the State of Vermont totals 0.999 percent of claims. This consists of 0.8 percent of claims for the HCCA tax and 0.199 percent of claims for the VITL assessment.

Patient-Centered Outcomes Research Institute Fee

This fee is part of the Affordable Care Act and applies to all plan years ended after September 30, 2012 and before October 1, 2019. Therefore, the fee does not apply to this filing.

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 groups. Enacted on January 22, 2018, Section 4003 of Division D of H.R. 195 temporarily suspended the Federal Insurer Fee for 2019 only.

Details of the Taxes and Fees by product are on Exhibit 7C.

3.8.6. AV Pricing Values

As described in the 2019 Unified Rate Review Instructions, the AV Pricing Value “represents the cumulative effect of adjustments made by the issuer to move from the Market Adjusted Index Rate to the Plan Adjusted Index Rate”. These adjustments are described in detail in preceding parts of Section 3.8. See Exhibit 7D for details by product.

3.8.7. Calibration

Age, Tobacco, and Geographic factors are not allowed in Vermont. Therefore no calibration is required.

3.8.8. Projected Loss Ratio

The MLR calculation will be performed at the combined market level with a minimum requirement of 80 percent. We project that the overall Loss Ratio, using the federally prescribed MLR methodology for the combined market, will be 91.8 percent. See Exhibit 8 for details.

3.9. Consumer Adjusted Premium Rate Development

The Consumer Adjusted Premium rates are displayed on Exhibit 9B. Since rate factors for age, tobacco and geography are not allowed in Vermont, the only adjustment is the application of rating tier factors. Vermont has predetermined the tier factors for plans for Individuals and Small Groups.

We observed that using the same contract conversion factor on all plans does not produce the same total premium when multiplying members and PMPM and when multiplying contracts and rates. This is due to not all plans having the same distribution in each tier and not all plans receiving the same annual rate increase.

BLUE CROSS BLUE SHIELD OF VERMONT 2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING ACTUARIAL MEMORANDUM

To correct this, we are calculating the contract conversion factor in two steps. First, we calculate preliminary rates by tiers by using the simple ratio of average number of members to subscribers to calculate average tier factors for all plans except Catastrophic. We then compare the total premium from multiplying members by PMPM to the premium totaled by multiplying contracts by rates, and adjust the contract conversion factor to ensure that we collect the total required annual premium. We are calculating a contract conversion factor specifically for the catastrophic plan and one for all other plans.

Please see Exhibit 9A for details calculation of the contract conversion factor.

The Consumer Adjusted Premium Rates are shown on Exhibit 9B.

3.10. Small Group Plan Premium Rates

All Small Groups must renew on January 1, 2019 according to the combined market rules. BCBSVT will not file small group rates for Q2-Q4 2019.

4. ADDITIONAL INFORMATION

4.1. Terminated Products

BCBSVT will not be terminating any product prior to January 1, 2019.

4.2. Plan Type

Our plan type is EPO.

4.3. Warning Alerts

There are no warning alerts in the Unified Rate Review Template.

5. RELIANCE AND ACTUARIAL CERTIFICATION

5.1. Reliance

For the metallic AV values of the standard plans we relied upon the certification provided by Julie A. Peper, FSA, MAAA, Principal and Senior Consulting Actuary with Wakely Consulting. (Attachment A)

5.2. Actuarial Certification

The purpose of this rate filing is to provide the rates and a description of the rate development for the plans that Blue Cross and Blue Shield of Vermont (BCBSVT) is proposing to offer to the Vermont individual and small group market in 2019. These calculations are not intended to be used for any other purpose. This memorandum documents the methodology used to calculate the AV Metal Value for each Qualified Health Plan offered by BCBSVT in 2019, the appropriateness of the essential health benefit portion of premium upon which advanced payment of premium tax

**BLUE CROSS BLUE SHIELD OF VERMONT
2019 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING
ACTUARIAL MEMORANDUM**

credits (APTCs) are based, that the Index Rate is developed in accordance with federal regulations, and that the Index Rate along with allowable modifiers are used in the development of plan specific premium rates.

I, Paul A. Schultz, am a Fellow of the Society of Actuaries, a Member of the American Academy of Actuaries, meet the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States promulgated by the American Academy of Actuaries, and have the education and experience necessary to perform the work described herein.

In my opinion, the projected Index Rate is in compliance with all applicable State and Federal Statutes and Regulations (including 45 CFR 156.80 and 147.102), has been developed in compliance with the applicable Actuarial Standards of Practice, is reasonable in relation to the benefits provided and the population anticipated to be covered, and is neither excessive nor deficient. The calculations and results are appropriate for the purpose intended.

The Index Rate and only the allowable modifiers as described in 45 CFR 156.80(d)(1) and 45 CFR 156.80(d)(2) were used to generate plan level rates. The percent of total premium that represents essential health benefits included in Worksheet 2, Sections III and IV, was calculated in accordance with actuarial standards of practice.

I have relied upon the certification of AV Metal Value provided by the State for Standard Plans, and attached hereto. Metal AVs for Blue Rewards (Non-Standard) Plans were determined using the AV calculator, or in accordance with the requirements of 45 CFR 156.135(b)(3), as described in the attached actuarial certification.

Data used in this filing were reviewed for reasonableness, but no audit was performed.

The Part I Unified Rate Review Template does not demonstrate the process used by the issuer to develop the rates. Rather, it represents information required by Federal regulation to be provided in support of the review of rate increases, for certification of qualified health plans for federally facilitated exchanges, and for certification that the Index Rate is developed in accordance with Federal regulation, is used consistently, and is only adjusted by the allowable modifiers.



Paul A. Schultz, F.S.A., M.A.A.A.
Chief Actuary
Blue Cross and Blue Shield of Vermont
May 11, 2018