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Mr. Phil Keller Director of Rates and Forms Vermont Department of Financial Regulation 89 Main Street, Drawer 20 Montpelier, VT 05620-3601

Subject:

TVHP 2013 Group Merit Rating Program Filing DFR Filing Number: 64785

Dear Mr. Keller:

The purpose of this letter is to provide you with our analysis and opinion regarding the reasonableness of the group merit rating formula filed by The Vermont Health Plan (TVHP) for use with large groups (51 or more employees). This is not a premium rate filing but rather a filing that requests approval of a proposed methodology that will be used to develop a manual rate, and blend that manual rate with the large group's actual experience to arrive at the appropriate rate to charge the group. It should not be used for other purposes.

In performing our analysis, we relied on the filing documents. While we did review the information for general reasonableness and consistency where possible, we have not performed independent audits to verify its accuracy. Our conclusions could be impacted if there are material errors or omissions in the data provided that could lead to different results.

Background

Over the past year, TVHP has modified its rate filing approach to align with the approach used by Blue Cross and Blue Shield of Vermont (BCBSVT)¹. TVHP and the Department of Financial Regulation (DFR) previously agreed that, going forward, approval of various rating factors would be done through separate component factor filings (e.g. base rate and benefit relativity factors, trend filing, administrative expense filing, etc.). Oliver Wyman has reviewed component factor filings which cover most of these rating components, and it is our understanding that they have been approved by the Green Mountain Care Board (GMCB).

The proposed rating methodology in this filing is substantially similar to the revised methodology filed by BCBSVT and approved by the GMCB last year (VFN #59619, SERFF #BCVT-128267446). This filing differs from the BCBSVT filing in that adjustments are included in the rating formula to account for the fact that some TVHP claims are the responsibility of a provider

¹ The methodology previously employed by TVHP entailed submitting a single filing that included TVHP's proposed rating formula along with corresponding base rates, trends, administrative expenses, contribution to surplus, benefit relativity values and other rating factors used in the rating formula.





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health organization (PHO) and subject to medical expense targets (METs), which was not the case for the BCBSVT filing.

This is the first filing that covers only the proposed rating methodology that outlines the application of the various rating factors and development of renewal rates for a specific group. Previous large group filings were comprehensive in nature in that they covered all components associated with the development of a manual rate for a specific group (e.g. base rate, benefit relativity factors, trend, administrative expenses, etc.) in a single filing.

We note that while we have reviewed filings covering most of the component factors, we have not yet reviewed a factor filing that includes what TVHP defines as the Book of Business Standard Plan Expected Single Claims Rate, which we understand to be the Base Manual Rate for a specific plan of benefits that would be used as one input into the proposed rating methodology outlined in this filing. This filing indicates that the Book of Business Standard Plan Expected Single Claims Rate (hereafter referred to as the Base Manual Rate) to be used in the proposed rating formula is included in TVHP's Benefit Relativity Factor filing. However, page one of the actuarial memorandum for the most recently approved Benefit Relativity Factor filing includes a footnote which reads "It is our intention that the relativities will be applied to the Projected Standard Plan Single Claims Rate, as outlined in the to-be-filed TVHP Group Merit Rating Program filing." Therefore, it does not appear that this component of the proposed merit rating formula has been reviewed or approved.

We asked TVHP via a phone call on October 7, 2013 to direct us to which of their filings contains the Base Manual Rate, highlighting the above referenced footnote. Their response was that while it was their intent to include it in this filing, it regrettably was overlooked.

A subsequent conversation was held on October 28, 2013 which included representatives from TVHP, DFR, and Oliver Wyman. The purpose of the call was to discuss further the corresponding Base Manual Rate that would be used in conjunction with the methodology proposed in this filing, and when a new Base Manual Rate would be filed for TVHP's large group business. TVHP's last filed Base Manual Rate which was subsequently approved was part of its comprehensive 4Q12 Large Group Manual Rate Filing (VFN #60368).

The rate filing schedule TVHP previously submitted to DFR reflects that a new benefit relativity filing will be submitted in January of 2014. During the call, TVHP indicated that they still plan to submit a filing in January as scheduled, and that the filing will include a proposed Base Manual Rate along with quantitative support demonstrating the development of the rate. This still left open the question as to what Base Manual Rate would be used in conjunction with the methodology proposed in this filing, prior to a Base Manual Rate included in the forthcoming benefit relativity factor filing being reviewed and approved.

Since TVHP has an approved Base Manual Rate on file with the State, which was part of the 4Q12 Large Group Manual Rate Filing, we discussed the option of using the Base Manual Rate from that filing with the methodology included in this filing until a new Base Manual Rate is filed and approved. TVHP indicated that the Base Manual Rate included in the 4Q12 filing reflects the



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most recently approved Base Manual Rate and, therefore, they currently use the Base Manual Rate from that filing when developing rates for large groups (for other component factors such as trend, administrative expenses, and contribution to surplus, updated factors approved in subsequent factor filings are used). TVHP indicated that they felt continuing to use the most recently approved Base Manual Rate with the methodology in this filing was a reasonable approach until a new Base Manual Rate is approved, and that updating the underlying claims from that used in the 4Q2012 Large Group Manual Rate Filing to a more current period would be unlikely to have a significant impact on the resulting Base Manual Rate.

Since a Base Manual Rate was not included as part of this merit rating methodology filing, a complete review of a Base Manual Rate is outside the scope of our review for this filing. However, we did seek to examine the validity of TVHP's statement that establishing a more current Base Manual Rate based on updated claims experience would be unlikely to produce a result significantly different from using the Base Manual Rate from the 4Q12 Large Group Manual Rate Filing along with the most recently approved trend factors. To do this we examined fee-for-service allowed claims capped at \$120,000 from the pending 1Q2Q14 TVHP trend filing as this information was readily available to us. We compared claims for the period March 2011 through February 2012, the experience period that underlies the 4Q12 Large Group Manual Rate Filing, with claims for the period June 2012 through May 2013, the most recently available claims included in the trend filing. The following table summarizes these claims.

	Mar 2011 – Feb 2012		Jun 2012 – May 2013	
		Member		Member
	Claims	Months	Claims	Months
Non-CDHP Plans	\$43,585,471	127,521	\$36,280,275	107,576
CDHP Plans	\$92,383,491	320,448	\$106,138,712	347,816
Total	\$135,968,962	447,969	\$142,418,987	455,392
Claims PMPM	\$303.52		\$312.74	

The above table indicates that between the period used for developing the currently approved Base Manual Rate and the most recent experience period, claims per member per month (PMPM) capped at \$120,000 increased at an annual rate of 2.4% (= (\$312.74/\$303.52)^(12/15) - 1). This is lower than the most recently approved medical trend rate, capped at \$120,000 of 4.1% from TVHP's 3Q4Q13 trend filing. This indicates that it is likely that using the currently approved Base Manual Rate and a trend rate of 4.1% will produce higher rates than using an updated manual rate based on more recent experience.

We do acknowledge that this high level analysis does not consider the fact that TVHP employs Medical Expense targets for a portion of its business which would be reflected in the development of rates. It also does not account for any shifts in the underlying demographics; however the pending trend filing includes demographic information which shows the average age/gender factor has increased slightly. All else equal, normalizing for this change would result in a decrease to the



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calculated 2.4% observed annual increase in claims. We also note that there have been a limited number of new mandated benefit requirements recently enacted which are at least partially reflected in the most recent claims experience but are not reflected at all or to a lesser extent in the March 2011 through February 2012 experience; however restating the older claims to reflect an estimate of the impact of the mandated benefits and put them on the same basis as the more current claims would also result in a decrease to the calculated 2.4% observed trend rate.

The table below includes comparable experience for prescription drug claims from the pending 1Q2Q14 TVHP trend filing. We note that TVHP has elected to use combined BCBSVT and TVHP claims experience in supporting its drug trends; therefore the table below also represents the combined experience of both companies and may not accurately reflect the observed trend on only TVHP drug claims

	Mar 2011 - Feb 2012		Jun 2012 – May 2013	
		Member		Member
	Claims	Months	Claims	Months
Prescription Drugs	\$66,993,706	1,002,020	\$73,901,061	1,047,310
PMPM	\$66.86		\$70.56	

The above table indicates that between the period used for developing the current Base Manual Rate and the most recent experience period available to us, allowed claims per member per month increased at an annual rate of 4.4%. This is also lower than the most recently approved prescription drug rate of 6.8% and would therefore indicate it is likely that using updated experience to calculate a new Base Manual Rate would lead to lower rates than trending the current Base Manual Rate forward at the currently approved trend rate.

Proposed Rating Methodology

With this filing, TVHP proposes to align its methodology for calculating rates for large groups with the methodology and approach filed and approved for use by BCBSVT. In the corresponding BCBSVT filing, it was stated that the proposed changes will allow for improvement in the service provided to customers, as well as increased operational efficiencies.

TVHP employs adjusted community rating (ACR) for its large groups. A group's base period experience is first separated into MET and non-MET claims, and the final rates to be charged are proposed to be developed in five main steps, as outlined below:

- 1. Each group's historical claims experience, to the extent it is at least partially credible, is utilized to develop an experience based pure premium for a standard benefit plan during the projection period. The experience based pure premium is developed using the following steps:
 - a. The group's non-MET claims for the experience period are reduced by the amount of actual claims that exceed the selected pooling level.
 - b. A completion factor is applied to account for any claims that have been incurred but are unpaid.



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- c. A charge is included that represents the expected cost of claims above the selected pooling level.
- d. Additional adjustments, if necessary, are made to account for structural changes in the benefit program such as the cost of new mandated benefits which were not in effect during the base experience period or provider contract changes beyond those captured in the approved trend factors utilized.
- e. Claims are divided by the average seasonally adjusted benefit relativity factor in force during the experience period to arrive at the experience period pure premium for the standard benefit plan.
- f. The adjusted claims are trended to the rating period.
- 2. The manual rate for the book of business standard plan is trended to the projection period and adjusted for each group's particular demographic mix and industry classification based on factors in Attachments B and C of this filing, resulting in a group specific manual pure premium for the standard benefit plan.
- 3. The two pure premium rates (i.e., experience based and manual) are then blended using the appropriate credibility factors to arrive at a projected pure premium for the standard benefit plan.
- 4. Since some claims are the responsibility of a PHO, the medical expense target (MET) capitation rates for the standard benefit plan are blended with the projected pure premium for the standard benefit plan from step 3, based on the percent of claims that are the responsibility of the PHO.
- 5. Finally, the result from step 4 is adjusted by the approved benefit relativity factor for the benefit plan that the group has selected, and adjustments to account for items such as reinsurance, prescription drug rebates, retention charges, premium tax and a contribution to surplus are added to develop each group's final rate.

High Cost Claim Pooling Methodology and Application of Trend to Base Period Claims

TVHP proposes to revise the rating formula to remove actual claims over the pooling level from the base period not-MET claims as is done today, however an estimate of expected claims over the pooling level would then be added, prior to trending claims forward to the projection period. In the corresponding BCBSVT filing, it was stated that this change will simplify trend filings in that the claims being trended forward will represent an adjusted uncapped estimate and the number of the trend factors that are required to be developed today will be reduced.

We agree that utilizing uncapped trends should reduce the effort involved in preparing the trend filing and should work to reduce administrative expenses associated with preparing the trend filing, although likely not to a significantly noticeable extent. It will also reduce the amount of effort involved in reviewing the trend filings if trends at various capped levels no longer need to be developed.



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Claim Analysis Based on Benefit Relatively Values

TVHP proposes to change the way that they analyze base period incurred claims by incorporating seasonally adjusted benefit relativity values rather than simply comparing actual claims to the prior year's pure premium estimates.² By utilizing seasonally adjusted benefit relativity factors, TVHP asserts that they will be able to develop more accurate rates when enrollment among benefit plans has shifted throughout the year.

It is preferred that TVHP use the most recent experience available when calculating a renewal rate increase. However, due to renewal rates being calculated several months prior to the renewal date, the base period used does not correspond exactly with the renewal year. Rather, it includes portions of two different renewal periods. For example, the most recent twelve months of experience available at the time the renewal is calculated may represent seven months of the current renewal year and five months of the prior renewal year. Since most groups make changes to their benefits on the effective date of the renewal, the benefits underlying these two partial renewal years that make up the experience period could be different. Further, the claims of these two partial years of experience will have different seasonal effects underlying them. This is particularly true when shifts are made to higher deductibles that can have significant seasonal components to them.

The proposed methodology would develop a seasonally adjusted benefit factor for each benefit plan, for each month. Actual enrollment in each benefit plan for each month would be used in conjunction with these seasonally adjusted factors to calculate the average seasonally adjusted benefit relativity factor during the experience period. Therefore, the proposed approach reflects the seasonal patterns that incurred claims follow, and it adjusts for them. We agree that the proposed approach for developing expected claims more accurately reflects the underlying dynamics of changes that occurred during the base period, particularly as plans with higher deductibles become more prevalent. We also note that in our experience we have not yet observed many carriers moving to a methodology that incorporates this additional level of precision, so in that respect, TVHP is utilizing a more innovative approach than the market in general. It is also worth noting that administrative costs associated with adding this additional level of precision may outweigh the incremental precision gained.

Credibility

TVHP proposes using the following credibility formula for blending group specific experience with manual expected experience.

Credibility Factor =
$$CF_1 * CF_2$$

 $CF_1 = Min((Subscribers^* / 500)^{.75}, 1)$

² pure premium equals earned premium times the target loss ratio, which represents an estimate of expected claims.



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 $CF_2 = Min((Months in Experience Period/12)^2, 1)$

*Subscribers = average number of non-carveout subscribers in the base period plus ½ the average number of carveout subscribers in the base period

The formula above is the same credibility formula that was proposed in the corresponding BCBSVT merit rating formula filing. When reviewing that filing we asked several questions related to the proposed formula given it differs from those we typically see used in the industry. We had asked BCBSVT to provide their work papers supporting the development of the proposed credibility formula. While work papers were not provided, BCBSVT responded that the choice of credibility level is "more art than science." We disagree with this statement. Actuarial Standard of Practice (ASOP) Number 25 titled "Credibility Procedures Applicable to Accident and Health, Group Term Life, and Property/Casualty Coverages" provides guidance to actuaries in the selection of a credibility procedure and the assignment of credibility values. While the ASOP does recognize that the use of credibility procedures requires the actuary to exercise informed judgment, Appendix 1 outlines procedures commonly used for establishing credibility levels, all of which are statistically based. Coverages with more variability in claims costs (e.g. medical claims) require larger exposure bases to achieve full credibility than those with less variability in costs (e.g., dental). The ASOP states that the actuary should be familiar with and consider various credibility procedures.

As part of our review of the BCBSVT filing we also asked for an explanation as to why BCBSVT believed it is appropriate to utilize subscribers in the formula rather than members. Our concern was that the formula as presented, for example, would assign the same level of credibility to a group of 100 employees with single coverage as it would a group of 100 employees with family coverage. Given individuals within a family are heterogeneous with regard to their expected claims, taking into consideration family composition could impact the volatility and predictability of future claims. In its initial response, BCBSVT stated that "members might arguably be a more natural base" but relied on its historical use of subscribers as support. The response also indicated that the average member per contract ratio is 2.04, and ranges from 1.5 to 2.7. Additional information included an analysis which presents theoretical statistical 80% confidence intervals based on assuming 1.5, 2.04 or 2.7 members per contract. The small difference in the confidence intervals indicated that, given the range of member per contract ratios observed by BCBSVT, utilizing contracts rather than members in the credibility formula would not be expected to lead to a difference in results that is outside a reasonable range. We have no reason to believe that similar results would not hold for TVHP's block of business.

We asked BCBSVT to provide support for the use of a factor of 0.75 in the exponent for the CF₁ term. We typically observe carriers using an exponential formula with a factor of 0.50 as the exponent and asked BCBSVT to provide support for their choice of 0.75. In its initial response, BCBSVT stated "the credibility formula was set to produce certain desired credibility factors at certain group sizes" and that "the 0.75 value produced a reasonably good fit to the desired points." Our understanding of this statement was that BCBSVT selected a few group size levels and their



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desired credibility level for those group sizes, and then fit a curve such that the resulting curve reproduced the desired credibility at the selected group sizes. We had asked BCBSVT to provide further support for their assumption including further discussion of why the proposed formula was selected from among the various options they examined. In their response, BCBSVT provided a comparison of the current credibility formula with two competitors' credibility formulas based on information they have been able to gather, as well as a linear formula and the proposed formula.

The current formula matched closely to the curve of Competitor 2 while the proposed formula, which assigns lower credibility at each group size less than 500 employees, matched well with the curve of Competitor 1. The linear function assigns less credibility at each group size than any of the other curves. All of the curves considered assign less credibility than the lower bound of the 80% confidence interval. This is reasonable considering BCBSVT developed the confidence interval based on theoretical volatility assuming a group's make-up is stable throughout the renewal period which would lead to greater confidence, all else equal. In practice, the make up of groups will change throughout the year as employees leave and new employees are hired which will lead to more volatility and less confidence in predictions.

We had also asked BCBSVT for numerical support for the use of an exponent of two in the formula for the CF_2 term. The use of the exponent results in treating the addition of more months of experience differently than the addition of more members. Specifically, a group with 100 subscribers and 12 months of experience would be assigned 30% credibility while a group with 200 subscribers and 6 months of experience would be assigned only 8% credibility. In both cases, the experience period represents 12,000 subscriber months. The following table demonstrates this difference:

	Average		
<u>Subscribers</u>	Exposure Months	Subscriber Months	Credibility
100	12	12,000	30%
150	9	12,000	23%
200	6	12,000	8%

BCBSVT demonstrated the significant seasonal patterns that are present in its CHDP business. Therefore, despite the same number of members assumed in each scenario in the table above, the shorter time periods of experience are less predictable of future claims, and we agree with the proposed adjustment factor to assign them less credibility.

Issues

The proposed merit rating formula includes several component factors as inputs. While we have reviewed and the GMCB has approved through separate rate filings the factors that TVHP may use for most of these components, we have not reviewed a filing that covers one factor in particular called the Book of Business Standard Plan Expected Single Claims Rate, or the Base Manual Rate. Prior to approving the proposed merit rating formula included in this filing the State may wish to require that TVHP file for approval its Base Manual Rate. TVHP has indicated that it



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intends to file a Base Manual Rate as part of its next benefit relativity factor filing which will be submitted in January 2014.

Alternately, rather than require that TVHP wait until a Base Manual Rate is filed as part of the next benefit relatively factor filing, the State could allow TVHP to begin utilizing the methodology outlined in this filing by using the Base Manual Rate which was part of the 4Q12 Large group Manual Rate Filing in the interim which would allow the refinements related to using seasonally adjusted benefit relativity factors to be implemented as soon as possible. TVHP indicated that updating the underlying claims from those used in the 4Q12 Large Group Manual Rate Filing to a more current period would be unlikely to have a significant impact on the resulting calculated rates. If this approach were utilized, it could be specified that only the Base Manual Rate from the 4Q12 Community Rate Filing could be used. For other component factors such as trend, administrative expenses, and contribution to surplus for which updated amounts have been approved in subsequent filings, TVHP could be required to use the updated approved amounts from those filings.

We performed a high level analysis to examine the validity of TVHP's statement that establishing a more current Base Manual Rate based on updated claims experience would be unlikely to have a significant impact on rates and found that, in our opinion, it is likely that updating the Base Manual Rate would lead to lower rates.

Opinion

In our opinion, the changes proposed to TVHP's group merit rating formula are reasonable and should produce premiums that are neither excessive, deficient, nor unfairly discriminatory when used in conjunction with the approved rating factors from the various component factor filings.

In providing this opinion, we relied on the information provided by TVHP in the filing. If this information is inaccurate, incomplete, or out of date, our findings and conclusions may need to be revised. While we have relied on the data provided by TVHP without independent investigation or verification, we have reviewed the data for consistency and reasonableness.

I have utilized generally accepted actuarial methodologies in arriving at my opinion. I am a member of the American Academy of Actuaries and meet that body's Qualification Standards to render this opinion.

Sincerely,

Tammy Tomczyk, FSA, MAAA Principal and Consulting Actuary

Copy: Ryan Schultz, Oliver Wyman Actuarial Consulting, Inc.