Ryan Schultz, FSA, MAAA

Oliver Wyman
411 East Wisconsin Avenue, Suite 1300
Milwaukee, WI 53202-4412
414 223 2287 Fax 414 223 3244
Ryan.Schultz@OliverWyman.com
www.oliverwyman.com

November 6, 2013

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

Subject: **Blue Cross and Blue Shield of Vermont 1Q & 2Q 2014 Trend Factor Filing**
Vermont Filing Number: 68007

Dear Mr. Keller:

The purpose of this letter is to provide our analysis and opinion regarding the reasonableness of the proposed Blue Cross and Blue Shield of Vermont (BCBSVT) first and second quarter 2014 (1Q/2Q14) trend factor filing. It should not be used for other purposes. In performing our analysis, we relied on the information in the filing itself, additional information provided by BCBSVT as requested in our follow up letter and the 1Q/2Q14 supplemental exhibits. We reviewed this information to determine whether there were any material changes in the methodology used relative to prior filings, and did identify the following: (1) mental health and substance abuse claims are now being included in the historical claims experience and (2) the drug trend is now being evaluated with The Vermont Health Plan (TVHP) and BCBSVT data combined. These changes are discussed in more detail within the body of the report.

In the filing, BCBSVT proposes base annual uncapped[1] allowed trend factors equal to 3.9% for medical claims, 7.2% for pharmacy claims, and 4.4% for medical and pharmacy claims combined. This compares to the approved 3Q/4Q13 uncapped trend rates of 3.7% for medical claims, 5.8% for pharmacy claims and 4.1% for medical and pharmacy claims combined. Please note that medical capped trend rates are also included in this filing in addition to the uncapped trend rates described above. However, we have confirmed with BCBSVT that the capped trend rates will not be utilized due to recent changes made to BCBSVT's large group rate development methodology[2]. As a result, this opinion letter has been written with emphasis placed on the filed uncapped trend rates.

It is also important to note that the proposed trends will be used primarily for the development of large group premiums, however, the data underlying the development of these trends includes not only large group, but small group and individual products as well. While incorporating both small

[1] Uncapped trend factors refer to trend rates which are based on, and applied in projections to, claims where there are no caps or limits (e.g. stop loss thresholds) on potential payment amounts. On the other hand, capped trend factors refer to trend rates which are based on, and applied in projections to, claims where caps or limits on potential payment amounts do exist. In general, capped trend factors are expected to be lower than uncapped trend factors due to the limited growth that can occur in the underlying claim costs where a cap exists, for claims which are close to or already equal to the specific cap level.
[2] see the most recently approved BCBSVT Merit Rating filing (VFN 59619)

group and individual data boosts credibility, future consideration will need to be given to the appropriateness of including small group and individual data as these markets will be experiencing considerable changes in 2014 and beyond. Since service dates for this filing are prior to 2014 (pre-ACA), we find the inclusion of small group and individual data within the filing to be reasonable.

Data Consistency

With each rate filing, Oliver Wyman reviews the data which was utilized in any underlying analysis for consistency with the data utilized in the prior filing. During our review, we identified material differences between the data provided in the 1Q/2Q14 filing compared to the 3Q/4Q13 filing. As previously mentioned, two changes made by BCBSVT for this filing were to include mental health and substance abuse claims within the historical medical experience and also to combine the TVHP and BCBSVT drug data for the purposes of evaluating the drug trend. Additionally, we note that BCBSVT removed the experience for three large groups because they did not have experience throughout the entire experience period. During the course of our review, BCBSVT has demonstrated that, after removing the impact of these adjustments, the claims in the 1Q/2Q14 filing are consistent with the previous filing. Any remaining differences are primarily confined to the most recent months and are within a range where they can reasonably be attributed to restated reserve estimates and retroactive adjustments to claims.

BCBSVT Trend Calculation

BCBSVT has traditionally reviewed the results of two different approaches in developing its proposed trend rates. In the first approach, BCBSVT examines historical rolling 12-month averages, and in the second, BCBSVT performs regression analysis on the rolling 12-month claims. Both of these analyses are performed on allowed claims to ensure that calculated trends do not also capture the effect of benefit changes, which are adjusted for elsewhere in the rating formula. In addition, these analyses are performed on a per member per month (PMPM) basis so as not to skew the results when the size of the underlying population changes over time. Both methods are consistent with standard actuarial practices. We note that the ways in which the results from these approaches are applied in developing the ultimate proposed trend rates do vary between medical and drug. The development of the specific medical and drug trend rates is described in the subsections that follow.

Medical Trend

In developing its proposed uncapped trends, BCBSVT examines claims for the period June 2010 through May 2013, with payments through July 2013. It is commonly accepted practice to include at least a couple of months of claim payment runout in order to avoid calculating trends which are highly sensitive to reserve estimates underlying the most recent months of claims. As noted earlier, mental health and substance abuse fee-for-service equivalent claims[3] are now being included in the historical experience since they will no longer be paid on a capitated basis and, therefore, must be considered in the development of the overall fee-for-service trend rate. BCBSVT then removes claims in excess of $200,000 so that the results of its regression analysis

[3] Fee-for-service equivalent claims are those claims that would have been paid had mental health claims been reimbursed on a fee-for-service basis rather than a capitated basis during the experience period.

are not skewed downward or upward by any unusually large claims in the underlying claims experience. The resulting trend rates based on claims capped at $200,000 are then adjusted to reflect the equivalent trend rates if no cap existed. This is done by utilizing the stop loss dampening and deductible leveraging analysis performed by BCBSVT.

Using the first method previously mentioned, which examines rolling 12-month PMPM allowed claims figures, BCBSVT calculated the following trends using the May 2013 data point.

Major Service Category	Observed Rolling 12-Month Trend
Inpatient	6.9%
Outpatient	-1.3%
Professional	2.0%
Other	-4.8%

These percentages represent the change in average claims PMPM between the time periods of June 2011 – May 2012 and June 2012 – May 2013. The average medical trend across all service categories in the table above is 1.1%, which is over a three percentage point decrease from the rate of 4.4% that was observed using the same approach in the 3Q/4Q13 filing.

Using the second method, in which BCBSVT performs a regression on the rolling 12-month allowed claims PMPM, the following trends were calculated:

Regression Type 12-Month Rolling	Resulting Medical Trend
24-Point	3.6%
36-Point	3.8%

In Exhibit VI of the rate filing, BCBSVT has provided a chart of the average age of the population by month. The average age/gender factor of the population and the male/female distribution has been very stable. In most cases, this demographic component should be normalized from the trends as it is typically captured elsewhere in the rating formula (i.e., through rates which vary by age and gender). However, given Vermont's community rating structure, it needs to remain in the trends as long as it is anticipated to continue at the same rate. Given that the average age and the distribution of male and females have been relatively stable, we do not feel the demographics are skewing observed trends.

Drug Trend

As described earlier, in developing its proposed drug trends, the data, which was reviewed by BCBSVT, reflects claims experience for both BCBSVT and TVHP. This approach is reasonable since both companies utilize the same reimbursement fee schedules and claims adjudication processes. Page 7 of Exhibit II within the filing shows the development of the proposed drug trend rate and, as can be seen, the overall proposed rate represents the combined impact of the estimated utilization and unit cost trends for each drug script type (i.e., generic, brand and

specialty). The unit cost trends were developed based on the results of BCBSVT's regression analysis of unit costs by script type, which were then adjusted for any changes in the PBM contracted rates. The utilization trends were developed based on the results of BCBSVT's regression analysis of utilization by specialty and non-specialty scripts (i.e., generic and brand combined). The non-specialty script result was then split into generic and brand specific utilization rates based on BCBSVT's projected generic dispensing rate[4] (GDR) for the rating period. We note that BCBSVT's projected GDR for the rating period was developed, as demonstrated on page 6 of Exhibit II, based on a review of which prescription drugs would be coming off of patent in the future, the historical utilization of those drugs, and a projection of how the patent expiration for those drugs would impact future generic vs. brand utilization. The following table summarizes the trend components calculated by BCBSVT. As noted previously, the overall trend rate of 7.2% represents the weighted average of the individual trend components using the most recent drug experience.

Trends	Generic	Brand	Specialty	Total
Utilization	1.9%	-6.4%	18.1%	0.6%
Cost	-3.7%	10.0%	6.8%	6.6%
Total	-1.9%	2.9%	26.2%	7.2%

There is one item that we wanted to highlight with respect to BCBSVT's development of this proposed drug trend rate. We note that BCBSVT is anticipating that the GDR will not continue to increase at the annual growth rate which has been experienced in recent years, which has been approximately 4%. Instead, BCBSVT is assuming the GDR will increase at an annual rate of only approximately 1% from the 12 months ending June 2013 to the 12 months ending March 2015. The actuarial memorandum states that BCBSVT's expected GDR for the 12 month period of April 2014 through March 2015 will be 83.4%. For the 12 months ending June 2013, the GDR was 82.3%. The result of assuming a lower growth rate for the GDR is a higher projected drug trend than would be calculated if a higher GDR growth rate were assumed. This is because a higher GDR typically implies that more drugs are shifting from brand to generic script types in the future. Ultimately, generic scripts are lower cost than brand scripts and, therefore, a shift from brand to generic scripts would generally be expected to result in a lower trend rate.

Proposed Trends

BCBSVT is proposing uncapped trend rates equal to 3.9% for medical, 7.2% for pharmacy, and 4.4% for medical and pharmacy combined. As noted earlier, BCBSVT has also filed capped medical trend rates, although these will not be utilized.

The selection of the 3.9% medical trend is based on the average of the 24-point and 36-point regression on 12-month rolling data capped at $200,000, adjusted to reflect the equivalent trend rate if no cap were applied. The selected drug trend of 7.2% was determined by evaluating unit cost and utilization trend for generic, brand and specialty drugs as previously described.

[4] The generic dispensing rate is equal to the number of generic scripts divided by the total number of drug scripts.

Independent Trend Calculation

Medical Trend

In forming our opinion as to the reasonableness of BCBSVT's proposed 1Q/2Q14 medical trend rates, we performed several independent calculations. First, we evaluated the medical trend based on regression analyses of 12-month rolling averages on capped data (i.e. claims below a $200,000 threshold). The table below summarizes the resulting historical trend rates by three different historical periods (i.e., 12 points, 24 points, and 36 points). Included in the table is the standard error[5] for each time period. It is important to note that we evaluated capped data in this approach in order to remove any potential skewing that could occur by including large claims. The resulting calculated trend rates were then adjusted in order to arrive at equivalent uncapped trends. This was done by using stop loss dampening and deductible leveraging factors which we discuss in the latter portion of this letter.

Data Points	12-Month Rolling Trend with Standard Error
12 Points	0.9% ± 0.3%
24 Points	3.9% ± 0.4%
36 Points	4.1% ± 0.2%

As can be seen, the 24-point and 36-point periods are producing consistent trends with relatively small standard error terms, while the 12-point regression is producing a trend that is nearly three percentage points lower than the other two time periods. This could suggest an emergence of lower trends. In order to investigate we further evaluated historical trends using uncapped monthly data. In order to eliminate the spikes in large claims over the regression period, we asked BCBSVT for monthly claims excluding claimants with more than $25,000 in charges in a given month. These additional data allowed us to estimate large claims on a monthly basis by comparing the uncapped monthly totals previously provided to the capped monthly totals. For medical coverage, after partitioning the large claims, we then smoothed them over the 42-month period for which we had data, assuming a 24.0% annual large claims trend. Smoothing the large claims eliminates potential random fluctuation of high cost claims. The 24.0% annual large claims trend assumption was developed based on changes in the average large claims PMPM from December 2009 through May 2013. The following table shows the actual medical large claims PMPM over that time period.

[5] The standard error amount represents one standard deviation from the calculated sample mean. The smaller the standard error term, the more representative the data used will be of the underlying population.

Year	Difference PMPM
2009	38.51
2010	44.95
2011	44.32
2012	62.00
YTD 2013	81.76
Trend	1.240

1.240=(81.76/38.51)^(12/42)

After smoothing the large claims, we added the smoothed large claims for each month back to the claims for individuals with less than $25,000 for the month and conducted a regression analysis on 24, 36, and 42 monthly data points. The table below summarizes the results. It should be noted that this analysis includes large claims which have been smoothed but, because large claims are included, ultimately represents allowed uncapped trends. To estimate $200K capped trends, we applied an adjustment reflecting the same relationship as shown on Exhibit IV between BCBSVT's capped and uncapped trends. The calculated $200K capped trends are also shown in the table below.

Monthly Data Points	Uncapped Medical Trend	$200K Capped Medical Trend
24	3.7%	3.5%
36	4.2%	3.9%
42	4.6%	4.3%

The results of the monthly regression analyses are consistent with the 24-point and 36-point rolling average regression results described earlier, leaving the 12-point rolling average regression as an outlier. After examining the monthly data graphically it was determined that the 12-point, 12-month rolling regression is being significantly impacted by unusually low incurred months from July 2012 to September 2012. For this reason we have excluded the 12-point, 12-monthy trend result from our final estimated range of medical trends. The table below provides a range of our estimated allowed medical trends compared to the allowed trends which are being proposed by BCBSVT.

		OW Range	
Trend Category	BCBSVT	Low	High
Medical (Uncapped)	3.9%	3.7%	4.6%
Medical ($200K Capped)	3.7%	3.5%	4.3%

Drug Trend

In forming our opinion as to the reasonableness of the proposed drug trend, we evaluated the utilization and unit cost trends for each drug type (i.e., generic, brand and specialty), similar to the approach which was utilized by BCBSVT. Our method involved the use of regression on 24 data points of 12 month rolling averages. We also considered the impact of a potential slowdown in the GDR relative to recent historical growth. The following table summarizes the estimated range of drug trends resulting from our analysis.

		OW Range	
Trend Category	**BCBSVT**	**Low**	**High**
Drug Trend (Uncapped)	7.2%	5.3%	9.5%

It is important to note that with over 80% of all scripts which are currently being filled representing generic drugs, it is our belief that the significant growth in the GDR of approximately 4% which has been experienced in recent years simply cannot continue indefinitely. Ultimately, however, we believe it is very difficult to predict when exactly the GDR growth will begin to slow down, and believe recent trends could possibly continue for the next couple of years. The low end of the above range represents a scenario in which the GDR continues to increases at a rate of approximately 4.0%. Under this scenario the projected GDR for the 12 months ending March 2015 would be roughly 88.5% Under the high scenario, we have estimated that the GDR would be roughly 84.0% for the 12 months ending March 2015, which would represent a growth rate of approximately 1.3% through that time period.

Deductible Leveraging

BCBSVT provides their proposed leveraging factors in Exhibit IV, page 2 of the filing. The purpose of the leveraging factors is to adjust trend factors as necessary to reflect the leveraging effect of fixed dollar deductibles. We compared the proposed factors to those generated from our pricing model, after it was calibrated to BCBSVT's underlying allowed cost PMPM. The following table provides a comparison of BCBSVT's deductible leveraging rates to Oliver Wyman's estimated deductible leveraging rates.

Deductible Leveraging Factors

	Medical - No Coins		Medical - W/Coins		Combined - No Coins		Combined - W/Coins	
Ded	**BCBSVT**	**OW**	**BCBSVT**	**OW**	**BCBSVT**	**OW**	**BCBSVT**	**OW**
$0	-0.2%	-0.1%	-0.2%	-0.1%	-0.2%	-0.3%	-0.2%	-0.2%
$100	-0.2%	-0.1%	0.0%	-0.1%	-0.1%	-0.2%	0.0%	-0.1%
$150	-0.1%	0.0%	0.0%	0.0%	-0.3%	-0.2%	0.0%	-0.1%
$200	-0.1%	0.0%	0.0%	0.0%	-0.1%	-0.2%	-0.1%	0.0%
$250	-0.1%	0.0%	0.0%	0.1%	-0.1%	-0.1%	0.0%	0.0%
$300	0.0%	0.1%	0.1%	0.1%	0.0%	-0.1%	0.0%	0.0%
$350	0.0%	0.1%	0.1%	0.1%	0.0%	-0.1%	0.1%	0.1%
$400	0.0%	0.1%	0.1%	0.2%	0.0%	0.0%	0.1%	0.1%
$450	0.0%	0.1%	0.2%	0.2%	0.0%	0.0%	0.1%	0.1%
$500	0.1%	0.2%	0.2%	0.2%	0.0%	0.0%	0.2%	0.1%
$750	0.1%	0.2%	0.3%	0.3%	0.1%	0.1%	0.3%	0.3%
$1,000	0.2%	0.3%	0.4%	0.3%	0.2%	0.2%	0.4%	0.3%
$1,500	0.4%	0.4%	0.5%	0.5%	0.3%	0.4%	0.5%	0.5%
$2,000	0.5%	0.5%	0.6%	0.6%	0.6%	0.5%	0.6%	0.6%
$2,500	0.6%	0.6%	0.7%	0.7%	0.5%	0.6%	0.7%	0.7%
$3,000	0.6%	0.7%	1.2%	0.7%	0.9%	0.7%	0.8%	0.8%
$3,500	0.7%	0.8%	1.3%	0.8%	0.7%	0.8%	1.2%	0.9%
$4,000	0.8%	0.8%	0.9%	0.9%	0.7%	0.9%	1.3%	1.0%
$5,000	1.0%	1.0%	1.1%	1.0%	0.9%	1.0%	1.5%	1.1%
$7,500	1.3%	1.2%	1.4%	1.2%	1.8%	1.3%	1.3%	1.4%
$10,000	2.1%	1.4%	1.6%	1.4%	1.4%	1.5%	2.3%	1.6%

The factors we independently developed compare reasonably well with those proposed by BCBSVT.

Stop Loss Dampened Trends

BCBSVT provides their stop loss dampened proposed trend factors in Exhibit IV, page 3 of the filing. These factors reflect trends adjusted for the impact of various stop loss levels. Stop loss places a ceiling on the level to which claims can increase due to the effect of trend. As the stop loss level decreases from an unlimited level, the increase in claims below the stop loss level becomes further capped and the trends decrease.

We developed independent estimates of these dampened trends, assuming the underlying trend levels are consistent with the trends requested by BCBSVT. The following table compares the dampened trends filed by BCBSVT with those developed from our pricing model for select stop loss levels. As with the deductible leveraging factors, the two estimates compare well.

Base Stop Loss Dampened Trends

	Medical		Combined	
Attachment Point	BCBSVT	OW	BCBSVT	OW
$100,000	3.6%	3.7%	4.1%	4.1%
$200,000	3.9%	3.9%	4.4%	4.3%
$1,000,000	4.1%	4.2%	4.7%	4.6%
Unlimited	4.2%	4.2%	4.7%	4.6%

********** Begin – Confidential Information **********

[redacted]

********** End – Confidential Information **********

Conclusion

We find that the 3.9% uncapped medical trend requested by BCBSVT is within our range of our independent estimates (3.7% to 4.6%). As such, we believe the proposed medical trend factor is reasonable. The requested 7.2% prescription drug trend is also within our range of independent estimates (5.3% to 9.5%). One key assumption regarding the drug trend is whether generic utilization will continue to grow as a percentage of the overall drug utilization. If the GDR continues to grow at a relatively high rate then we would expect this to have downward pressure on the emerging drug trend, and the result would be a trend rate closer to the low end of the range we have developed. However, if the GDR growth rate begins to slow significantly, then this will have upward pressure on emerging trends, and the result would be a rate closer to the high end of the range we have developed.

Lastly, we note that the proposed trends are low as compared to those observed in the industry. The most recent semi-annual Oliver Wyman carrier trend survey[6] shows carriers are utilizing the following pricing trends for their group business:

[6] This report presents pricing trends used by the 66 participating companies in the development of their rates for July 2013. These trends are used to develop premiums for approximately 108.3 million group members as reported by the participating companies.

	Medical PPO	Medical HMO	Pharmacy
75th Percentile	11.1%	9.8%	10.7%
50th Percentile	9.0%	7.7%	8.3%
25th Percentile	7.2%	6.2%	7.0%

The medical trend rate requested by BCBSVT is below the 25th percentile for both Medical PPO and HMO, even after adjusting for the impact of deductible leveraging, while the prescription drug trend is just slightly above the 25th percentile for Pharmacy.

Opinion

In providing this opinion, I relied on the data and other information provided by BCBSVT in the rate filing and the supplemental exhibits. 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 BCBSVT without independent investigation or verification, we have reviewed the data for consistency and reasonableness. Where we found the data inconsistent or unreasonable, we have requested clarification.

In my opinion, the proposed medical and drug trend factors are reasonable relative to the range of independent estimates I have developed and should generate premium that is not excessive, deficient, or unfairly discriminatory.

Since our analysis involves the projection of future contingent events, actual results will likely vary.

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,

Ryan Schultz, FSA, MAAA
Senior Consultant

Copy: Justin Feagles, Oliver Wyman Actuarial Consulting, Inc.
Tammy Tomczyk, Oliver Wyman Actuarial Consulting, Inc.