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March 26, 2014

Green Mountain Care Board
State of Vermont
89 Main Street, Third Floor, City Center
Montpelier, VT 05620

Re: Blue Cross and Blue Shield of Vermont, LG 3Q-4Q 2014 Trend Filing (SERFF # BCVT-129403752)

The purpose of this letter is to provide a summary and recommendation regarding the proposed LG 3Q-4Q 2014 Trend Filing for Blue Cross and Blue Shield of Vermont and to assist the Board in assessing whether to approve, modify, or disapprove the request.

Filing Description

1. Blue Cross Blue Shield of Vermont (BCBSVT) is a non-profit hospital and medical service corporation. BCBSVT provides large group coverage to employers in Vermont.

2. This filing develops claim trend assumptions for use in the calculation of rates for the Company's large groups. Once approved, the trend factors from this filing will be used for all future large group proposals and renewals until superseded by a subsequent filing.

3. The Company is requesting a total allowed trend of 5.2%. The total allowed trend represents the change in total medical spending, which includes payments from both the insurance company and member cost sharing.

   The average paid trend is 5.8%. Paid trends directly impact the premium that employers are charged, because it reflects the change in payments from only the Company and excludes member cost sharing.

In the chart below, the paid trends are higher than the allowed trends due to the leveraging[1] effect of fixed first dollar cost sharing such as deductibles and copays.

	Total Allowed Trend	Paid Trend[2]
Medical	4.7%	5.3%
Pharmacy	7.6%	7.9%
Combined Plans	5.2%	5.5%

4. BCBSVT has an estimated 16,400 subscribers (33,100 members) that are currently enrolled in a large group plan.

5. The actual paid trends for each employer will vary based on the cost sharing design of the plan as well as if the medical and pharmacy benefits are separate or based on an integrated benefit design.

Standard of Review
Pursuant to Green Mountain Care Board (Board) Rule 2.000 Health Insurance Rate Review, this letter is to assist the Board in determining whether the requested rate is affordable, promotes quality care, promotes access to health care, protects insurer solvency, and is not unjust, unfair, inequitable, misleading, or contrary to the law, and is not excessive, inadequate, or unfairly discriminatory.

Summary of the Data Received
BCBSVT provided the historical claims data and the methodology used to calculate the projected trends. The Company provided a list of drugs that will lose their patent going forward from the pharmacy benefit manager. The Company also described the process used to adjust the allowed claims to paid claims due to benefit leveraging. Exhibits were provided that summarized various trending methodologies as well as the final trends that were chosen.

Company's Analysis
1. *Methodology & Data:* For medical trend development, the Company used claims incurred between January 1, 2010 and October 31, 2013, paid through December 31, 2013. Completion factors were used to estimate the ultimate incurred claims based on best estimates (i.e. no margin for conservatism was included).

   The data includes claims from BCBSVT Cost Plus groups, BCBSVT Insured Large Groups and The Vermont Health Plan (TVHP) Insured Large Groups. BCBSVT and TVHP cover substantially similar populations under similar benefit packages. The Company felt that combining these homogeneous populations creates greater consistency and credibility within

[1] Trend leveraging is a result of fixed deductibles and copays not increasing with trend which causes paid trends to be higher than allowed trends. Note that if the fixed deductibles and copays were increased at the same rate as trend, then allowed trends would equal paid trends.

[2] The 5.5% is not a weighted average of the medical and pharmacy paid trends. It is the result of applying the 5.2% allowed trend to the plans with an integrated medical and pharmacy benefit design.

the trend factor development. Adjustments were made to the data to reflect network differences between the two companies.

Allowed charges were used instead of claim payments in order to reduce the effect of benefit changes on observed trends. The allowed trends were then adjusted by the leveraging effect of deductibles and copays to produce a paid trend for each plan.

The medical claims data used represents a change from the prior trend filing. The BCBSVT Small Group experience was not included in this filing, and the TVHP Insured Large Group data was added. These changes were already implemented for pharmacy claims in the prior trend filing.

Medical trend is composed of multiple components including cost and utilization of services. The contracts with providers are separated in to three categories: Inpatient, Outpatient and Professional/Other. The trend was estimated for each service category. The overall trend is a weighted average of the trend components.

2. *Medical Trend Development:* The medical trends are calculated using 36 months of historical data, which is modeled using an exponential regression. The results of this analysis were compared to results based on a shorter time period for reasonableness. For example, the total inpatient trend (cost and utilization) of 9.0% was compared to the 12.7% trend if only the most recent 24 months of data was used. For each trend component analyzed, the Company felt that using 36 months of historical data produced trends that were reasonable and less volatile. The following table shows the results of the Company's analysis and the resulting 4.7% overall allowed medical trend.

36 Month Regression	Cost	Utilization	Total
Inpatient	6.0%	2.9%	9.0%
Outpatient	3.8%	-0.4%	3.4%
Professional & Other	1.8%	1.7%	3.5%
Total	3.6%	1.1%	4.7%

In addition to the monthly regression, the Company also modeled the rolling twelve month average data using an exponential regression. The rolling twelve month trends shown in the table below produce different results for each trend component, but the overall trend of 4.6% is only marginally different.

Rolling 12 Months Regression: 35 Months	Cost	Utilization	Total
Inpatient	6.1%	1.3%	7.5%
Outpatient	4.7%	-0.7%	4.0%
Professional & Other	1.0%	2.4%	3.4%
Total	3.7%	0.8%	4.6%

The Company selected the monthly regression methodology, with an overall allowed medical trend of 4.7%, because it smooths results and does a better job of recognizing more recent trends.

3. *Pharmacy Trend Adjustment – Contract Changes:* There was an improvement in the future contracts with the pharmacy benefit manager that reduced cost trends for generic and brand drugs. This reduced the generic cost trend from 5.4% to 3.1% and only had a marginal impact on the 12.1% brand cost trend.

4. *Pharmacy Trend Adjustment – Generic Dispensing Ratio:* The generic dispensing ratio (GDR) is a measure of the percentage of pharmacy utilization attributable to generic drugs. Historically, the GDR has been increasing due to blockbuster drugs, such as Lipitor, losing their patents. Although several popular drugs, such as Nexium and Lunesta, are expected to lose their patents in the upcoming year, the Company's drug-by-drug analysis shows that the GDR will not increase at the same historical rate.

   Based on the current distribution of days supply and a list of brands expected to move to generic in the projected period, as provided by their pharmacy benefit manager, the Company projected the GDR to reach 84.4% in the projection period. This is an increase of 1.6% over the prior filing's assumption of 83.1%. The list of brand drugs used to calculate the GDR is based on a more extensive list of drugs than was used in the prior filing.

5. *Pharmacy Trend Development:* The pharmacy trends are calculated using 24 months of historical data, which is modeled using an exponential regression. The Company analyzed 24 months of data in order to best capture an adequate amount of the most recent history of drug costs.

   The Company modeled the cost for generic and brand drugs individually. However, they combined the data for generic and brand drugs to analyze utilization patterns because of several popular brand drugs losing their patents. The combined utilization is projected to increase by 0.5%. A separate adjustment was then made to split the generic and brand utilization based on the projected GDR. The Company only modeled the total PMPM trends for specialty drugs due to their relatively low utilization and high cost nature. The following table shows the results of the Company's analysis and the requested 7.6% overall allowed pharmacy trend.

24 Month Regression	Cost	Utilization	Total
Generic	3.1%	2.0%	5.1%
Brand	12.1%	-7.4%	3.8%
Specialty	N/A	N/A	17.3%
Total	N/A	N/A	7.6%

In addition to the monthly regression, the Company also modeled the rolling twelve month average data using an exponential regression. The rolling twelve month trends shown in the table below produce a higher overall pharmacy trend of 10.5%.

Rolling 12 Months Regression: 24 Months	Cost	Utilization	Total
Generic	3.1%	2.6%	5.7%
Brand	13.1%	-6.8%	5.4%
Specialty	N/A	N/A	25.3%
Total	N/A	N/A	10.5%

The Company did not feel that these higher trends based on the rolling twelve month averages were appropriate.

6. *Leverage Adjustments to Allowed Trends:* The Company analyzed allowed trends in order to reduce the effect of benefit changes on observed trends. Therefore, adjustments for trend leveraging were made in order to convert the allowed trends into paid trends. The paid trends are what will actually be applied to large group experience to develop premiums. The leveraged trend values were calculated using claim probability distributions for several deductibles and copay levels based on claims distributions data from BCBSVT and TVHP data and Milliman Health Cost Guidelines®(2013 version).

   The paid trends in the table below will be applied to medical and pharmacy claims separately. The combined trend will be used for plans that have an integrated medical and pharmacy benefit design such as an HSA plan.

	Allowed Trends	Paid Trends
Medical	4.7%	5.3%
Drug	7.6%	7.9%
Combined	5.2%	5.5%
Average	5.2%	5.8%

L&E Analysis

1. *Methodology & Data:* The Company removed the small group medical claims and combined the BCBSVT and TVHP large group medical claims for this filing. The use of only large group data is consistent with the recommendation made by the previous reviewing actuary. Because the medical claims are all from substantially similar populations (large group market) and adjustments were made to reflect network differences, we consider this change to be reasonable and appropriate.

   There is an average of 90,000 large group members over the three year experience period that is used to estimate trend. We note that the data may not be sufficiently large or credible to project cost and utilization trends for the various components such as inpatient, outpatient and professional services. This is most evident in the inpatient utilization per 1,000 members data where the monthly change ranges from a decrease of 18% to an increase of 30% over the prior month.

   We considered two alternative methods to calculate the medical trend due to potential uncertainty regarding the credibility of the method used by the Company.
   - Use nationwide data to blend with the Company's Vermont specific data. Due to significant geographic differences and the consistently lower historical trends in Vermont, we do not recommend this approach.
   - Combine the medical claims from each service category and project the trend in PMPM costs. This accounts for both the cost and utilization trends. The results of this analysis are discussed in the next section, which matches the total allowed medical trend that the Company requested.

2. *Medical Trend Development:* To evaluate the reasonableness of the Company's approach, we combined all of the allowed medical claims for the prior 36 months and modeled PMPM claims using an exponential regression. Our analysis resulted in an allowed medical trend of 4.7%, which is equivalent to the Company's requested allowed medical trend.

   Actual results will vary from the projected amount due to random fluctuations and unpredictable changes in the market. Our estimated range for the actual results is 3.5% to

5.8%. Each of the numbers within our estimated range are not equally likely, that is the trends on the low and high end are not as likely to occur as the trends in the middle of the range.[3]

Our best estimate trend is equal to the Company's proposed value of 4.7%. We consider the Company's requested allowed medical trend of 4.7% to be appropriate and reasonable.

3. *Pharmacy Trend Adjustment – Contract Changes:* The Company's adjustments for changes in the future contract terms with their pharmacy benefit manager appear to be reasonable and appropriate.

4. *Pharmacy Trend Adjustment – Generic Dispensing Ratio:* The chart below shows the rolling 12 month average GDR from December 2011 to December 2013 as well as the projected GDR for the next 2 years. The growth in the GDR has slowed considerably in recent months as the growth from June 2013 to December 2013 was only 0.5%.

Historical	Rolling 12 Month GDR	Semi-Annual Increase
December 2011	78.0%	
June 2012	79.0%	1.4%
December 2012	81.2%	2.7%
June 2013	82.8%	2.0%
December 2013	83.2%	0.5%

Projected	Rolling 12 Month GDR	Semi-Annual Increase
June 2014	83.3%	0.1%
December 2014	84.0%	0.8%
June 2015	84.8%	1.0%
December 2015	85.2%	0.5%

While the chart shows that the historical trends have slowed, we believe that it is more important to focus on the approach used by the Company to project the GDR. The approach from the prior filing was improved by using a more extensive list of drugs from their pharmacy benefit manager.

During our review, three issues were addressed:

- The Company did not include drugs that were projected to become multi-source generics between January and June of 2014.
- The Company projected the GDR to an endpoint of February 2016, which assumes that there will not be a 1st and 2nd quarter trend filing later this year. We feel that it is more appropriate to project the GDR to an endpoint of July 2015 because we presume that the Company will file another semi-annual trend filing in 2014.

[3] For example, the probability that the actual trend will be centered around the best estimate (between 4.6% and 4.8%) is over 50% higher than being near the low end of the range (between 3.5% and 3.7%).

- The Company recognized that they inappropriately applied the GDR, which would have resulted in an increase to their requested overall pharmacy trend; however, the Company is not requesting to change the pharmacy trend proposed of 7.6%.

These issues increased the projected GDR from 84.4% to 84.9%. This in isolation would decrease trends, but due to the Company's error in applying the GDR, our best estimate pharmacy trend increases from 7.6% to 8.2%. The Company is cognizant of the implications of these modifications, but they are comfortable using the originally requested pharmacy trend of 7.6%.

We feel that the modifications described above and the more exhaustive list of brand drugs used in the Company's analysis produce an estimate of the GDR that is reasonable and appropriate. We note that the projected GDR represents a slowdown in the growth of the GDR, which is expected as the GDR approaches its limit of 100%.

5. *Pharmacy Trend Development:* We attempted to use the same approach for pharmacy claims as we did for medical claims; however, this did not produce reasonable results due to the slowing growth of the GDR, drugs losing their patents in the projection period, as well as the adjustments to the future contract terms with the Company's pharmacy benefit manager. Therefore, we used the same approach that the Company used to calculate the pharmacy trends, but we included our proposed enhancements to the projection of the GDR. This resulted in a projected trend of 8.2%.

   Additionally, we reviewed the pharmacy trends based on using the prior 36 months of data, in order to be consistent with the time period used for the medical trend. For each category, this produced substantially higher trends than the trend requested by the Company. We consider the Company's requested allowed pharmacy trend of 7.6% to be reasonable and appropriate.

   Our estimated range for the actual results is 5.9% to 10.5%. Each of the numbers within our estimated range are not equally likely, that is the trends on the low and high end are not as likely to occur as the trends in the middle of the range. The Company's proposed value of 7.6% fits comfortably within our estimated range of actual results. We consider the Company's requested allowed pharmacy trend to be reasonable and appropriate.

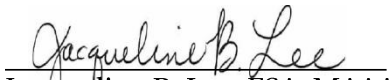
6. *Leveraged Adjustments to Allowed Trends:* We independently calculated the leveraging factors that the Company provided using national data and produced similar results. Additionally, the factors are not materially different from the factors used in the prior filing. The approach that the Company used to adjust allowed trends to paid trends is considered reasonable and appropriate. The table below shows the allowed trends and the paid trends after leverage adjustments were made.

	Total Allowed Trend	Paid Trend
Medical	4.7%	5.3%
Pharmacy	7.6%	7.9%
Combined Plans	5.2%	5.5%

Recommendation
L&E believes that this filing does not produce rates that are excessive, inadequate, or unfairly discriminatory. Therefore, L&E recommends that the Board approve the filing as requested.

Sincerely,

Josh Hammerquist, ASA, MAAA
Assistant Vice President & Consulting Actuary
Lewis & Ellis, Inc.



Jacqueline B. Lee, FSA, MAAA
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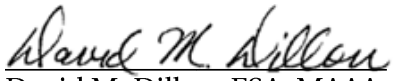

David M. Dillon, FSA, MAAA
Vice President & Principal
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ASOP 41 Disclosures
The Actuarial Standards Board (ASB), vested by the U.S.-based actuarial organizations[4], promulgates actuarial standards of practice (ASOPs) for use by actuaries when providing professional services in the United States.

Each of these organizations requires its members, through its Code of Professional Conduct[5], to observe the ASOPs of the ASB when practicing in the United States. ASOP 41 provides guidance to actuaries with respect to actuarial communications and requires certain disclosures which are contained in the following.

Identification of the Responsible Actuary
The responsible actuaries are:

- Joshua A. Hammerquist, ASA, MAAA, Assistant Vice President at Lewis & Ellis, Inc. (L&E).
- Jacqueline B. Lee, FSA, MAAA, Vice President at Lewis & Ellis, Inc. (L&E).
- David M. Dillon, FSA, MAAA, MS, Vice President & Principal at Lewis & Ellis, Inc. (L&E).

These actuaries are available to provide supplementary information and explanation. The actuaries also acknowledge that they may be acting as an advocate.

Identification of Actuarial Documents
The date of this document is March 26, 2014. The date (a.k.a. "latest information date") through which data or other information has been considered in performing this analysis is March 20, 2014.

Disclosures in Actuarial Reports

- The contents of this report are intended for the use of the Green Mountain Care Board. The authors of this report are aware that it will be distributed to third parties. Any third party with access to this report acknowledges, as a condition of receipt, that they cannot bring suit, claim, or action against L&E, under any theory of law, related in any way to this material.
- Lewis & Ellis Inc. is financially and organizationally independent from the health insurance issuers whose rate filings were reviewed. There is nothing that would impair or seem to impair the objectivity of the work.
- The purpose of this report is to assist the Board in assessing whether to approve, modify, or disapprove the rate filing.
- The responsible actuaries identified above are qualified as specified in the Qualification Standards of the American Academy of Actuaries.
- Lewis & Ellis has reviewed the data provided by the issuers for reasonableness, but we have not audited it. L&E nor the responsible actuaries assume responsibility for these items that may have a material impact on the analysis. To the extent that there are

[4] The American Academy of Actuaries (Academy), the American Society of Pension Professionals and Actuaries, the Casualty Actuarial Society, the Conference of Consulting Actuaries, and the Society of Actuaries.

[5] These organizations adopted identical *Codes of Professional Conduct* effective January 1, 2001.

material inaccuracies in, misrepresentations in, or lack of adequate disclosure by the data, the results may be accordingly affected.
- We are not aware of any subsequent events that may have a material effect on the findings.
- There are no other documents or files that accompany this report.
- The findings of this report are enclosed herein.

Actuarial Findings
The actuarial findings of the report can be found in the body of this report.

Methods, Procedures, Assumptions, and Data
The methods, procedures, assumptions and data used by the actuary can be found in body of this report.

Assumptions or Methods Prescribed by Law
This report was prepared as prescribed by applicable law, statues, regulations and other legally binding authority.

Responsibility for Assumptions and Methods
The actuaries do not disclaim responsibility for material assumptions or methods.

Deviation from the Guidance of an ASOP
The actuaries have not deviated materially from the guidance set forth in an applicable ASOP.