

July 4, 2020

Mr. Kevin Ruggeberg, A.S.A., M.A.A.A.  
Consulting Actuary  
Lewis & Ellis, Inc.

**Subject: Your 07/01/2020 Questions re:  
Blue Cross and Blue Shield of Vermont  
2021 Vermont Individual and Small Group Rate Filing  
(SERFF Tracking #: BCVT-131936226)**

Dear Mr. Ruggeberg:

In response to your requests dated July 1, 2020, here are *your questions* and our answers:

1. *Please provide revised URRT and filing exhibits representing the following updates:*
  - a. *Updated 2019 risk adjustment figures communicated by L&E.*
  - b. *Correction to weighted average medical trend calculation as noted in a prior objection response.*
  - c. *Correcting URRT taxes and fees as noted in a prior objection response. Please also confirm the Profit & Risk Load and the Administrative Expense line items of URRT worksheet 2.*
  - d. *Reduced credit card fees as noted in your prior response.*

Please see attached *2021 BCBSVT Revised Exhibits 3J to 9B.xlsx* and *Revised 2021 BCBSVT URRT.xlsx*.

The updated average rate increase is 6.5 percent.

We updated the medical cost and utilization to reflect the new weights by category, as described in our response to question 5 of your June 11, 2020 request. These changes are shown on the revised exhibit 3J.

We updated the credit card fees to reflect the updated calculation described in our response to question 4 of your June 26, 2020 request. This change is reflected on the revised exhibit 7A.

We updated the 2019 risk adjustment transfer total by using the final RATEE information for BCBSVT and adjusting MVP's PLRS to arrive at the transfer amounts L&E provided via email on June 13, 2020. We also adjusted the 2021 premium increase to reflect the other changes described above. The result of this change is shown on the revised exhibit 4.

The table below demonstrates the incremental impacts to the average rate increase.

| Step                     | Average Rate Increase | Incremental Impact (multiplicative) |
|--------------------------|-----------------------|-------------------------------------|
| Filed                    | 6.340%                |                                     |
| Updated Medical Trends   | 6.470%                | 0.122%                              |
| Updated Credit Card Fees | 6.298%                | -0.162%                             |
| Updated Risk Adjustment  | 6.536%                | 0.224%                              |

We updated the URRT for the changes listed above. We also corrected the plan names, as described in our response to question 1 of your May 19, 2020 request, as well as correcting the plan adjustment factors (worksheet 2, section III) to reflect 2021 information, as noted in our response to question 5 of your June 26, 2020 request. Profit & Risk Load, Administration Expenses, and Taxes and Fees in that section of the URRT now represent the 2021 factors, matching exhibits 7A through 7C.

2. *Please provide the currently expected 2020 claims, premiums, membership, Total Adjusted Capital (TAC), and Authorized Control Level (ACL), as of 6/30/2020 and 12/31/2020 in light of the impact of COVID19.*

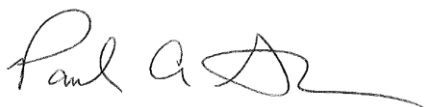
In the interest of time and completeness, we are providing two documents that are more fully responsive to this question than a literal interpretation could be, understanding that certain specific elements of your request are not directly enumerated in our response. If we have misinterpreted the intent of your inquiry, we will promptly follow up with any specific data elements you require that are not already incorporated within the attachments.

We have completed an actuarial evaluation of the effect of plausible scenarios related to the COVID-19 pandemic in 2020 and 2021 on BCBSVT's risk-based capital position. Please see attached *BCBSVT Actuarial Report\_COVID-19 Modeling.pdf*.

We have also completed a projection of RBC to December 31, 2021, based on our best knowledge at this time of significant impacts to BCBSVT's financial position over the next 18 months. The actuarial modeling of the COVID-19 impact feeds into the RBC projection. Please see attached *RBC Outlook.pdf*.

Please let us know if you have any further questions, or if we can provide additional clarity on any of the items above.

Sincerely,




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

BLUE CROSS AND BLUE SHIELD OF VERMONT  
2021 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

REVISED EXHIBIT 3J

TREND DEVELOPMENT  
PROJECTION FACTOR FOR INDEX RATE CALCULATION

| TREND FACTORS - FROM 2019 to 2020 |       |             |       |
|-----------------------------------|-------|-------------|-------|
| Claim Type                        | Cost  | Utilization | Total |
| Medical                           | 3.3%  | 3.2%        | 6.6%  |
| Pharmacy                          | 10.1% | 3.0%        | 13.4% |
| Dental                            | 0.0%  | 0.7%        | 0.7%  |
| Vision                            | 0.0%  | 0.0%        | 0.0%  |

| TREND FACTORS - FROM 2020 to 2021 |       |             |       |
|-----------------------------------|-------|-------------|-------|
| Claim Type                        | Cost  | Utilization | Total |
| Medical                           | 3.9%  | 4.1%        | 8.1%  |
| Pharmacy                          | 10.1% | 3.0%        | 13.4% |
| Dental                            | 0.0%  | 0.7%        | 0.7%  |
| Vision                            | 0.0%  | 0.0%        | 0.0%  |

| Claim Type      | Experience Allowed PMPM | Cost Trend    | Adding Cost Trend | Utilization Trend | CY 2020 Allowed PMPM |
|-----------------|-------------------------|---------------|-------------------|-------------------|----------------------|
| Medical Claims  | \$542.29                | 1.0334        | \$560.41          | 1.0316            | \$578.11             |
| Pharmacy Claims | \$134.56                | 1.1005        | \$148.08          | 1.0300            | \$152.53             |
| Dental Claims   | \$1.99                  | 1.0000        | \$1.99            | 1.0071            | \$2.00               |
| Vision claims   | \$0.10                  | 1.0000        | \$0.10            | 1.0000            | \$0.10               |
| <b>Total</b>    | <b>\$678.93</b>         | <b>1.0466</b> | <b>\$710.57</b>   | <b>1.0312</b>     | <b>\$732.74</b>      |

| Claim Type      | CY 2020 Allowed PMPM | Cost Trend    | Adding Cost Trend | Utilization Trend | CY 2021 Allowed PMPM |
|-----------------|----------------------|---------------|-------------------|-------------------|----------------------|
| Medical Claims  | \$578.11             | 1.0386        | \$600.41          | 1.0409            | \$624.94             |
| Pharmacy Claims | \$152.53             | 1.1005        | \$167.86          | 1.0300            | \$172.91             |
| Dental Claims   | \$2.00               | 1.0000        | \$2.00            | 1.0071            | \$2.02               |
| Vision claims   | \$0.10               | 1.0000        | \$0.10            | 1.0000            | \$0.10               |
| <b>Total</b>    | <b>\$732.74</b>      | <b>1.0514</b> | <b>\$770.38</b>   | <b>1.0384</b>     | <b>\$799.97</b>      |

| Cost Trend Factor | Utilization Trend Factor |
|-------------------|--------------------------|
| 1+d <sub>1</sub>  | 1+d <sub>2</sub>         |
| 1.0733            | 1.0737                   |
| 1.2111            | 1.0610                   |
| 1.0000            | 1.0142                   |
| 1.0000            | 1.0000                   |
| <b>1.1004</b>     | <b>1.0708</b>            |

RISK ADJUSTMENT CALCULATION

| Table 1                                  | Average Premium |          |              |          |
|--|-----------------|----------|--------------|----------|
|  | Merged          |          | Catastrophic |          |
|  | BCBSVT          | MVP      | BCBSVT       | MVP      |
| Scenario                                 |                 |          |              |          |
| Premium PMPM 2020                        | \$638.87        | \$562.93 | \$264.95     | \$305.91 |
| Adjust to billable member months         | 0.932           | 0.932    | 1.000        | 1.000    |
| Premium adjustment factor                | 0.86            | 0.86     | 0.86         | 0.86     |
| Projected 2021 Rate Increase             | 1.065           | 1.065    | 0.994        | 0.994    |
| Projected Statewide Average Premium 2021 | \$590.71        |          | \$227.91     |          |

| Table 2   | Plan Liability Risk Score |       |        |              |       |        |
|---|---------------------------|-------|--------|--------------|-------|--------|
|   | Merged                    |       |        | Catastrophic |       |        |
|   | BCBSVT                    | MVP   | Ratio  | BCBSVT       | MVP   | Ratio  |
| Scenario  |                           |       |        |              |       |        |
| Interim 2019  | 1.525                     | 1.162 | 1.3125 | 0.261        | 0.144 | 1.8206 |
| <i>Impact of Claims Runout &amp; Supplemental Diagnosis</i> | 1.021                     | 1.059 |        | 1.061        | 1.004 |        |
| Estimated Final 2019  | 1.558                     | 1.231 | 1.2659 | 0.277        | 0.144 | 1.9246 |
|   |                           |       |        |              |       |        |
|   |                           |       |        |              |       |        |
|   |                           |       |        |              |       |        |
|   |                           |       |        |              |       |        |
| Projected Final 2021  | 1.523                     | 1.257 | 1.2114 | 0.254        | 0.144 | 1.7624 |

| Table 3                 | Factor --> | Other Risk Adjustment Factors* |        |       |        |        |  |
|-------------------------|------------|--------------------------------|--------|-------|--------|--------|--|
|                         |            | AV                             |        | IDF   |        | ARF    |  |
|                         |            | Merged                         |        |       |        |        |  |
| Scenario                | BCBSVT     | MVP                            | BCBSVT | MVP   | BCBSVT | MVP    |  |
| Interim 2019            | 0.756      | 0.723                          | 1.065  | 1.048 | 0.9806 | 0.9840 |  |
| Estimated Final 2019    | 0.756      | 0.723                          | 1.065  | 1.048 | 0.9806 | 0.9840 |  |
| Membership Changes 2021 | 0.747      | 0.732                          | 1.061  | 1.053 | 0.9807 | 0.9840 |  |
| Projected Final 2021    | 0.747      | 0.732                          | 1.061  | 1.053 | 0.9807 | 0.9840 |  |

\*Catastrophic AV, IDF and ARF equals 0.57, 1.00 and 0.999 for both carriers in all scenarios

| Table 4                 | Risk Adjustment Transfer |              |               |
|-------------------------|--------------------------|--------------|---------------|
|                         | Merged                   | Catastrophic | Total         |
| Interim 2019            | -\$22,478,036            | -\$14,392    | -\$22,492,428 |
| Estimated Final 2019    | -\$20,258,520            | -\$15,359    | -\$20,273,879 |
| Membership Changes 2021 | -\$22,942,044            | -\$16,902    | -\$22,958,946 |
| Projected Final 2021    | -\$22,942,044            | -\$16,902    | -\$22,958,946 |

| Summary                                  |               |
|--|---------------|
| Projected Risk Adjustment Transfer       | -\$22,958,946 |
| Member Months                            | 461,052       |
| Net Projected Risk Adjustment PMPM       | -\$49.80      |
| Estimated Cost of High Risk Pool program | \$1.69        |
| Paid to Allowed Ratio (from Exh 6C)      | 75.60%        |

|  |          |
|--|----------|
| Market Wide Adjustment for the Risk Adjustment Program | -\$63.63 |
|--|----------|

INDEX RATE CALCULATION

|  |   |   | Medical         | Pharmacy        | Dental        | Vision        | Total           |
|--|---|---|-----------------|-----------------|---------------|---------------|-----------------|
| Experience   | Total Experience Period Allowed Claims PMPM                     | $a_1$   | \$539.32        | \$133.60        | \$1.97        | \$0.10        | \$674.98        |
|  | Experience Period Allowed Claims PMPM for Non-EHB               | $a_2$   | \$0.08          | \$0.00          | \$0.00        | \$0.00        | \$0.08          |
|  | Index Rate : Experience Period Allowed Claims for EHB           | A   | \$539.24        | \$133.60        | \$1.97        | \$0.10        | \$674.90        |
|  | <b>Capping experience claims</b>                                | $a_3$   | 0.9966          | 0.9966          | 0.9966        | 0.9966        | 0.9966          |
|  | Capped Experience Period Allowed Claims for EHB                 | $B = A \times a_3$  | \$537.41        | \$133.15        | \$1.97        | \$0.10        | \$672.62        |
| Morbidity  | Impact of the ACO Experience Settlement                         | $1+b_4$   | 1.0000          | 1.0000          | 1.0000        | 1.0000        | 1.0000          |
|  | Impact of Association Health Plans                              | $1+b_5$   | 0.9978          | 0.9993          | 1.0009        | 1.0060        | 0.9981          |
|  | Impact of Projected ACO Savings                                 | $1+b_6$   | 1.0000          | 1.0000          | 1.0000        | 1.0000        | 1.0000          |
|  | Changes in pool morbidity                                       | $1+b_9$   | 1.0048          | 1.0048          | 1.0048        | 1.0048        | 1.0048          |
| Other  | Impact of different benefit plans (in experience vs projection) | $1+c_1$   | 0.9963          | 0.9963          | 0.9963        | 0.9963        | 0.9963          |
|  | Changes in provider networks                                    | $1+c_2$   | 1.0000          | 1.0000          | 1.0000        | 1.0000        | 1.0000          |
|  | Changes in demographics (age, gender, region, etc.)             | $1+c_3$   | 1.0069          | 1.0069          | 1.0069        | 1.0069        | 1.0069          |
| <b>Adjusted Experience Period Allowed Claims for EHB</b>                       |   | <b>C</b>  | <b>\$540.45</b> | <b>\$134.10</b> | <b>\$1.98</b> | <b>\$0.10</b> | <b>\$676.63</b> |
| Trend  | Cost Trend  | $1+d_1$   | 1.0733          | 1.2111          | 1.0000        | 1.0000        | 1.1004          |
|  | Utilization Trend   | $1+d_2$   | 1.0737          | 1.0610          | 1.0142        | 1.0000        | 1.0708          |
| <b>Projected Period Allowed Claims for Experience EHB</b>                      |   | <b>D</b>  | <b>\$622.83</b> | <b>\$172.32</b> | <b>\$2.01</b> | <b>\$0.10</b> | <b>\$797.25</b> |
| Non-System Claims  | Projected Pharmacy Rebates                                      | $e_1$   |                 |                 |               |               | -\$29.91        |
|  | Projected Blue Print Payments                                   | $e_2$   |                 |                 |               |               | \$3.85          |
|  | Projected ITS Fees  | $e_3$   |                 |                 |               |               | \$2.65          |
|  | Projected Vaccine Payments                                      | $e_4$   |                 |                 |               |               | \$2.11          |
|  | Contractual Fees  | $e_5, e_7$ and $e_8$  |                 |                 |               |               | \$2.06          |
|  | OneCare Care Coordination Fee                                   | $e_6$   |                 |                 |               |               | \$1.63          |
| <b>Projected Index Rate : Projected Period Expected Allowed Claims for EHB</b> |   | <b>F = D + <math>\sum e_i</math></b>                                  |                 |                 |               |               | <b>\$779.64</b> |
| Market Wide Adjustments  | Risk Adjustment Payments and Fees                               | $g_1$   |                 |                 |               |               | -\$63.63        |
|  | Transitional Reinsurance Payments and Recoveries                | $g_2$   |                 |                 |               |               | \$0.00          |
|  | Vermont Exchange Fees   | $g_3$   |                 |                 |               |               | \$0.00          |
| <b>Market Adjusted Index Rate</b>  |   | <b>H = F + <math>g_1</math> + <math>g_2</math> + <math>g_3</math></b> |                 |                 |               |               | <b>\$716.01</b> |

**BLUE CROSS AND BLUE SHIELD OF VERMONT  
2021 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING**

REVISED Exhibit 6A

**PLAN LEVEL ADJUSTMENT SUMMARY**

|                           |              |                     | Market Adjusted Index Rate | Benefit Richness Adjustment | Paid to Allowed Ratio | Plan Benefits in addition to EHB | For Catastrophic Only - Impact of Eligibility | Expected Claims Cost | Administrative Charges Plan Level Adjustment | Taxes and Fees Plan Level Adjustment | Contribution to Reserve Plan Level Adjustment | Plan Level Adjusted Index Rate | Projected Membership |
|---------------------------|--------------|---------------------|----------------------------|-----------------------------|-----------------------|----------------------------------|---|----------------------|--|--------------------------------------|---|--------------------------------|----------------------|
| <b>NON-STANDARD PLANS</b> | GOLD         | Vermont Preferred   | \$716.01                   | 0.9970                      | 83.58%                | 1.0002                           | 1.0000  | \$596.76             | 1.0878                                       | 1.0148                               | 1.0183  | \$670.81                       | 1,208                |
|                           | GOLD         | Vermont Select CDHP | \$716.01                   | 1.0133                      | 86.96%                | 1.0001                           | 1.0000  | \$631.05             | 1.0836                                       | 1.0145                               | 1.0183  | \$706.44                       | 5,022                |
|                           | SILVER       | Vermont Preferred   | \$716.01                   | 0.9601                      | 86.09%                | 1.0002                           | 1.0000  | \$591.91             | 1.0882                                       | 1.0148                               | 1.0183  | \$665.63                       | 1,299                |
|                           | SILVER       | Vermont Select CDHP | \$716.01                   | 0.9661                      | 86.14%                | 1.0002                           | 1.0000  | \$595.97             | 1.0876                                       | 1.0148                               | 1.0183  | \$669.82                       | 212                  |
|                           | BRONZE       | Vermont Preferred   | \$716.01                   | 0.9379                      | 66.53%                | 1.0002                           | 1.0000  | \$446.86             | 1.1158                                       | 1.0163                               | 1.0183  | \$515.99                       | 520                  |
|                           | BRONZE       | Vermont Select CDHP | \$716.01                   | 0.9364                      | 65.87%                | 1.0002                           | 1.0000  | \$441.74             | 1.1176                                       | 1.0163                               | 1.0183  | \$510.95                       | 2,098                |
| <b>STANDARD PLANS</b>     | PLATINUM     | Deductible          | \$716.01                   | 1.0906                      | 100.07%               | 1.0001                           | 1.0000  | \$781.48             | 1.0677                                       | 1.0137                               | 1.0183  | \$861.34                       | 6,963                |
|                           | GOLD         | Deductible          | \$716.01                   | 1.0247                      | 89.16%                | 1.0001                           | 1.0000  | \$654.25             | 1.0802                                       | 1.0144                               | 1.0183  | \$730.00                       | 4,797                |
|                           | SILVER       | Deductible          | \$716.01                   | 0.9693                      | 87.46%                | 1.0002                           | 1.0000  | \$607.03             | 1.0861                                       | 1.0147                               | 1.0183  | \$681.23                       | 3,546                |
|                           | SILVER       | CDHP                | \$716.01                   | 0.9791                      | 88.21%                | 1.0001                           | 1.0000  | \$618.47             | 1.0845                                       | 1.0146                               | 1.0183  | \$693.04                       | 824                  |
|                           | BRONZE       | Deductible          | \$716.01                   | 0.9373                      | 66.28%                | 1.0002                           | 1.0000  | \$444.90             | 1.1165                                       | 1.0163                               | 1.0183  | \$514.05                       | 1,823                |
|                           | BRONZE       | CDHP                | \$716.01                   | 0.9409                      | 67.77%                | 1.0002                           | 1.0000  | \$456.62             | 1.1135                                       | 1.0161                               | 1.0183  | \$526.11                       | 1,392                |
|                           | BRONZE       | Integrated          | \$716.01                   | 0.9394                      | 67.14%                | 1.0002                           | 1.0000  | \$451.69             | 1.1146                                       | 1.0162                               | 1.0183  | \$520.96                       | 563                  |
|                           | Catastrophic | Deductible          | \$716.01                   | 0.9394                      | 67.16%                | 1.0005                           | 0.4487  | \$202.79             | 1.2512                                       | 1.0223                               | 1.0183  | \$264.14                       | 360                  |
| <b>REFLECTIVE PLANS</b>   | SILVER       | Vermont Preferred   | \$716.01                   | 0.9594                      | 74.11%                | 1.0002                           | 1.0000  | \$509.21             | 1.1021                                       | 1.0155                               | 1.0183  | \$580.35                       | 637                  |
|                           | SILVER       | Vermont Select CDHP | \$716.01                   | 0.9652                      | 75.79%                | 1.0002                           | 1.0000  | \$523.87             | 1.0998                                       | 1.0154                               | 1.0183  | \$595.75                       | 661                  |
|                           | SILVER       | Deductible          | \$716.01                   | 0.9688                      | 76.78%                | 1.0002                           | 1.0000  | \$532.75             | 1.0978                                       | 1.0153                               | 1.0183  | \$604.68                       | 4,586                |
|                           | SILVER       | CDHP                | \$716.01                   | 0.9789                      | 79.37%                | 1.0002                           | 1.0000  | \$556.38             | 1.0938                                       | 1.0151                               | 1.0183  | \$629.09                       | 1,910                |
| <b>Total</b>              |              |                     | \$716.01                   |                             |                       |                                  |   | \$602.19             |  |                                      |   | \$676.38                       | 38,421               |

**BLUE CROSS AND BLUE SHIELD OF VERMONT  
2021 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING**

REVISED Exhibit 6B

**PLAN LEVEL ADJUSTMENT  
BENEFIT RICHNESS ADJUSTMENT FACTOR**

|                       |                        |                          | Base Paid to<br>Allowed Ratio<br>before Silver<br>Load | Benefit<br>Richness<br>Adjustment for<br>EHB | Normalized<br>Benefit<br>Richness<br>Adjustment for<br>EHB | For<br>Catastrophic<br>Only - Impact<br>of Eligibility | Projected<br>Period Paid<br>Claims for<br>Experience EHB | Benefit<br>Richness<br>Adjustment for<br>EHB | Non-System<br>Claims | Market Wide<br>Adjustments | Total Paid<br>Claims with<br>Benefit<br>Richness<br>Adjustment | Overall Benefit<br>Richness<br>Adjustment | Projected<br>Membership |
|-----------------------|------------------------|--------------------------|--|--|--|--|--|--|----------------------|----------------------------|--|---|-------------------------|
| NON-STANDARD<br>PLANS | GOLD                   | Vermont Preferred        | 76.64%   | 1.0609                                       | 0.9973   | 1.000  | \$664.17   | 0.9973                                       | -\$17.62             | -\$48.11                   | \$596.67   | 0.9970                                    | 1,208                   |
|                       | GOLD                   | Vermont Select CDHP      | 79.43%   | 1.0766                                       | 1.0121   | 1.000  | \$688.38   | 1.0121                                       | -\$17.62             | -\$48.11                   | \$630.96   | 1.0133                                    | 5,022                   |
|                       | SILVER                 | Vermont Preferred        | 68.81%   | 1.0254                                       | 0.9639   | 1.000  | \$682.16   | 0.9639                                       | -\$17.62             | -\$48.11                   | \$591.82   | 0.9601                                    | 1,299                   |
|                       | SILVER                 | Vermont Select CDHP      | 70.29%   | 1.0312                                       | 0.9693   | 1.000  | \$682.52   | 0.9693                                       | -\$17.62             | -\$48.11                   | \$595.88   | 0.9661                                    | 212                     |
|                       | BRONZE                 | Vermont Preferred        | 62.55%   | 1.0057                                       | 0.9454   | 1.000  | \$542.07   | 0.9454                                       | -\$17.62             | -\$48.11                   | \$446.77   | 0.9379                                    | 520                     |
|                       | BRONZE                 | Vermont Select CDHP      | 62.00%   | 1.0044                                       | 0.9442   | 1.000  | \$537.36   | 0.9442                                       | -\$17.62             | -\$48.11                   | \$441.65   | 0.9364                                    | 2,098                   |
| STANDARD PLANS        | PLATINUM               | Deductible               | 90.26%   | 1.1521                                       | 1.0830   | 1.000  | \$782.21   | 1.0830                                       | -\$17.62             | -\$48.11                   | \$781.39   | 1.0906                                    | 6,963                   |
|                       | GOLD                   | Deductible               | 81.24%   | 1.0876                                       | 1.0224   | 1.000  | \$704.10   | 1.0224                                       | -\$17.62             | -\$48.11                   | \$654.15   | 1.0247                                    | 4,797                   |
|                       | SILVER                 | Deductible               | 71.02%   | 1.0342                                       | 0.9722   | 1.000  | \$691.91   | 0.9722                                       | -\$17.62             | -\$48.11                   | \$606.94   | 0.9693                                    | 3,546                   |
|                       | SILVER                 | CDHP                     | 73.16%   | 1.0436                                       | 0.9811   | 1.000  | \$697.31   | 0.9811                                       | -\$17.62             | -\$48.11                   | \$618.38   | 0.9791                                    | 824                     |
|                       | BRONZE                 | Deductible               | 62.34%   | 1.0052                                       | 0.9449   | 1.000  | \$540.27   | 0.9449                                       | -\$17.62             | -\$48.11                   | \$444.80   | 0.9373                                    | 1,823                   |
|                       | BRONZE                 | CDHP                     | 63.57%   | 1.0084                                       | 0.9479   | 1.000  | \$550.93   | 0.9479                                       | -\$17.62             | -\$48.11                   | \$456.53   | 0.9409                                    | 1,392                   |
|                       | BRONZE<br>Catastrophic | Integrated<br>Deductible | 63.06%<br>63.07%                                       | 1.0070<br>1.0071                             | 0.9467<br>0.9467   | 1.000<br>0.449   | \$546.47<br>\$546.58                                     | 0.9467<br>0.9467                             | -\$17.62<br>-\$17.62 | -\$48.11<br>-\$48.11       | \$451.60<br>\$451.72   | 0.9394<br>0.9394                          | 563<br>360              |
| REFLECTIV<br>E PLANS  | SILVER                 | Vermont Preferred        | 68.81%   | 1.0254                                       | 0.9639   | 1.000  | \$596.37   | 0.9639                                       | -\$17.62             | -\$48.11                   | \$509.12   | 0.9594                                    | 637                     |
|                       | SILVER                 | Vermont Select CDHP      | 70.20%   | 1.0308                                       | 0.9690   | 1.000  | \$608.37   | 0.9690                                       | -\$17.62             | -\$48.11                   | \$523.78   | 0.9652                                    | 661                     |
|                       | SILVER                 | Deductible               | 71.02%   | 1.0342                                       | 0.9722   | 1.000  | \$615.51   | 0.9722                                       | -\$17.62             | -\$48.11                   | \$532.66   | 0.9688                                    | 4,586                   |
|                       | SILVER                 | CDHP                     | 73.16%   | 1.0436                                       | 0.9810   | 1.000  | \$634.03   | 0.9810                                       | -\$17.62             | -\$48.11                   | \$556.29   | 0.9789                                    | 1,910                   |
| <b>Total</b>          |                        |                          |  | <b>1.0638</b>                                |  |  |  | <b>1.0000</b>                                |                      |                            |  | <b>0.9994</b>                             | <b>38,421</b>           |

BLUE CROSS AND BLUE SHIELD OF VERMONT  
2021 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

REVISED Exhibit 6C

PLAN LEVEL ADJUSTMENT  
PAID TO ALLOWED RATIOS

|                       |              |                     | Projected<br>Period Allowed<br>Claims for<br>Experience EHB | Paid to Allowed<br>Ratio for EHB<br>Portion | Impact of silver<br>loading | Impact of<br>selection | Projected<br>Period Paid<br>Claims for<br>Experience EHB | Non-System<br>Claims | Market Wide<br>Adjustments<br>(Paid) | Market Wide<br>Adjustments<br>(Allowed) | Market<br>Adjusted Index<br>Rate | Total Paid<br>Claims | Paid to Allowed<br>Ratio | Projected<br>Membership |
|-----------------------|--------------|---------------------|---|---|-----------------------------|------------------------|--|----------------------|--------------------------------------|---|----------------------------------|----------------------|--------------------------|-------------------------|
| NON-STANDARD<br>PLANS | GOLD         | Vermont Preferred   | \$797.25  | 76.64%                                      | 100.00%                     | 108.71%                | \$664.17   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$598.44             | 83.58%                   | 1,208                   |
|                       | GOLD         | Vermont Select CDHP | \$797.25  | 79.43%                                      | 100.00%                     | 108.71%                | \$688.38   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$622.66             | 86.96%                   | 5,022                   |
|                       | SILVER       | Vermont Preferred   | \$797.25  | 68.81%                                      | 114.39%                     | 108.71%                | \$682.16   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$616.44             | 86.09%                   | 1,299                   |
|                       | SILVER       | Vermont Select CDHP | \$797.25  | 70.29%                                      | 112.03%                     | 108.71%                | \$682.52   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$616.80             | 86.14%                   | 212                     |
|                       | BRONZE       | Vermont Preferred   | \$797.25  | 62.55%                                      | 100.00%                     | 108.71%                | \$542.07   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$476.34             | 66.53%                   | 520                     |
|                       | BRONZE       | Vermont Select CDHP | \$797.25  | 62.00%                                      | 100.00%                     | 108.71%                | \$537.36   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$471.64             | 65.87%                   | 2,098                   |
| STANDARD PLANS        | PLATINUM     | Deductible          | \$797.25  | 90.26%                                      | 100.00%                     | 108.71%                | \$782.21   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$716.49             | 100.07%                  | 6,963                   |
|                       | GOLD         | Deductible          | \$797.25  | 81.24%                                      | 100.00%                     | 108.71%                | \$704.10   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$638.38             | 89.16%                   | 4,797                   |
|                       | SILVER       | Deductible          | \$797.25  | 71.02%                                      | 112.41%                     | 108.71%                | \$691.91   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$626.19             | 87.46%                   | 3,546                   |
|                       | SILVER       | CDHP                | \$797.25  | 73.16%                                      | 109.98%                     | 108.71%                | \$697.31   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$631.59             | 88.21%                   | 824                     |
|                       | BRONZE       | Deductible          | \$797.25  | 62.34%                                      | 100.00%                     | 108.71%                | \$540.27   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$474.55             | 66.28%                   | 1,823                   |
|                       | BRONZE       | CDHP                | \$797.25  | 63.57%                                      | 100.00%                     | 108.71%                | \$550.93   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$485.21             | 67.77%                   | 1,392                   |
|                       | BRONZE       | Integrated          | \$797.25  | 63.06%                                      | 100.00%                     | 108.71%                | \$546.47   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$480.75             | 67.14%                   | 563                     |
|                       | Catastrophic | Deductible          | \$797.25  | 63.07%                                      | 100.00%                     | 108.71%                | \$546.58   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$480.86             | 67.16%                   | 360                     |
| REFLECTIV<br>E PLANS  | SILVER       | Vermont Preferred   | \$797.25  | 68.81%                                      | 100.00%                     | 108.71%                | \$596.37   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$530.64             | 74.11%                   | 637                     |
|                       | SILVER       | Vermont Select CDHP | \$797.25  | 70.20%                                      | 100.00%                     | 108.71%                | \$608.37   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$542.65             | 75.79%                   | 661                     |
|                       | SILVER       | Deductible          | \$797.25  | 71.02%                                      | 100.00%                     | 108.71%                | \$615.51   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$549.79             | 76.78%                   | 4,586                   |
|                       | SILVER       | CDHP                | \$797.25  | 73.16%                                      | 100.00%                     | 108.71%                | \$634.03   | -\$17.62             | -\$48.11                             | -\$63.63                                | \$716.01                         | \$568.31             | 79.37%                   | 1,910                   |
|                       | Total        |                     |   | \$797.25                                    | 75.60%                      | 101.91%                | 108.71%  | \$666.92             | -\$17.62                             | -\$48.11                                | -\$63.63                         | \$716.01             | \$601.20                 | 83.96%                  |



PLAN LEVEL ADJUSTMENTS

IMPACT OF SPECIFIC ELIGIBILITY CATEGORIES FOR THE CATASTROPHIC PLAN

|   | Percent of Eligible<br>Population | Projected Allowed<br>Charges for<br>Experience EHB | Paid to<br>Allowed Ratio<br>for EHB Claims | Projected Paid<br>Claims for EHB<br>Claims |
|---|-----------------------------------|--|--|--|
| Average Population  | 100.0%                            | \$797.25   | 63.1%                                      | \$502.81                                   |
| Individual Ages 30 or Less                                      | ██████                            | ██████   | ██████                                     | ██████                                     |
| Individual Ages over 30   | ██████                            | ██████   | ██████                                     | ██████                                     |
| Weighted Average  |                                   | \$445.75   | 58.5%                                      | \$260.83                                   |
| <i>Allowed Charges Adjustment</i>                               |                                   | 0.5591   |  |  |
| <i>Paid to Allowed Ratio Adjustment</i>                         |                                   |  | 0.9278                                     |  |
| <u>Plan Level Adjustment Calculation</u>                        |                                   |  |  |  |
| Projected Period Allowed Claims for Experience EHB              |                                   | \$797.25   |  |  |
| Paid to Allowed Ratio for EHB Portion                           |                                   | 68.6%  |  |  |
| Benefit Richness Adjustment for EHB                             |                                   | 0.9467   |  |  |
| <i>Adjustment for Allowed Charges and Paid to Allowed Ratio</i> |                                   | 0.5187   |  |  |
| Projected Period Paid Claims for Experience EHB                 |                                   | \$268.42   |  |  |
| Non-System Claims   |                                   | -\$17.62   |  |  |
| Market Wide Adjustments   |                                   | -\$48.11   |  |  |
| Plans Benefits in addition to EHB                               |                                   | \$0.09   |  |  |
| Expected Claims Cost  |                                   | \$202.79   |  |  |
| Market Adjusted Index Rate                                      |                                   | \$716.01   |  |  |
| Paid to Allowed Ratio   |                                   | 67.2%  |  |  |
| Benefit Richness Adjustment                                     |                                   | 0.9394   |  |  |
| Plan Benefits in addition to EHB                                |                                   | 1.0005   |  |  |
| For Catastrophic Only - Impact of Eligibility                   |                                   | 0.4487   |  |  |
| Expected Claims Cost  |                                   | \$202.79   |  |  |
| <b>Total Adjustment for Catastrophic Plan</b>                   |                                   |  | <b>0.4487</b>                              |  |

BLUE CROSS AND BLUE SHIELD OF VERMONT  
2021 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

REVISED Exhibit 6E

IMPACT OF SELECTION

|                    |          |                         | Projected Paid Claims - Using HHS Induced Utilization Factor |                             |  |   |                       | Projected Paid Claims - Using BCBSVT Induced Utilization Factor |                             |  |                       |                      |
|--------------------|----------|-------------------------|--|-----------------------------|--|---|-----------------------|---|-----------------------------|--|-----------------------|----------------------|
|                    |          |                         | Projected FFS Allowed Charges - Without Selection            | Benefit Richness Adjustment | Actuarial Value from Standard Population | For Catastrophic Plan only - Impact of the specific eligibility | Projected Paid Claims | Projected FFS Allowed Charges - Without Selection               | Benefit Richness Adjustment | Actuarial Value from BCBSVT Population | Projected Paid Claims | Projected Membership |
| NON-STANDARD PLANS | GOLD     | Vermont Preferred       | \$797.25   | 0.9973                      | 76.64%                                   | 1.0000  | \$609.35              | \$797.25  | 1.0295                      | 83.54%                                 | \$685.63              | 1,208                |
|                    | GOLD     | Vermont Select CDHP     | \$797.25   | 1.0121                      | 79.43%                                   | 1.0000  | \$640.89              | \$797.25  | 1.2977                      | 86.46%                                 | \$894.53              | 5,022                |
|                    | SILVER   | Vermont Preferred       | \$797.25   | 0.9639                      | 68.81%                                   | 1.0000  | \$528.81              | \$797.25  | 1.0623                      | 76.44%                                 | \$647.39              | 1,299                |
|                    | SILVER   | Vermont Select CDHP     | \$797.25   | 0.9693                      | 70.29%                                   | 1.0000  | \$543.24              | \$797.25  | 1.0623                      | 75.67%                                 | \$640.88              | 212                  |
|                    | BRONZE   | Vermont Preferred       | \$797.25   | 0.9454                      | 62.55%                                   | 1.0000  | \$471.45              | \$797.25  | 0.5902                      | 69.00%                                 | \$324.66              | 520                  |
|                    | BRONZE   | Vermont Select CDHP     | \$797.25   | 0.9442                      | 62.00%                                   | 1.0000  | \$466.74              | \$797.25  | 0.5902                      | 67.52%                                 | \$317.71              | 2,098                |
| STANDARD PLANS     | PLATINUM | Deductible              | \$797.25   | 1.0830                      | 90.26%                                   | 1.0000  | \$779.27              | \$797.25  | 1.3866                      | 93.50%                                 | \$1,033.55            | 6,963                |
|                    | GOLD     | Deductible              | \$797.25   | 1.0224                      | 81.24%                                   | 1.0000  | \$662.23              | \$797.25  | 1.0295                      | 84.08%                                 | \$690.10              | 4,797                |
|                    | SILVER   | Deductible              | \$797.25   | 0.9722                      | 71.02%                                   | 1.0000  | \$550.47              | \$797.25  | 1.0623                      | 76.25%                                 | \$645.80              | 3,546                |
|                    | SILVER   | CDHP                    | \$797.25   | 0.9811                      | 73.16%                                   | 1.0000  | \$572.24              | \$797.25  | 1.0623                      | 78.00%                                 | \$660.62              | 824                  |
|                    | BRONZE   | Deductible              | \$797.25   | 0.9449                      | 62.34%                                   | 1.0000  | \$469.64              | \$797.25  | 0.5902                      | 67.76%                                 | \$318.83              | 1,823                |
|                    | BRONZE   | CDHP                    | \$797.25   | 0.9479                      | 63.57%                                   | 1.0000  | \$480.43              | \$797.25  | 0.5902                      | 68.66%                                 | \$323.06              | 1,392                |
|                    | BRONZE   | Integrated Catastrophic | \$797.25   | 0.9467                      | 63.06%                                   | 1.0000  | \$475.89              | \$797.25  | 0.5902                      | 69.51%                                 | \$327.07              | 563                  |
| REFLECTIVE PLANS   | SILVER   | Vermont Preferred       | \$797.25   | 0.9639                      | 68.81%                                   | 1.0000  | \$528.81              | \$797.25  | 0.7594                      | 72.80%                                 | \$440.72              | 637                  |
|                    | SILVER   | Vermont Select CDHP     | \$797.25   | 0.9690                      | 70.20%                                   | 1.0000  | \$542.29              | \$797.25  | 0.7594                      | 71.43%                                 | \$432.46              | 661                  |
|                    | SILVER   | Deductible              | \$797.25   | 0.9722                      | 71.02%                                   | 1.0000  | \$550.46              | \$797.25  | 0.7594                      | 73.07%                                 | \$442.36              | 4,586                |
|                    | SILVER   | CDHP                    | \$797.25   | 0.9810                      | 73.16%                                   | 1.0000  | \$572.20              | \$797.25  | 0.7594                      | 74.91%                                 | \$453.50              | 1,910                |
| <b>Total</b>       |          |                         |  |                             |  |   | <b>\$603.88</b>       |   |                             |  | <b>\$656.45</b>       | <b>38,421</b>        |

Impact of Selection = \$656.45 / \$603.88 1.0871

BLUE CROSS AND BLUE SHIELD OF VERMONT  
2021 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

REVISED Exhibit 7A

DETAILS OF ADMINISTRATIVE CHARGES

|                       |              |                     | BCBSVT Base<br>Administrative<br>Charges | Administrative<br>Charges for<br>Outside<br>Vendors | VHC Billing   | Credit Card<br>Fees | Total<br>Administrative<br>Charges PMPM | Administrative<br>Charges Plan<br>Level<br>Adjustment | Administrative<br>Charges as a<br>percent of<br>Premium | Projected<br>Membership |
|-----------------------|--------------|---------------------|--|---|---------------|---------------------|---|---|---|-------------------------|
| NON-STANDARD<br>PLANS | GOLD         | Vermont Preferred   | \$48.85                                  | \$0.48  | \$0.94        | \$2.10              | \$52.37                                 | 1.0878  | 7.81%   | 1,208                   |
|                       | GOLD         | Vermont Select CDHP | \$48.85                                  | \$0.73  | \$0.94        | \$2.21              | \$52.74                                 | 1.0836  | 7.47%   | 5,022                   |
|                       | SILVER       | Vermont Preferred   | \$48.85                                  | \$0.31  | \$0.94        | \$2.09              | \$52.19                                 | 1.0882  | 7.84%   | 1,299                   |
|                       | SILVER       | Vermont Select CDHP | \$48.85                                  | \$0.31  | \$0.94        | \$2.10              | \$52.20                                 | 1.0876  | 7.79%   | 212                     |
|                       | BRONZE       | Vermont Preferred   | \$48.85                                  | \$0.34  | \$0.94        | \$1.62              | \$51.74                                 | 1.1158  | 10.03%  | 520                     |
|                       | BRONZE       | Vermont Select CDHP | \$48.85                                  | \$0.58  | \$0.94        | \$1.60              | \$51.97                                 | 1.1176  | 10.17%  | 2,098                   |
| STANDARD PLANS        | PLATINUM     | Deductible          | \$48.85                                  | \$0.42  | \$0.94        | \$2.70              | \$52.91                                 | 1.0677  | 6.14%   | 6,963                   |
|                       | GOLD         | Deductible          | \$48.85                                  | \$0.36  | \$0.94        | \$2.29              | \$52.44                                 | 1.0802  | 7.18%   | 4,797                   |
|                       | SILVER       | Deductible          | \$48.85                                  | \$0.31  | \$0.94        | \$2.13              | \$52.24                                 | 1.0861  | 7.67%   | 3,546                   |
|                       | SILVER       | CDHP                | \$48.85                                  | \$0.32  | \$0.94        | \$2.17              | \$52.28                                 | 1.0845  | 7.54%   | 824                     |
|                       | BRONZE       | Deductible          | \$48.85                                  | \$0.42  | \$0.94        | \$1.61              | \$51.82                                 | 1.1165  | 10.08%  | 1,823                   |
|                       | BRONZE       | CDHP                | \$48.85                                  | \$0.38  | \$0.94        | \$1.65              | \$51.81                                 | 1.1135  | 9.85%   | 1,392                   |
|                       | BRONZE       | Integrated          | \$48.85                                  | \$0.32  | \$0.94        | \$1.63              | \$51.75                                 | 1.1146  | 9.93%   | 563                     |
|                       | Catastrophic | Deductible          | \$48.85                                  | \$0.31  | \$0.94        | \$0.83              | \$50.93                                 | 1.2512  | 19.28%  | 360                     |
| REFLECTIV<br>E PLANS  | SILVER       | Vermont Preferred   | \$48.85                                  | \$0.36  | \$0.94        | \$1.82              | \$51.97                                 | 1.1021  | 8.96%   | 637                     |
|                       | SILVER       | Vermont Select CDHP | \$48.85                                  | \$0.63  | \$0.94        | \$1.87              | \$52.29                                 | 1.0998  | 8.78%   | 661                     |
|                       | SILVER       | Deductible          | \$48.85                                  | \$0.40  | \$0.94        | \$1.89              | \$52.08                                 | 1.0978  | 8.61%   | 4,586                   |
|                       | SILVER       | CDHP                | \$48.85                                  | \$0.42  | \$0.94        | \$1.97              | \$52.19                                 | 1.0938  | 8.30%   | 1,910                   |
|                       |              | <b>Total</b>        | <b>\$48.85</b>                           | <b>\$0.44</b>                                       | <b>\$0.94</b> | <b>\$2.12</b>       | <b>\$52.35</b>                          | <b>1.0869</b>   | <b>7.74%</b>  | <b>38,421</b>           |

BLUE CROSS AND BLUE SHIELD OF VERMONT  
2021 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

REVISED Exhibit 7B

DETAILS OF CONTRIBUTION TO RESERVE

|                               |              |                     | BCBSVT<br>Contribution to<br>Reserve | Risk Margin for<br>Bad Debt | Total<br>Contribution to<br>Reserve PMPM | Contribution to<br>Reserve and<br>Risk Margin<br>Plan Level<br>Adjustment | Contribution to<br>Reserve as a<br>percent of<br>Premium | Risk Margin Bad<br>Debt as a<br>percent of<br>Premium | Projected<br>Membership |
|-------------------------------|--------------|---------------------|--------------------------------------|-----------------------------|--|---|--|---|-------------------------|
| <b>NON-STANDARD<br/>PLANS</b> | GOLD         | Vermont Preferred   | \$10.06                              | \$2.01                      | \$12.07                                  | 1.0183  | 1.50%  | 0.30%   | 1,208                   |
|                               | GOLD         | Vermont Select CDHP | \$10.60                              | \$2.12                      | \$12.72                                  | 1.0183  | 1.50%  | 0.30%   | 5,022                   |
|                               | SILVER       | Vermont Preferred   | \$9.98                               | \$2.00                      | \$11.98                                  | 1.0183  | 1.50%  | 0.30%   | 1,299                   |
|                               | SILVER       | Vermont Select CDHP | \$10.05                              | \$2.01                      | \$12.06                                  | 1.0183  | 1.50%  | 0.30%   | 212                     |
|                               | BRONZE       | Vermont Preferred   | \$7.74                               | \$1.55                      | \$9.29                                   | 1.0183  | 1.50%  | 0.30%   | 520                     |
|                               | BRONZE       | Vermont Select CDHP | \$7.66                               | \$1.53                      | \$9.20                                   | 1.0183  | 1.50%  | 0.30%   | 2,098                   |
| <b>STANDARD PLANS</b>         | PLATINUM     | Deductible          | \$12.92                              | \$2.58                      | \$15.50                                  | 1.0183  | 1.50%  | 0.30%   | 6,963                   |
|                               | GOLD         | Deductible          | \$10.95                              | \$2.19                      | \$13.14                                  | 1.0183  | 1.50%  | 0.30%   | 4,797                   |
|                               | SILVER       | Deductible          | \$10.22                              | \$2.04                      | \$12.26                                  | 1.0183  | 1.50%  | 0.30%   | 3,546                   |
|                               | SILVER       | CDHP                | \$10.40                              | \$2.08                      | \$12.47                                  | 1.0183  | 1.50%  | 0.30%   | 824                     |
|                               | BRONZE       | Deductible          | \$7.71                               | \$1.54                      | \$9.25                                   | 1.0183  | 1.50%  | 0.30%   | 1,823                   |
|                               | BRONZE       | CDHP                | \$7.89                               | \$1.58                      | \$9.47                                   | 1.0183  | 1.50%  | 0.30%   | 1,392                   |
|                               | BRONZE       | Integrated          | \$7.81                               | \$1.56                      | \$9.38                                   | 1.0183  | 1.50%  | 0.30%   | 563                     |
|                               | Catastrophic | Deductible          | \$3.96                               | \$0.79                      | \$4.75                                   | 1.0183  | 1.50%  | 0.30%   | 360                     |
| <b>REFLECTIV<br/>E PLANS</b>  | SILVER       | Vermont Preferred   | \$8.71                               | \$1.74                      | \$10.45                                  | 1.0183  | 1.50%  | 0.30%   | 637                     |
|                               | SILVER       | Vermont Select CDHP | \$8.94                               | \$1.79                      | \$10.72                                  | 1.0183  | 1.50%  | 0.30%   | 661                     |
|                               | SILVER       | Deductible          | \$9.07                               | \$1.81                      | \$10.88                                  | 1.0183  | 1.50%  | 0.30%   | 4,586                   |
|                               | SILVER       | CDHP                | \$9.44                               | \$1.89                      | \$11.32                                  | 1.0183  | 1.50%  | 0.30%   | 1,910                   |
| <b>Total</b>                  |              |                     | <b>\$10.15</b>                       | <b>\$2.03</b>               | <b>\$12.17</b>                           | <b>1.0183</b>   | <b>1.50%</b>   | <b>0.30%</b>  | <b>38,421</b>           |

BLUE CROSS AND BLUE SHIELD OF VERMONT  
2021 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

REVISED Exhibit 7C

DETAILS OF TAXES AND FEES

|                    |              |                     | 0.800%                  | 0.199%           |                |                            |                     |                          |                           |                                      |  |                      |
|--------------------|--------------|---------------------|-------------------------|------------------|----------------|----------------------------|---------------------|--------------------------|---------------------------|--------------------------------------|--|----------------------|
|                    |              |                     | State Assessment - HCCA | State Tax - VITL | GMCB Billbacks | Federal Assessment - PCORI | Federal Insurer Fee | Risk Adjustment User Fee | Total Taxes and Fees PMPM | Taxes and Fees Plan Level Adjustment | Taxes and Fees as a percent of Premium | Projected Membership |
| NON-STANDARD PLANS | GOLD         | Vermont Preferred   | \$5.32                  | \$1.32           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$9.60                    | 1.0148                               | 1.43%                                  | 1,208                |
|                    | GOLD         | Vermont Select CDHP | \$5.59                  | \$1.39           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$9.94                    | 1.0145                               | 1.41%                                  | 5,022                |
|                    | SILVER       | Vermont Preferred   | \$5.28                  | \$1.31           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$9.55                    | 1.0148                               | 1.43%                                  | 1,299                |
|                    | SILVER       | Vermont Select CDHP | \$5.31                  | \$1.32           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$9.59                    | 1.0148                               | 1.43%                                  | 212                  |
|                    | BRONZE       | Vermont Preferred   | \$4.12                  | \$1.03           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$8.10                    | 1.0163                               | 1.57%                                  | 520                  |
|                    | BRONZE       | Vermont Select CDHP | \$4.08                  | \$1.01           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$8.05                    | 1.0163                               | 1.58%                                  | 2,098                |
| STANDARD PLANS     | PLATINUM     | Deductible          | \$6.80                  | \$1.69           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$11.45                   | 1.0137                               | 1.33%                                  | 6,963                |
|                    | GOLD         | Deductible          | \$5.78                  | \$1.44           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$10.17                   | 1.0144                               | 1.39%                                  | 4,797                |
|                    | SILVER       | Deductible          | \$5.40                  | \$1.34           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$9.70                    | 1.0147                               | 1.42%                                  | 3,546                |
|                    | SILVER       | CDHP                | \$5.49                  | \$1.37           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$9.82                    | 1.0146                               | 1.42%                                  | 824                  |
|                    | BRONZE       | Deductible          | \$4.11                  | \$1.02           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$8.08                    | 1.0163                               | 1.57%                                  | 1,823                |
|                    | BRONZE       | CDHP                | \$4.20                  | \$1.04           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$8.20                    | 1.0161                               | 1.56%                                  | 1,392                |
|                    | BRONZE       | Integrated          | \$4.16                  | \$1.03           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$8.15                    | 1.0162                               | 1.56%                                  | 563                  |
|                    | Catastrophic | Deductible          | \$2.17                  | \$0.54           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$5.66                    | 1.0223                               | 2.14%                                  | 360                  |
| REFLECTIVE PLANS   | SILVER       | Vermont Preferred   | \$4.62                  | \$1.15           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$8.73                    | 1.0155                               | 1.50%                                  | 637                  |
|                    | SILVER       | Vermont Select CDHP | \$4.74                  | \$1.18           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$8.87                    | 1.0154                               | 1.49%                                  | 661                  |
|                    | SILVER       | Deductible          | \$4.81                  | \$1.20           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$8.96                    | 1.0153                               | 1.48%                                  | 4,586                |
|                    | SILVER       | CDHP                | \$5.00                  | \$1.24           | \$2.54         | \$0.24                     | \$0.00              | \$0.18                   | \$9.20                    | 1.0151                               | 1.46%                                  | 1,910                |
|                    | <b>Total</b> |                     |                         | <b>\$5.36</b>    | <b>\$1.33</b>  | <b>\$2.54</b>              | <b>\$0.24</b>       | <b>\$0.00</b>            | <b>\$0.18</b>             | <b>\$9.65</b>                        | <b>1.0147</b>                          | <b>1.43%</b>         |

BLUE CROSS AND BLUE SHIELD OF VERMONT  
2021 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

REVISED Exhibit 8

FEDERAL MINIMUM LOSS RATIO for COMBINED MARKET  
(PROJECTION)

|                               |              |                     | Expected<br>Direct Claims<br>PMPM | Risk<br>Adjustment<br>Transfer<br>Payments<br>PMPM | Adjustments<br>for Health Care<br>Quality PMPM* | MLR Claims      | Premium PMPM    | Taxes & Fees<br>PMPM | MLR Premium     | Expected Loss<br>Ratio | Projected<br>Membership |
|-------------------------------|--------------|---------------------|-----------------------------------|--|---|-----------------|-----------------|----------------------|-----------------|------------------------|-------------------------|
| <b>NON-STANDARD<br/>PLANS</b> | GOLD         | Vermont Preferred   | \$646.64                          | -\$48.11   | \$3.16  | \$601.69        | \$670.81        | -\$4.28              | \$666.53        | 90.3%                  | 1,208                   |
|                               | GOLD         | Vermont Select CDHP | \$681.20                          | -\$48.11   | \$3.17  | \$636.27        | \$706.44        | -\$4.35              | \$702.10        | 90.6%                  | 5,022                   |
|                               | SILVER       | Vermont Preferred   | \$641.75                          | -\$48.11   | \$3.15  | \$596.79        | \$665.63        | -\$4.27              | \$661.36        | 90.2%                  | 1,299                   |
|                               | SILVER       | Vermont Select CDHP | \$645.84                          | -\$48.11   | \$3.15  | \$600.88        | \$669.82        | -\$4.28              | \$665.54        | 90.3%                  | 212                     |
|                               | BRONZE       | Vermont Preferred   | \$495.54                          | -\$48.11   | \$3.15  | \$450.58        | \$515.99        | -\$3.98              | \$512.01        | 88.0%                  | 520                     |
|                               | BRONZE       | Vermont Select CDHP | \$490.38                          | -\$48.11   | \$3.16  | \$445.44        | \$510.95        | -\$3.97              | \$506.98        | 87.9%                  | 2,098                   |
| <b>STANDARD PLANS</b>         | PLATINUM     | Deductible          | \$832.84                          | -\$48.11   | \$3.15  | \$787.89        | \$861.34        | -\$4.65              | \$856.69        | 92.0%                  | 6,963                   |
|                               | GOLD         | Deductible          | \$704.59                          | -\$48.11   | \$3.15  | \$659.63        | \$730.00        | -\$4.39              | \$725.60        | 90.9%                  | 4,797                   |
|                               | SILVER       | Deductible          | \$656.99                          | -\$48.11   | \$3.15  | \$612.03        | \$681.23        | -\$4.30              | \$676.93        | 90.4%                  | 3,546                   |
|                               | SILVER       | CDHP                | \$668.53                          | -\$48.11   | \$3.15  | \$623.57        | \$693.04        | -\$4.32              | \$688.72        | 90.5%                  | 824                     |
|                               | BRONZE       | Deductible          | \$493.56                          | -\$48.11   | \$3.15  | \$448.61        | \$514.05        | -\$3.98              | \$510.08        | 87.9%                  | 1,823                   |
|                               | BRONZE       | CDHP                | \$505.38                          | -\$48.11   | \$3.15  | \$460.43        | \$526.11        | -\$4.00              | \$522.11        | 88.2%                  | 1,392                   |
|                               | BRONZE       | Integrated          | \$500.41                          | -\$48.11   | \$3.15  | \$455.45        | \$520.96        | -\$3.99              | \$516.97        | 88.1%                  | 563                     |
|                               | Catastrophic | Deductible          | \$249.52                          | -\$48.11   | \$3.15  | \$204.56        | \$264.14        | -\$3.50              | \$260.64        | 78.5%                  | 360                     |
| <b>REFLECTIVE<br/>PLANS</b>   | SILVER       | Vermont Preferred   | \$558.39                          | -\$48.11   | \$3.15  | \$513.43        | \$580.35        | -\$4.11              | \$576.25        | 89.1%                  | 637                     |
|                               | SILVER       | Vermont Select CDHP | \$573.17                          | -\$48.11   | \$3.17  | \$528.23        | \$595.75        | -\$4.13              | \$591.62        | 89.3%                  | 661                     |
|                               | SILVER       | Deductible          | \$582.12                          | -\$48.11   | \$3.15  | \$537.16        | \$604.68        | -\$4.15              | \$600.52        | 89.4%                  | 4,586                   |
|                               | SILVER       | CDHP                | \$605.94                          | -\$48.11   | \$3.15  | \$560.99        | \$629.09        | -\$4.20              | \$624.89        | 89.8%                  | 1,910                   |
| <b>Total</b>                  |              |                     | <b>\$652.12</b>                   | <b>-\$48.11</b>                                    | <b>\$3.16</b>                                   | <b>\$607.17</b> | <b>\$676.38</b> | <b>-\$4.29</b>       | <b>\$672.08</b> | <b>90.3%</b>           | <b>38,421</b>           |

\*Approximately 6.4% of current BCBSVT Administrative Charges are for health care quality

BLUE CROSS AND BLUE SHIELD OF VERMONT  
2021 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

REVISED Exhibit 9A

CONTRACT CONVERSION FACTOR

|                    |              |                     | Projected Membership | Plan Level Adjusted Index Rate | Average Members per Subscribers | Average Tier Factor | Ratio of Members per Subscribers to Tier Factor | Preliminary Rates |             |                           |             | Projected Contracts |             |                           |             |
|--------------------|--------------|---------------------|----------------------|--------------------------------|---------------------------------|---------------------|---|-------------------|-------------|---------------------------|-------------|---------------------|-------------|---------------------------|-------------|
|                    |              |                     |                      |                                |                                 |                     |   | Single Rate       | Couple Rate | Adult and Child(ren) Rate | Family Rate | Single Rate         | Couple Rate | Adult and Child(ren) Rate | Family Rate |
| NON-STANDARD PLANS | GOLD         | Vermont Preferred   | 1,208                | \$670.81                       | 1.6220                          | 1.4565              | 1.1137  | \$747.08          | \$1,494.16  | \$1,441.86                | \$2,099.29  | 522                 | 120         | 26                        | 101         |
|                    | GOLD         | Vermont Select CDHP | 5,022                | \$706.44                       | 1.6220                          | 1.4565              | 1.1137  | \$786.77          | \$1,573.54  | \$1,518.47                | \$2,210.82  | 1,356               | 563         | 134                       | 551         |
|                    | SILVER       | Vermont Preferred   | 1,299                | \$665.63                       | 1.6220                          | 1.4565              | 1.1137  | \$741.31          | \$1,482.62  | \$1,430.73                | \$2,083.08  | 714                 | 195         | 30                        | 37          |
|                    | SILVER       | Vermont Select CDHP | 212                  | \$669.82                       | 1.6220                          | 1.4565              | 1.1137  | \$745.98          | \$1,491.96  | \$1,439.74                | \$2,096.20  | 118                 | 32          | 5                         | 6           |
|                    | BRONZE       | Vermont Preferred   | 520                  | \$515.99                       | 1.6220                          | 1.4565              | 1.1137  | \$574.66          | \$1,149.32  | \$1,109.09                | \$1,614.79  | 264                 | 50          | 13                        | 35          |
|                    | BRONZE       | Vermont Select CDHP | 2,098                | \$510.95                       | 1.6220                          | 1.4565              | 1.1137  | \$569.05          | \$1,138.10  | \$1,098.27                | \$1,599.03  | 834                 | 192         | 37                        | 203         |
| STANDARD PLANS     | PLATINUM     | Deductible          | 6,963                | \$861.34                       | 1.6220                          | 1.4565              | 1.1137  | \$959.27          | \$1,918.54  | \$1,851.39                | \$2,695.55  | 2,330               | 798         | 215                       | 630         |
|                    | GOLD         | Deductible          | 4,797                | \$730.00                       | 1.6220                          | 1.4565              | 1.1137  | \$813.00          | \$1,626.00  | \$1,569.09                | \$2,284.53  | 1,903               | 507         | 113                       | 403         |
|                    | SILVER       | Deductible          | 3,546                | \$681.23                       | 1.6220                          | 1.4565              | 1.1137  | \$758.69          | \$1,517.38  | \$1,464.27                | \$2,131.92  | 1,844               | 551         | 77                        | 124         |
|                    | SILVER       | CDHP                | 824                  | \$693.04                       | 1.6220                          | 1.4565              | 1.1137  | \$771.84          | \$1,543.68  | \$1,489.65                | \$2,168.87  | 376                 | 128         | 17                        | 41          |
|                    | BRONZE       | Deductible          | 1,823                | \$514.05                       | 1.6220                          | 1.4565              | 1.1137  | \$572.50          | \$1,145.00  | \$1,104.93                | \$1,608.73  | 896                 | 193         | 40                        | 119         |
|                    | BRONZE       | CDHP                | 1,392                | \$526.11                       | 1.6220                          | 1.4565              | 1.1137  | \$585.93          | \$1,171.86  | \$1,130.84                | \$1,646.46  | 588                 | 128         | 35                        | 122         |
|                    | BRONZE       | Integrated          | 563                  | \$520.96                       | 1.6220                          | 1.4565              | 1.1137  | \$580.20          | \$1,160.40  | \$1,119.79                | \$1,630.36  | 272                 | 53          | 13                        | 40          |
|                    | Catastrophic | Deductible          | 360                  | \$264.14                       | 1.0435                          | 1.0362              | 1.0070  | \$265.99          | \$531.98    | \$513.36                  | \$747.43    | 334                 | 7           | 2                         | 2           |
| REFLECTIVE PLANS   | SILVER       | Vermont Preferred   | 637                  | \$580.35                       | 1.6220                          | 1.4565              | 1.1137  | \$646.34          | \$1,292.68  | \$1,247.44                | \$1,816.22  | 321                 | 45          | 14                        | 48          |
|                    | SILVER       | Vermont Select CDHP | 661                  | \$595.75                       | 1.6220                          | 1.4565              | 1.1137  | \$663.49          | \$1,326.98  | \$1,280.54                | \$1,864.41  | 208                 | 54          | 12                        | 80          |
|                    | SILVER       | Deductible          | 4,586                | \$604.68                       | 1.6220                          | 1.4565              | 1.1137  | \$673.43          | \$1,346.86  | \$1,299.72                | \$1,892.34  | 1,977               | 439         | 110                       | 369         |
|                    | SILVER       | CDHP                | 1,910                | \$629.09                       | 1.6220                          | 1.4565              | 1.1137  | \$700.61          | \$1,401.22  | \$1,352.18                | \$1,968.71  | 676                 | 174         | 53                        | 191         |
| Total              |              |                     | 38,421               | \$676.38                       |                                 |                     |   |                   |             |                           | \$675.25    |                     |             |                           |             |

|  |         |
|--|---------|
| Additional Factor for Contract Conversion Factor | 100.17% |
|--|---------|

BLUE CROSS AND BLUE SHIELD OF VERMONT  
2021 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

CONSUMER ADJUSTED PREMIUM RATES

|                    |              |                     | Plan Level Adjusted Index Rate | PMPM to Single Contract Conversion Factor | 2021 Proposed Rates  |             |                           |             | 2020 Approved Rates  |             |                           |             | 2021 Proposed Rate Increases |             |                           |             |
|--------------------|--------------|---------------------|--------------------------------|---|----------------------|-------------|---------------------------|-------------|----------------------|-------------|---------------------------|-------------|------------------------------|-------------|---------------------------|-------------|
|                    |              |                     |                                |   | Single Rate          | Couple Rate | Adult and Child(ren) Rate | Family Rate | Single Rate          | Couple Rate | Adult and Child(ren) Rate | Family Rate | Single Rate                  | Couple Rate | Adult and Child(ren) Rate | Family Rate |
| NON-STANDARD PLANS | GOLD         | Vermont Preferred   | \$670.81                       | 1.1156                                    | \$748.35             | \$1,496.70  | \$1,444.32                | \$2,102.86  | \$698.95             | \$1,397.90  | \$1,348.97                | \$1,964.05  | 7.1%                         | 7.1%        | 7.1%                      | 7.1%        |
|                    | GOLD         | Vermont Select CDHP | \$706.44                       | 1.1156                                    | \$788.11             | \$1,576.22  | \$1,521.05                | \$2,214.59  | \$694.59             | \$1,389.18  | \$1,340.56                | \$1,951.80  | 13.5%                        | 13.5%       | 13.5%                     | 13.5%       |
|                    | SILVER       | Vermont Preferred   | \$665.63                       | 1.1156                                    | \$742.58             | \$1,485.16  | \$1,433.18                | \$2,086.65  | \$691.29             | \$1,382.58  | \$1,334.19                | \$1,942.52  | 7.4%                         | 7.4%        | 7.4%                      | 7.4%        |
|                    | SILVER       | Vermont Select CDHP | \$669.82                       | 1.1156                                    | \$747.25             | \$1,494.50  | \$1,442.19                | \$2,099.77  | \$703.57             | \$1,407.14  | \$1,357.89                | \$1,977.03  | 6.2%                         | 6.2%        | 6.2%                      | 6.2%        |
|                    | BRONZE       | Vermont Preferred   | \$515.99                       | 1.1156                                    | \$575.64             | \$1,151.28  | \$1,110.99                | \$1,617.55  | \$545.43             | \$1,090.86  | \$1,052.68                | \$1,532.66  | 5.5%                         | 5.5%        | 5.5%                      | 5.5%        |
|                    | BRONZE       | Vermont Select CDHP | \$510.95                       | 1.1156                                    | \$570.02             | \$1,140.04  | \$1,100.14                | \$1,601.76  | \$545.59             | \$1,091.18  | \$1,052.99                | \$1,533.11  | 4.5%                         | 4.5%        | 4.5%                      | 4.5%        |
| STANDARD PLANS     | PLATINUM     | Deductible          | \$861.34                       | 1.1156                                    | \$960.91             | \$1,921.82  | \$1,854.56                | \$2,700.16  | \$900.13             | \$1,800.26  | \$1,737.25                | \$2,529.37  | 6.8%                         | 6.8%        | 6.8%                      | 6.8%        |
|                    | GOLD         | Deductible          | \$730.00                       | 1.1156                                    | \$814.39             | \$1,628.78  | \$1,571.77                | \$2,288.44  | \$777.60             | \$1,555.20  | \$1,500.77                | \$2,185.06  | 4.7%                         | 4.7%        | 4.7%                      | 4.7%        |
|                    | SILVER       | Deductible          | \$681.23                       | 1.1156                                    | \$759.99             | \$1,519.98  | \$1,466.78                | \$2,135.57  | \$723.22             | \$1,446.44  | \$1,395.81                | \$2,032.25  | 5.1%                         | 5.1%        | 5.1%                      | 5.1%        |
|                    | SILVER       | CDHP                | \$693.04                       | 1.1156                                    | \$773.16             | \$1,546.32  | \$1,492.20                | \$2,172.58  | \$727.00             | \$1,454.00  | \$1,403.11                | \$2,042.87  | 6.3%                         | 6.3%        | 6.3%                      | 6.3%        |
|                    | BRONZE       | Deductible          | \$514.05                       | 1.1156                                    | \$573.48             | \$1,146.96  | \$1,106.82                | \$1,611.48  | \$549.48             | \$1,098.96  | \$1,060.50                | \$1,544.04  | 4.4%                         | 4.4%        | 4.4%                      | 4.4%        |
|                    | BRONZE       | CDHP                | \$526.11                       | 1.1156                                    | \$586.93             | \$1,173.86  | \$1,132.77                | \$1,649.27  | \$559.27             | \$1,118.54  | \$1,079.39                | \$1,571.55  | 4.9%                         | 4.9%        | 4.9%                      | 4.9%        |
|                    | BRONZE       | Integrated          | \$520.96                       | 1.1156                                    | \$581.19             | \$1,162.38  | \$1,121.70                | \$1,633.14  | \$560.45             | \$1,120.90  | \$1,081.67                | \$1,574.86  | 3.7%                         | 3.7%        | 3.7%                      | 3.7%        |
|                    | Catastrophic | Deductible          | \$264.14                       | 1.0087                                    | \$266.44             | \$532.88    | \$514.23                  | \$748.70    | \$266.82             | \$533.64    | \$514.96                  | \$749.76    | -0.1%                        | -0.1%       | -0.1%                     | -0.1%       |
| REFLECTIVE PLANS   | SILVER       | Vermont Preferred   | \$580.35                       | 1.1156                                    | \$647.44             | \$1,294.88  | \$1,249.56                | \$1,819.31  | \$607.28             | \$1,214.56  | \$1,172.05                | \$1,706.46  | 6.6%                         | 6.6%        | 6.6%                      | 6.6%        |
|                    | SILVER       | Vermont Select CDHP | \$595.75                       | 1.1156                                    | \$664.62             | \$1,329.24  | \$1,282.72                | \$1,867.58  | \$630.08             | \$1,260.16  | \$1,216.05                | \$1,770.52  | 5.5%                         | 5.5%        | 5.5%                      | 5.5%        |
|                    | SILVER       | Deductible          | \$604.68                       | 1.1156                                    | \$674.58             | \$1,349.16  | \$1,301.94                | \$1,895.57  | \$644.75             | \$1,289.50  | \$1,244.37                | \$1,811.75  | 4.6%                         | 4.6%        | 4.6%                      | 4.6%        |
|                    | SILVER       | CDHP                | \$629.09                       | 1.1156                                    | \$701.81             | \$1,403.62  | \$1,354.49                | \$1,972.09  | \$663.91             | \$1,327.82  | \$1,281.35                | \$1,865.59  | 5.7%                         | 5.7%        | 5.7%                      | 5.7%        |
| <b>Total</b>       |              |                     |                                |   | <b>\$311,858,486</b> |             |                           |             | <b>\$292,726,577</b> |             |                           |             | <b>6.536%</b>                |             |                           |             |



BLUE CROSS AND BLUE SHIELD OF VERMONT  
2021 VERMONT INDIVIDUAL AND SMALL GROUP RATE FILING

CONSUMER ADJUSTED PREMIUM RATES

|                    |              |                     | Inforce Contracts |             |                           |             | Projected Contracts |             |                           |             |
|--------------------|--------------|---------------------|-------------------|-------------|---------------------------|-------------|---------------------|-------------|---------------------------|-------------|
|                    |              |                     | Single Rate       | Couple Rate | Adult and Child(ren) Rate | Family Rate | Single Rate         | Couple Rate | Adult and Child(ren) Rate | Family Rate |
| NON-STANDARD PLANS | GOLD         | Vermont Preferred   | 522               | 120         | 26                        | 101         | 522                 | 120         | 26                        | 101         |
|                    | GOLD         | Vermont Select CDHP | 1,356             | 563         | 134                       | 551         | 1,356               | 563         | 134                       | 551         |
|                    | SILVER       | Vermont Preferred   | 714               | 195         | 30                        | 37          | 714                 | 195         | 30                        | 37          |
|                    | SILVER       | Vermont Select CDHP | 118               | 32          | 5                         | 6           | 118                 | 32          | 5                         | 6           |
|                    | BRONZE       | Vermont Preferred   | 264               | 50          | 13                        | 35          | 264                 | 50          | 13                        | 35          |
|                    | BRONZE       | Vermont Select CDHP | 834               | 192         | 37                        | 203         | 834                 | 192         | 37                        | 203         |
| STANDARD PLANS     | PLATINUM     | Deductible          | 2,866             | 841         | 234                       | 656         | 2,330               | 798         | 215                       | 630         |
|                    | GOLD         | Deductible          | 1,903             | 507         | 113                       | 403         | 1,903               | 507         | 113                       | 403         |
|                    | SILVER       | Deductible          | 1,844             | 551         | 77                        | 124         | 1,844               | 551         | 77                        | 124         |
|                    | SILVER       | CDHP                | 376               | 128         | 17                        | 41          | 376                 | 128         | 17                        | 41          |
|                    | BRONZE       | Deductible          | 896               | 193         | 40                        | 119         | 896                 | 193         | 40                        | 119         |
|                    | BRONZE       | CDHP                | 588               | 128         | 35                        | 122         | 588                 | 128         | 35                        | 122         |
|                    | BRONZE       | Integrated          | 272               | 53          | 13                        | 40          | 272                 | 53          | 13                        | 40          |
|                    | Catastrophic | Deductible          | 334               | 7           | 2                         | 2           | 334                 | 7           | 2                         | 2           |
| REFLECTIVE PLANS   | SILVER       | Vermont Preferred   | 321               | 45          | 14                        | 48          | 321                 | 45          | 14                        | 48          |
|                    | SILVER       | Vermont Select CDHP | 208               | 54          | 12                        | 80          | 208                 | 54          | 12                        | 80          |
|                    | SILVER       | Deductible          | 1,977             | 439         | 110                       | 369         | 1,977               | 439         | 110                       | 369         |
|                    | SILVER       | CDHP                | 676               | 174         | 53                        | 191         | 676                 | 174         | 53                        | 191         |
| <b>Total</b>       |              |                     | <b>24,434</b>     |             |                           |             | <b>23,810</b>       |             |                           |             |

|    | A | B   | C                                     | D     | E           | F                | G            | H    | I           | J            | K           | L                               | M                | N | O | P       | Q        | R | S | T |  |  |  |
|----|---|---|---------------------------------------|-------|-------------|------------------|--------------|------|-------------|--------------|-------------|---------------------------------|------------------|---|---|---------|----------|---|---|---|--|--|--|
| 1  |   | <b>Unified Rate Review v5.1</b>   |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 2  |   |   |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 3  |   | Company Legal Name:   | Blue Cross and Blue Shield of Vermont |       |             |                  |              |      |             |              |             |                                 |                  |   |   | State:  | VT       |   |   |   |  |  |  |
| 4  |   | HIOS Issuer ID:   | 13627                                 |       |             |                  |              |      |             |              |             |                                 |                  |   |   | Market: | Combined |   |   |   |  |  |  |
| 5  |   | Effective Date of Rate Change(s):   | 1/1/2021                              |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 6  |   |   |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 7  |   |   |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 8  |   | <b>Market Level Calculations (Same for all Plans)</b>   |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 9  |   |   |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 10 |   |   |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 11 |   | <b>Section I: Experience Period Data</b>  |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 12 |   | Experience Period:  | 1/1/2019                              |       |             | to               | 12/31/2019   |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 13 |   |   |                                       |       |             | Total            |              |      |             | PMPM         |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 14 |   | Allowed Claims  |                                       |       |             | \$346,262,636.11 |              |      |             |              | \$665.15    |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 15 |   | Reinsurance   |                                       |       |             | \$0.00           |              |      |             |              | \$0.00      |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 16 |   | Incurred Claims in Experience Period  |                                       |       |             | \$291,932,566.60 |              |      |             |              | \$560.78    |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 17 |   | Risk Adjustment   |                                       |       |             | \$20,665,540.89  |              |      |             |              | \$39.70     |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 18 |   | Experience Period Premium   |                                       |       |             | \$309,718,620.32 |              |      |             |              | \$594.95    |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 19 |   | Experience Period Member Months   |                                       |       |             | \$20,581         |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 20 |   |   |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 21 |   | <b>Section II: Projections</b>  |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 22 |   |   |                                       |       |             |                  | Year 1 Trend |      |             | Year 2 Trend |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 23 |   | Benefit Category  | Experience Period Index Rate PMPM     | Cost  | Utilization | Cost             | Utilization  | Cost | Utilization | Cost         | Utilization | Trended EHB Allowed Claims PMPM |                  |   |   |         |          |   |   |   |  |  |  |
| 24 |   | Inpatient Hospital  | \$119.11                              | 1.033 | 1.032       | 1.039            | 1.041        |      |             |              |             | \$137.34                        |                  |   |   |         |          |   |   |   |  |  |  |
| 25 |   | Outpatient Hospital   | \$261.42                              | 1.033 | 1.032       | 1.039            | 1.041        |      |             |              |             | \$301.43                        |                  |   |   |         |          |   |   |   |  |  |  |
| 26 |   | Professional  | \$87.60                               | 1.033 | 1.032       | 1.039            | 1.041        |      |             |              |             | \$101.01                        |                  |   |   |         |          |   |   |   |  |  |  |
| 27 |   | Other Medical   | \$71.49                               | 1.032 | 1.031       | 1.038            | 1.040        |      |             |              |             | \$82.11                         |                  |   |   |         |          |   |   |   |  |  |  |
| 28 |   | Capitation  | \$10.92                               | 1.033 | 1.032       | 1.039            | 1.041        |      |             |              |             | \$12.59                         |                  |   |   |         |          |   |   |   |  |  |  |
| 29 |   | Prescription Drug   | \$114.53                              | 1.101 | 1.030       | 1.101            | 1.030        |      |             |              |             | \$147.29                        |                  |   |   |         |          |   |   |   |  |  |  |
| 30 |   | Total   | \$665.07                              |       |             |                  |              |      |             |              |             | \$781.77                        |                  |   |   |         |          |   |   |   |  |  |  |
| 31 |   |   |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 32 |   | Morbidity Adjustment  |                                       |       |             | 1.003            |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 33 |   | Demographic Shift   |                                       |       |             | 1.007            |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 34 |   | Plan Design Changes   |                                       |       |             | 0.996            |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 35 |   | Other   |                                       |       |             | 0.991            |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 36 |   | Adjusted Trended EHB Allowed Claims PMPM for  |                                       |       |             | 1/1/2021         |              |      |             |              |             | \$779.37                        |                  |   |   |         |          |   |   |   |  |  |  |
| 37 |   |   |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 38 |   | Manual EHB Allowed Claims PMPM  |                                       |       |             |                  |              |      |             |              |             | \$0.00                          |                  |   |   |         |          |   |   |   |  |  |  |
| 39 |   | Applied Credibility %   |                                       |       |             |                  |              |      |             |              |             | 100.00%                         |                  |   |   |         |          |   |   |   |  |  |  |
| 40 |   |   |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 41 |   |   |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 42 |   |   |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 43 |   | Projected Index Rate for  |                                       |       |             | 1/1/2021         |              |      |             |              | \$779.37    |                                 | \$359,330,097.24 |   |   |         |          |   |   |   |  |  |  |
| 44 |   | Reinsurance   |                                       |       |             |                  |              |      |             |              | \$0.00      |                                 | \$0.00           |   |   |         |          |   |   |   |  |  |  |
| 45 |   | Risk Adjustment Payment/Charge  |                                       |       |             |                  |              |      |             |              | \$63.63     |                                 | \$29,336,738.76  |   |   |         |          |   |   |   |  |  |  |
| 46 |   | Exchange User Fees  |                                       |       |             |                  |              |      |             |              | 0.00%       |                                 | \$0.00           |   |   |         |          |   |   |   |  |  |  |
| 47 |   | Market Adjusted Index Rate  |                                       |       |             |                  |              |      |             |              | \$715.74    |                                 | \$329,993,358.48 |   |   |         |          |   |   |   |  |  |  |
| 48 |   | Projected Member Months   |                                       |       |             |                  |              |      |             |              | 461,052     |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 49 |   |   |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 50 |   | <b>Information Not Releasable to the Public Unless Authorized by Law:</b> This information has not been publicly disclosed and may be privileged and confidential. It is for internal government use only and must not be disseminated, distributed, or copied to persons not authorized to receive the information. Unauthorized disclosure may result in prosecution to the full extent of the law. |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |
| 51 |   |   |                                       |       |             |                  |              |      |             |              |             |                                 |                  |   |   |         |          |   |   |   |  |  |  |







## Rating Area Data Collection

*Specify the total number of Rating Areas in your State by selecting the Create Rating Areas button or Ctrl + Shift + R.  
Select only the Rating Areas you are offering plans within and add a factor for each area.  
To validate, select the Validate button or Ctrl + Shift + I.  
To finalize, select the Finalize button or Ctrl + Shift + F.*

| Rating Area   | Rating Factor |
|---------------|---------------|
| Rating Area 1 | 1.0000        |

Blue Cross and Blue Shield of Vermont  
COVID-19 Modeling

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## Blue Cross and Blue Shield of Vermont COVID-19 Modeling

### Purpose

The COVID-19 pandemic has introduced significant uncertainty into the level of claims anticipated in 2020, 2021, and beyond. In recent months, stay at home orders have resulted in a significant drop in claims volume. Over subsequent months, there are uncertain impacts around the level and cost of testing, the presence and severity of a second wave, the availability and cost of a vaccine, and the degree to which care returns that had been deferred under the stay at home orders.

To examine the possible variance in paid claims in 2020 and 2021, we have created a model that simulates paid claims under varying scenarios for the Vermont Individual and Small Group (VISG) merged market, BCBSVT insured large groups, and TVHP insured large groups. The model and results are intended to quantify the impact varying scenarios have on BCBSVT's risk based capital ratio (RBC). BCBSVT submits this information in response to Question 2 of the July 1, 2020 Inquiry Letter 4 from Lewis & Ellis in the Vermont Individual and Small Group Rate Filing (SERFF #BCVT-132371410) docket. It should not be used for any other purpose.

Not included in this modeling are a number of additional operational costs incurred by BCBSVT related to the COVID-19 pandemic. BCBSVT has implemented programming to enhance access to and affordability of retail pharmaceuticals during the crisis, extended grace periods and offered premium flexibility to customers, cancelled the recoupment of certain overpayments to providers, waived any deductible amounts applying to generic wellness drugs and insulins, suspended claims audit activity, and provided over \$10 million in advances to Vermont hospitals and provider groups. Each of these items has a material impact on BCBSVT's financial position, as demonstrated in separate documentation delivered in response to Inquiry Letter 4.

This modeling is specific to claims costs directly related to COVID-19, along with the deferral of medical care due to the pandemic and that care's eventual (partial) return. We specifically note the exclusion of retail pharmacy from this modeling; while retail pharmacy utilization has surpassed expected levels in 2020, the impact of the pandemic on retail pharmacy costs is beyond the scope of this model. We have included an estimate of the elevated retail pharmacy spending within the separate documentation referenced above.

This model does not project ongoing COVID-19 illness beyond the end of 2021. While such scenarios are certainly plausible, they have limited utility for the purpose of informing a rate review decision for the 2021 BCBSVT VISG filing. The model does produce output pertaining to the potential drift beyond 2021 of returning services that had been deferred as part of a 2020 or 2021 wave of elevated disease incidence and partial economic shutdown. It also considers potential costs for vaccine administration that may take place beyond the end of 2021. These two items can be viewed as the tail of the claims impact of the 2020 and 2021 course of the pandemic—failing to consider this tail would lead to misleading or incomplete conclusions about BCBSVT's financial position as of December 31, 2021. Because BCBSVT is committed to covering pandemic-related costs from policyholder reserves rather than through premiums, financial reporting requirements would mandate that these 2022 costs, if estimable, should be included in December 31, 2021 financials as a premium deficiency reserve. It is therefore consistent and appropriate to include the 2022 tail of these pandemic-related costs in our



## Blue Cross and Blue Shield of Vermont COVID-19 Modeling

assessment of BCBSVT’s financial position in response to Inquiry Letter 4 and for purposes of informing review of the 2021 VISG filing.

### Data

The model and its inputs rely on several sources of information. To project 2020 and 2021 claims, we use projected claims, trend, actuarial value (AV), and membership information from the BCBSVT 2021 Vermont Individual and Small Group Rate Filing and claims, trend, and AV projections presented in or underlying the BCBSVT and TVHP Q3 2020 Large Group Rating Program Filing (SERFF: BCVT-132350241). The large group filings do not project membership, so we use membership from internal reporting for these lines of business as of January 31, 2020 to approximate 2020 and 2021 membership. We include direct costs incurred in March through May 2020 and paid through June 25, 2020.

To calculate the level of deferred care, we use claims incurred from January 2019 through May 2020 for all BCBSVT members. We apply completion factors developed from the monthly financial reporting process (best estimates before margin and before blending with trended estimates). Shelter in place restrictions were put in place in March 2020 and therefore the slowdown period was defined as the incurred period from March 2020 through May 2020. This slowdown period was quantified by comparing the PMPM of the slowdown period relative to a benchmark PMPM. For more detail, please refer to the *Deferred Care* section beginning on page 8.

### Methodology

#### Vaccine Development

Significant uncertainty exists around the timing and cost of a COVID-19 vaccine. As of June 29, 2020, three vaccines are in a Phase III trial, eight vaccines are in a Phase II trial, and numerous other vaccines are in a Phase I trial or the preclinical phase<sup>1</sup>. Our scenario modeling considers varying vaccine availability dates, ranging from the fourth quarter of 2020 to sometime after 2021. In each scenario, we assumed a three-month duration for the administration of the vaccine across the majority of the population, over which treatment costs and testing are assumed to ramp down in the following pattern (where “month zero” is the month in which the vaccine first becomes available):

| Vaccine Availability Month | Dampening Factor |
|----------------------------|------------------|
| 0                          | 83.33%           |
| 1                          | 50.00%           |
| 2                          | 16.67%           |
| 3                          | 0.00%            |

<sup>1</sup> <https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html>, accessed June 29, 2020.

## Blue Cross and Blue Shield of Vermont COVID-19 Modeling

Emerging studies suggest that a vaccine may not be effective, or that any vaccine may need to be administered annually rather than only once. While both scenarios are beyond the scope of this modeling exercise, it is clear to see that an annual or ineffective vaccine would lead to higher or potentially much higher COVID-19 costs than those presented in this study.

Similarly, the cost of the vaccine is unknown and dependent on a variety of factors. We center the estimate the cost of a potential vaccine at \$60, which is approximately the average cost of a flu vaccination across our insured book of business. While there is significant uncertainty around the cost of a vaccination, we note that the flu vaccination cost has been used in other industry studies to approximate the cost of a COVID-19 vaccine<sup>2</sup>. We cap the cost of the vaccine at \$150, which is the large group and small group vaccine cost amount used in the recently published modeling of the Society of Actuaries (SOA)<sup>3</sup>, and set a lower bound of \$40. We use a lognormal distribution to model the cost of the vaccine. While we find more compelling the speculation that the actual cost of a vaccine will be closer to the low end of our range, we recognize the possibility of the vaccine cost significantly deviating on the high end from the expected value of \$60 by using a distribution with a higher right-skewed curve.

To develop the estimate of the vaccination rate, we first set the lower and upper bound of a range of plausible values. We use the CDC's reported 2016 age 65+ pneumococcal vaccination rate, 67 percent, as the lower bound<sup>4</sup>. Given the severity and extremely contagious nature of COVID-19 and the strenuous impact of the alternative of social distancing, we consider it likely the COVID-19 vaccination rate will meet or more likely surpass the rate of a vaccine that is widely available and recommended for an adult population. At the high end, the rate of newborns with BCBSVT coverage born between 2016 and 2019 receiving any vaccination is approximately 98 percent. We use this figure—representative of the higher rate of vaccination observed when Vermonters are making choices with potentially serious implications for the health of others—as the upper bound and assume a uniform distribution within the range.

While current regulation dictates that insurers will bear the cost of a vaccine, there is some speculation that this cost may ultimately be shifted to a government entity. Appendix A presents modeling results in the circumstance that BCBSVT is not responsible for paying for the cost of a vaccine.

Similarly, the timing of the vaccine is uncertain. While there is a possibility of a vaccine being available in the fall of 2020, many experts have indicated that timing is unlikely<sup>5</sup>. We consider it more likely the vaccine will follow the substantially accelerated 18-month timeline, if indeed it is available before 2022<sup>6</sup>. Given the uncertainty around timing, we

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<sup>2</sup> <https://www.ahip.org/wp-content/uploads/AHIP-COVID-19-Modeling.pdf>

<sup>3</sup> <https://www.soa.org/globalassets/assets/files/resources/research-report/2020/illustrative-forecasts-covid-19.pdf>

<sup>4</sup> <https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/pubs-resources/NHIS-2016.html>

<sup>5</sup> <https://www.latimes.com/california/story/2020-06-11/coronavirus-covid-vaccine-development-speed-fauci>

<sup>6</sup> <https://www.nytimes.com/interactive/2020/04/30/opinion/coronavirus-covid-vaccine.html>

## Blue Cross and Blue Shield of Vermont COVID-19 Modeling

model varying vaccine availability scenarios, which we provide with their respective weights in the table below.

| Vaccine Timing |     |
|----------------|-----|
| Q4 2020        | 5%  |
| Q1 2021        | 10% |
| Q2 2021        | 15% |
| Q3 2021        | 35% |
| Q4 2021        | 20% |
| 2022+          | 15% |

### Diagnostic Testing

To estimate the cost of diagnostic testing, we calculate a weekly average of testing costs incurred by VISG and insured large group members. The assumed testing cost uses a 4-3-2-1 weighted average, wherein the week ending June 12, 2020 is weighted the most heavily and preceding three weeks weighted in descending order.

There is significant uncertainty regarding the utilization of testing. Prior lack of testing availability, emerging federal guidance, availability of public health testing, and ongoing federal funding for state-run testing all affect the testing rate. We consider a range of 0.25 to 0.50 tests per member per year (PMPY) to be a reasonable, yet not excessive range for the rate of testing. The SOA<sup>7</sup> calculated testing rate of 0.50 PMPY serves as our upper bound, while we model scenarios with lower testing rates due to the presence of public health tests.

### Antibody Testing

The Tri-Agencies issued guidance on June 23, 2020<sup>8</sup> that indicated health plans are only responsible for diagnostic testing ordered by a provider and within the context of a plan of care. While this does not necessarily exclude antibody testing, we assume the preponderance of antibody tests will be for return-to-work purposes and therefore not the responsibility of the health plan. We include no future projected antibody testing costs in our modeling.

### Treatment Costs

To estimate treatment costs, we first develop an incidence rate. We use the SOA report 'COVID-19 Trends by Hospital Referral Region'<sup>9</sup> (HRR) to develop an incidence rate. We then apply the incidence rate to the VISG and insured large group populations to estimate the

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<sup>7</sup> <https://www.soa.org/globalassets/assets/files/resources/research-report/2020/illustrative-forecasts-covid-19.pdf>

<sup>8</sup> <https://www.cms.gov/files/document/FFCRA-Part-43-FAQs.pdf>

<sup>9</sup> <https://www.soa.org/globalassets/assets/files/resources/research-report/2020/covid-19-trends-hospital-referral-region.pdf>

## Blue Cross and Blue Shield of Vermont COVID-19 Modeling

number of COVID-19 cases in a given month. We then use data from the New York City Department of Health<sup>10</sup> to calculate the number of cases that will result in a hospital admission. Similarly detailed hospital admission data does not appear to be available in Vermont. We observed the confirmed cases and hospital admission rates in New York and Vermont near peak and determined that the hospitalization rates in each locality were similar<sup>11,12,13</sup>. We therefore feel comfortable using the New York data as a proxy.

In the absence of additional waves, we assume the ongoing incidence of cases will be similar to the incidence in the state of Vermont over the period of the SOA report<sup>14,15</sup>. We dampen the incidence rate by 60 to 70 percent in 2020 to reflect the ongoing severity will likely be less than the eight-week period in which the incidence rates are from. Specifically, we used Vermont Department of Health data to compare the number of new cases arising in Vermont during the period studied in the SOA report to the number of new cases emerging since the further relaxation of social distancing measures as of June 1, observing that the incidence of new cases in June is approximately 60 percent of the incidence of cases in the report period. Similarly, we dampen the incidence rate in 2021 by a factor within a range from a minimum of the 2020 dampening factor to a maximum 1.0. The 2021 incidence rate is dampened to a lesser degree due to the anticipated continued lessening of social distancing measures and ongoing spread of the virus until the earlier of vaccine availability or the commencement of a second wave (see below).

To develop a treatment cost, we split admissions into those requiring an ICU stay and non-ICU admissions. Wakely has published a study<sup>16</sup>, using an approximate ICU utilization rate of 30 percent in both its low and high scenario assumptions which we use to split admissions. To develop the cost of an admission, we use a mix of BCBSVT contract terms, emerging BCBSVT experience, and industry sources, including the Wakely study. In particular, the cost of an ICU admission is heavily based on the anticipated cost given BCBSVT's contract terms, while the cost of a non-ICU admission observed within BCBSVT experience data aligns very closely with material published elsewhere in the industry.

We also estimate the potential cost of a second wave. We define a second wave not by a particular infection rate, but as a second period of extreme social distancing, economic shutdown, and the deferral of all non-elective medical procedures. A second period of more severe economic restrictions would pose a great challenge for Vermonters and Vermont small businesses in particular. The decision to issue another round of shelter-in-place orders and/or

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<sup>10</sup> <https://www1.nyc.gov/site/doh/covid/covid-19-data.page>, accessed June 4, 2020

<sup>11</sup> [https://www.scribd.com/document/455265955/Gov-Cuomo-April-6-Coronavirus-Presentation?utm\\_source=First+Read+Session+Update&utm\\_campaign=423dc566b3-EMAIL\\_CAMPAIGN\\_2020\\_04\\_06\\_04\\_51&utm\\_medium=email&utm\\_term=0\\_4e700ecef423dc566b3-35061864&mc\\_cid=423dc566b3&mc\\_eid=94499aa84b](https://www.scribd.com/document/455265955/Gov-Cuomo-April-6-Coronavirus-Presentation?utm_source=First+Read+Session+Update&utm_campaign=423dc566b3-EMAIL_CAMPAIGN_2020_04_06_04_51&utm_medium=email&utm_term=0_4e700ecef423dc566b3-35061864&mc_cid=423dc566b3&mc_eid=94499aa84b)

<sup>12</sup> <https://www.healthvermont.gov/response/coronavirus-covid-19/current-activity-vermont>

<sup>13</sup> <https://www.cdc.gov/nhsn/covid19/report-overview.html>

<sup>14</sup> The calculated state incidence is analogous to the Burlington, VT Hospital Referral Region (HRR).

<sup>15</sup> Statewide statistics are reported by the Vermont Department of Health:

<https://www.healthvermont.gov/response/coronavirus-covid-19/current-activity-vermont>

<sup>16</sup> [https://www.ahip.org/wp-content/uploads/AHIP-COVID-19-Modeling-Update\\_Wakely-2020.06.pdf](https://www.ahip.org/wp-content/uploads/AHIP-COVID-19-Modeling-Update_Wakely-2020.06.pdf)

## Blue Cross and Blue Shield of Vermont COVID-19 Modeling

similar restrictions will not be made lightly. We consider it unlikely that a second wave will take place in Vermont until the infection rate approaches, if not exceeds, the infection rate experienced over the two-month period examined by the SOA in its study by medical service area. It is for this reason that we allow the 2021 incidence dampening to vary up to 100 percent of the incidence reported in the SOA study, as noted above.

A second wave may present an elevated incidence of COVID-19 cases, which will increase the treatment cost. A second wave also creates additional deferred care. We model costs under varying HRR incidence levels. We model incidence under varying scenarios: cases equivalent to the level experienced in the first wave in Vermont, the Capital Region of New York, Boston, and suburban southeastern New York. Additionally, we model scenarios where a second wave does not occur. We do not attempt to predict the likelihood of any of these five levels of disease burden. Because the level of incidence experienced in a second wave is quite impactful and impossible to predict with any degree of accuracy, the focus of our modeling results independently examines each of our five potential incidence scenarios. In order to examine the sensitivity of results to other assumptions, it is useful to define an array of likelihoods for the disease incidence in a second wave; for the purpose of producing a reasonable array of simulations for that sensitivity testing, we instructed the model to produce more scenarios at incidence levels that seem to more plausibly result in another partial economic shutdown and period of deferral of non-emergent care, and fewer scenarios at either extreme. This is demonstrated in the table below:

| Wave 2 Severity   | Scenarios |
|-------------------|-----------|
| Vermont           | 12%       |
| NY Capital Region | 36%       |
| Boston            | 20%       |
| Suburban SE NY    | 12%       |
| Never             | 20%       |

For any simulation in which a vaccine is available before the commencement of a second wave, the severity of the second wave is adjusted to "Never."

The timing of a second wave, if it occurs at all, is uncertain. While the path of this disease changes daily across the country, at the time the modeling was performed most experts considered it likely that a second wave would start in the autumn of 2020. We model varying scenarios of the timing of a second wave, centered around the wave starting in the fall. The probability of the second wave timing by quarter are provided in the table below.

| Wave 2 Timing | Probability |
|---------------|-------------|
| Q3 2020       | 15%         |
| Q4 2020       | 45%         |
| Q1 2020       | 20%         |
| Never         | 20%         |

Similarly, the duration of a second wave is also uncertain. We model wave durations from one to four months, with the likelihood of a longer duration increasing under the higher incidence

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scenarios. In this sense, the duration refers to both the length of time during which non-emergent services are deferred as well as the time period for which the elevated incidence level persists.

| Wave 2 Duration - Geographic Region | Vermont | NY Capital Region | Boston | Suburban SE NY |
|-------------------------------------|---------|-------------------|--------|----------------|
| Wave 2 Duration - 1 Month           | 5%      | 5%                | 0%     | 0%             |
| Wave 2 Duration - 2 Months          | 40%     | 30%               | 20%    | 10%            |
| Wave 2 Duration - 3 Months          | 40%     | 50%               | 60%    | 60%            |
| Wave 2 Duration - 4 Months          | 15%     | 15%               | 20%    | 30%            |

### Baseline Claims

Given that the timing of the deferred and returning care (see subsequent sections) is variable on a monthly basis, we first need to convert the annual claim totals included in the 2021 filings to monthly totals.

To estimate VISG claims, we start with the 2021 projected allowed medical and pharmacy claims from the 2021 VISG filing. We apply paid claim seasonality factors developed as part of the monthly reserving process. We then calculate a monthly allowed trend for medical and pharmacy claims using the 2020 to 2021 allowed trend factors in Exhibit 3J of that filing. Lastly, we set the starting trend for January 2020 such that the total projected allowed claims equals the figure presented in Exhibit 5 of the filing. Finally, we apply the 2021 AV<sup>17</sup> to convert from allowed claims to paid claims.

To estimate the insured large group claims, we start with the manual rate in the Q3 2020 BCBSVT/TVHP Large Group filing. The manual rate represents an estimated paid claim amount for the 12-month period starting January 1, 2021. We then divide by the effective AV underlying the Q3 2020 benefit relativity model to convert the manual rate to an allowed claim total. Then, we split medical and pharmacy claims using the proportion of each comprising the manual rate. We then apply paid claim seasonality factors developed as part of the reserving process and convert the annual allowed medical and pharmacy trend in the filing to monthly factors. We set the starting trend for January 2020 such that the total projected allowed claims per member for the year equals the allowed manual rate. We then apply the average AV to convert the allowed claims back to paid claims.

### Deferred Care

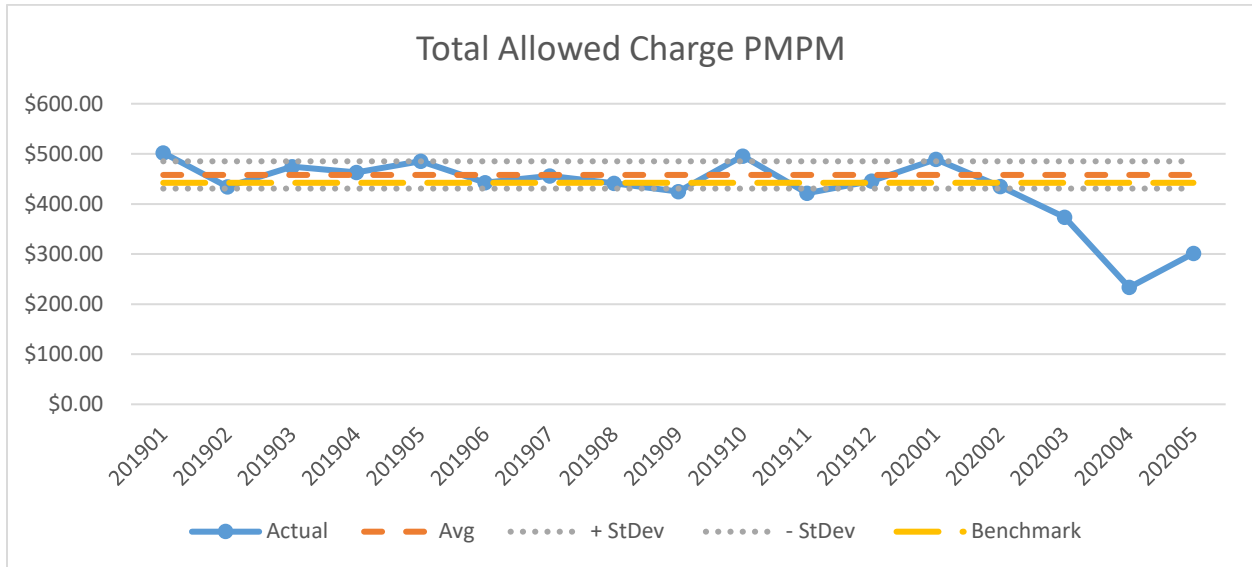
Using the period identified in the *Data* section, we create the graph below showing the total monthly PMPMs spanning over the benchmark and slowdown periods. We calculate the benchmark PMPM as the monthly average PMPM less the monthly standard deviation PMPM

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<sup>17</sup> We used the AV calculated using BCBSVT population from column L of exhibit 6E of the 2021 VISG rate filing.

## Blue Cross and Blue Shield of Vermont COVID-19 Modeling

divided by the cubic root of 3, to incorporate some conservatism in light of normal fluctuations.



We further subdivided our total claims by service category to make determinations about the percentage of claims in our slowdown period are likely to be rescheduled rather than foregone. We also made assumptions about changes in demand that certain claim categories will experience in the future due to the more lasting changes to the care delivery system that are likely to result from the pandemic.

We use place of service, DRG, ICD-10 procedure code, CPT/HCPCS, revenue code and ICD-10 diagnosis code to bucket the total claims into 33 sub-categories we considered in estimating the impact of deferred services. A table displaying the assumptions for each of the 33 categories can be found in Appendix B.

BCBSVT actuaries worked closely with BCBSVT medical directors to develop assumptions for the return of care for each service category. Mental health services apart from inpatient stays can be observed to be greater than the benchmark, presumably due to the availability of telehealth options as well as the increased stress the pandemic and economic disruption have inflicted upon our members. While there was a slowdown in inpatient mental health admissions, we assume that this was representative of a change in site of care rather than an indication of pent-up demand. Medical-drug services (such as injections), durable medical equipment and services at a home health & hospice location experienced very little or no slowdown; we assume that the limited amount of care that did not take place can be foregone completely or has been resolved using other methods of care. Emergency and urgent care experienced a 28 percent slowdown in services during the most recent three months while ambulance services dropped by 53 percent; we expect these services to not return because any emergent event that occurred during March to May has been handled in other ways. We assumed that influenza and pneumonia-based claims will not be made up because they are seasonal and do not result in pent-up demand. Newborns and delivery/pregnancy care for mothers cannot be deferred or made up for obvious reasons.

## Blue Cross and Blue Shield of Vermont COVID-19 Modeling

Laboratory, radiology and evaluation and management services assumptions depend on whether the service was for chronic care or acute care. We assumed that 100 percent of chronic services will be made up while any acute care that did not take place in the slowdown period has been foregone. We also assumed that any oncology treatment or immunization services that were deferred during the lockdown will be made up fully due to the necessary but deferrable nature of this care.

All surgeries had relatively significant slowdowns during the period. We project that all of these services will be made up due to the necessity of this care. We note that various Vermont hospitals and surgical centers have already expanded their hours to contend with the glut of services.

Other services such as physical therapy, chiropractic, cardiology, ophthalmology, and other miscellaneous services are assumed to partially—but not fully—return.

Overall, we estimate that 56.1 percent of the services that were deferred during the slowdown period will be made up. This can be calculated by taking the weighted average of the 'percent rescheduled services' and 'slowdown PMPM' from the table by type of service provided in Appendix B.

We note the independent BCBSVT analysis is closely aligned with industry sources<sup>18,19</sup>, which lends additional confidence to our assumption.

In any month where services are less than 100 percent of our non-COVID expectation, it is assumed that a mean of 56.1 percent of the claims will return at a later date, split into 100 percent of surgeries and 22.3 percent of all other care. This includes in any months during a second wave where non-emergent care is deferred such that claims are less than expected. In the stochastic model, we assume the level of deferred care is normally distributed with a mean of 56.1 percent and a standard deviation of one-tenth the mean. This standard deviation allows for a reasonable range of results around our best estimate, roughly equivalent to the "high" and "low" estimates within the above-referenced Milliman white paper.

### Changes in Demand

The 'Stay Home, Stay Safe' order changed the way many Vermonters access care. BCBSVT actuarial staff again worked with medical directors to make assumptions about persistent changes in utilization resulting from the pandemic and economic crisis.

Going forward we expect a shift away from using emergency room and urgent care services due largely to the availability and increased acceptance of telehealth services as a viable alternative. We assume a drop of 14 percent in these services (i.e. 50 percent of the slowdown from pre-pandemic to Wave 1 utilization) going forward.

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<sup>18</sup> <https://milliman-cdn.azureedge.net/-/media/milliman/pdfs/articles/estimating-the-financial-impact-covid19.ashx>

<sup>19</sup> <https://www.soa.org/globalassets/assets/files/resources/research-report/2020/illustrative-forecasts-covid-19.pdf>



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As noted above, non-inpatient mental health services are being utilized at higher than historical levels, presumably due to the availability of telehealth options as well as the increased stress the pandemic and economic disruption have inflicted upon our members. We observed a 14 percent increase in the allowed charge PMPM for non-inpatient mental health services during the slowdown period and assume that increase represents the new norm through 2021. We assumed that inpatient mental health admissions will resume at a higher level than previously due to the fallout from the extreme stress of the pandemic, lockdown, economic crisis and social unrest. There is evidence of an increase in PTSD in the aftermath of such events. The literature notes a possible uptick of as much as 7 percent in MHSA services after a catastrophic event<sup>20</sup>; we use this figure—half of the observed non-inpatient increase—as an ongoing increase in inpatient MHSA utilization. The weighted average of the “Future Demand %” and the “Benchmark PMPM” in the table below yields a \$2.63 reduction in allowed PMPM that we use as the change in ongoing demand. We treat this as a best estimate assumption and do not allow it to vary within the stochastic modeling.

| Type of Service                 | Benchmark PMPM | Slowdown PMPM | Future Demand % |
|---------------------------------|----------------|---------------|-----------------|
| Mental Health (Inpatient)       | \$4.40         | \$2.23        | 7%              |
| Mental Health (Other)           | \$13.28        | \$0.00        | 14%             |
| Emergency and Urgent Care       | \$34.30        | \$9.65        | -14%            |
| Changes in Demand, Allowed PMPM |                |               | <b>-\$2.63</b>  |

### Deferred Care Morbidity Impact

As outlined above, a broad spectrum of medical services experienced a decline during the spring. While we anticipate many of these services will be deferred to a later date, many will not occur at all. The cancellation and delay of services has created public health impacts<sup>21</sup>, and similar events that have impaired access to care have increased population morbidity<sup>22</sup>.

The health impacts created by the limited access to care in the spring of 2020 are unknown. Catastrophic events have a documented long-term impact on population morbidity. Given the long-term nature of the current health and economic crises, we consider it important to model possible morbidity effects created by the lack of access to care during periods of significant government restrictions. We set the stochastic model to randomly generate a morbidity factor uniformly distributed between 0.000 and 0.005 that is applied to medical and pharmacy claims. In the event of a second wave, we apply to the period following the conclusion of the second wave a factor uniformly distributed between the original factor and 0.010, due to the additional morbidity impacts that would likely be created from further barriers to receiving necessary care.

<sup>20</sup> <https://www.annualreviews.org/doi/full/10.1146/annurev-publhealth-032013-182435>

<sup>21</sup> <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/ResumingCalifornia%E2%80%99sDeferredandPreventiveHealthCare.aspx>

<sup>22</sup> <https://www.washingtonpost.com/opinions/2020/04/08/covid-19-pandemic-will-end-americas-next-health-crisis-is-already-starting/>

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Returning Care

The timing of the return of care is not only dependent on subsequent waves of COVID-19, but on the capacity of the health care system. We solicited feedback from a number of local hospitals and provider groups on their re-opening plans. The larger facilities indicated plans to expand capacity, whether through extended hours or performing services on the weekend<sup>23</sup>.

To estimate the capacity to make up deferred services, we split medical services into surgical and non-surgical procedures. Due to procedure time, opportunities to use telehealth, a greater propensity to extend physician hours, and a loss of efficiency due to increased COVID-related safety measures for surgical procedures, we assume that capacity can be extended above a baseline level to a greater degree for non-surgical procedures. We assume a maximum capacity of 108 percent for surgical procedures and 115 percent for non-surgical procedures. These assumptions are equivalent to a plausible total maximum capacity range of 106 to 112 percent.

To model the return of care, we randomly generate capacity factors to apply for each month from June 2020 through December 2021. The capacity in a given month is not allowed to exceed the maximum noted above. For months during a second wave, the factors are dampened to reflect the deferral of care. In the two months following a wave, we apply the additive factors to account for the return of services. We also apply dampening factors that revert care to 100 percent, based on the extent to which care exceeds normal volume, to reflect that the health care system likely cannot operate at maximum capacity for an extended duration. We include an additive term that helps prevent the dampening factors from returning the maximum capacity to 100 percent before returning care reaches the percentage randomly selected for the simulation. Lastly, we end any excess capacity upon reaching the modeled percent of care returning. We assume any modeled returning care not incurred by the end of 2021 will be performed in 2022. At the median, 21 percent of returning care is modeled to not be performed by the end of 2021.

| Capacity Factors | Provider Max | June 2020 | Wave (1 Month from Start/End) | Wave (2 Months from Start/End) | Post Wave Additive Factor (2 Months) |
|------------------|--------------|-----------|-------------------------------|--------------------------------|--------------------------------------|
| Low              | 106%         | 80%       | 85%                           | 75%                            | +15%                                 |
| High             | 112%         | 100%      | 95%                           | 85%                            | +30%                                 |

See Appendix C for a sample of capacity distributions randomly generated by these mechanics.

<sup>23</sup> See, e.g., <https://www.healthleadersmedia.com/clinical-care/coronavirus-how-dartmouth-hitchcock-reopening-paused-services>

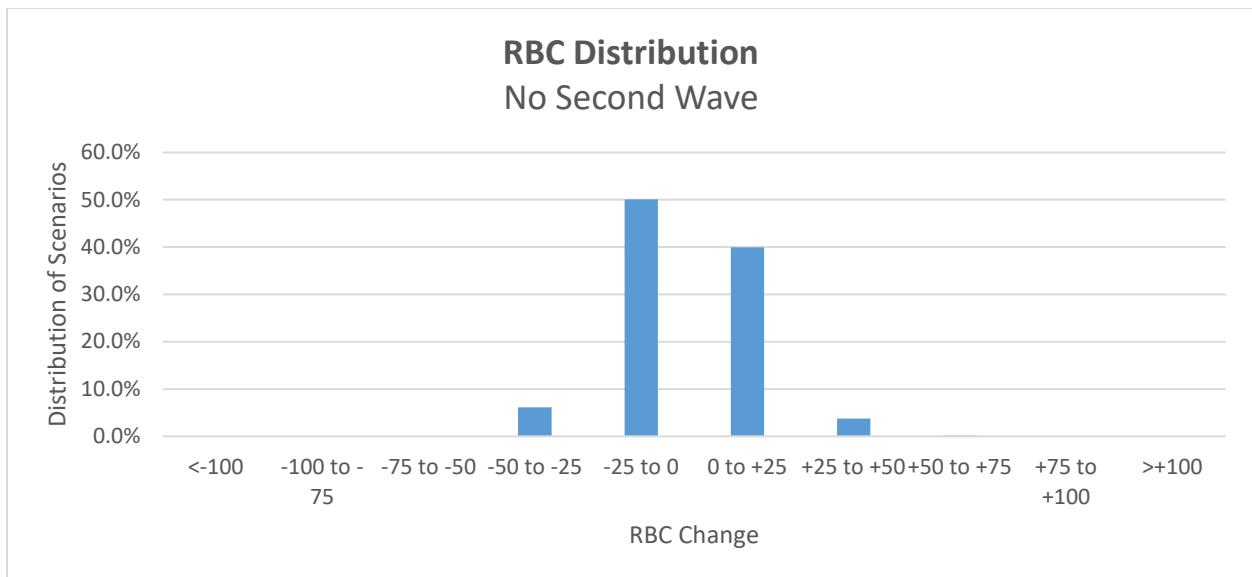
## Analysis & Results

The presence and severity of a second wave is the most impactful assumption. Below, we examine the cumulative RBC impact of each of the four second wave severity scenarios described above in the *Treatment Costs* section, as well as a scenario with no second wave of illness necessitating an economic shutdown. For each of these five scenarios, we run 10,000 simulations using the inputs noted in the *Methodology* section. Appendix D provides the summary stochastics of the stochastic modeling, with the geographic distribution noted in the *Methodology* section. Note that while the modeling does not consider the minimum or maximum to be likely, and in certain instances the values are +/- three standard deviations from the mean, we believe it is important to consider their possibility in the modeling without giving them an inordinate amount of weight.

### Results by Severity of Second Wave

#### No Second Wave

In scenarios where there is no second wave of illness necessitating an economic shutdown, the majority of scenarios fall between a -25 to +25 RBC change. In 2020, the deferral of care experienced in the spring of 2020 dampens claims, but the direct costs of COVID-19, vaccination costs, and the return of deferred services result in the RBC returning toward its beginning value in the vast majority of scenarios.



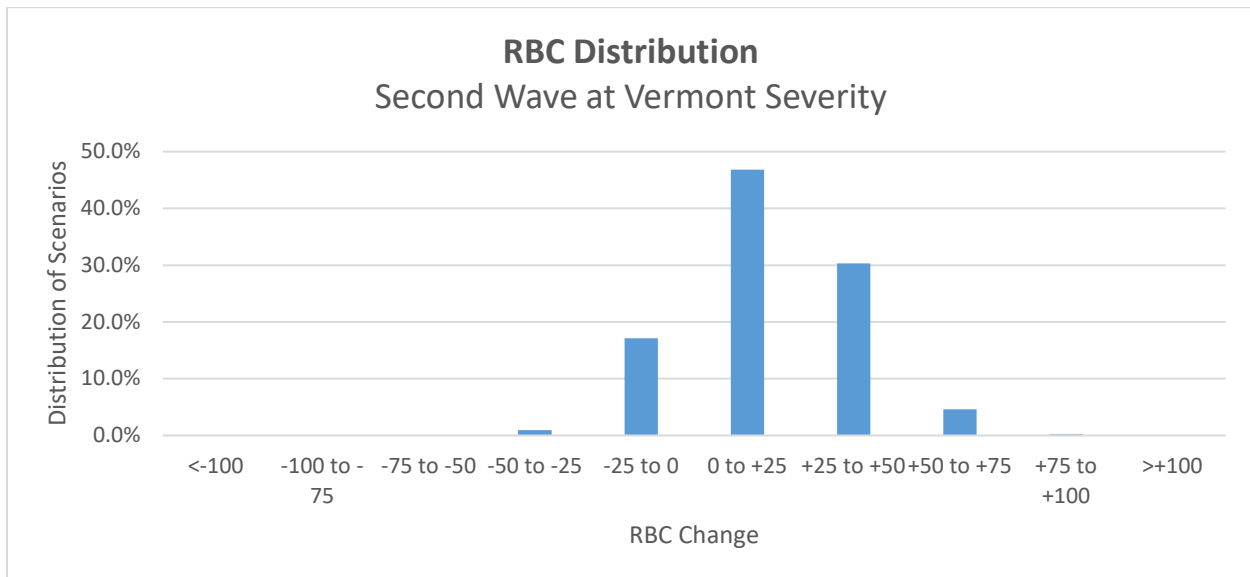
It seems unlikely, particularly in light of current events nationally, that Vermont will be able to avoid a second wave of increased incidence accompanied by stronger social distancing measures and the deferral of non-emergent services. Nonetheless, this model is useful to consider as it simulates a plausible range of outcomes in the instance that events to date represent the only significant wave of COVID infection or economic shutdown in Vermont. In

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the absence of more complete information, it may seem tempting to conclude that the tens of millions of dollars of deferred services to date are a “windfall” to BCBSVT. This simulation demonstrates that, to the contrary, even in the event that Vermont never sees another spike in COVID infection, the net claims impact of the pandemic is likely to be very close to breakeven.

### Vermont Severity

In scenarios where the second wave is aligned with the severity experienced in Vermont’s first wave, the majority of scenarios produced by the stochastic model show a modest increase to RBC. As noted above, the concept of a second wave not only considers COVID-19 incidence, but a corresponding economic shutdown and the deferral of non-emergent care. As noted in the *Treatment Costs* section, we consider it likely that incidence would need to surpass the infection rate experienced during the first wave for the state to consider further periods of economic shutdown, but nevertheless consider it important to model the impact of such a scenario to RBC. In this scenario, a second wave creates additional deferred care, but the limited direct costs drive the increase to RBC in most scenarios.



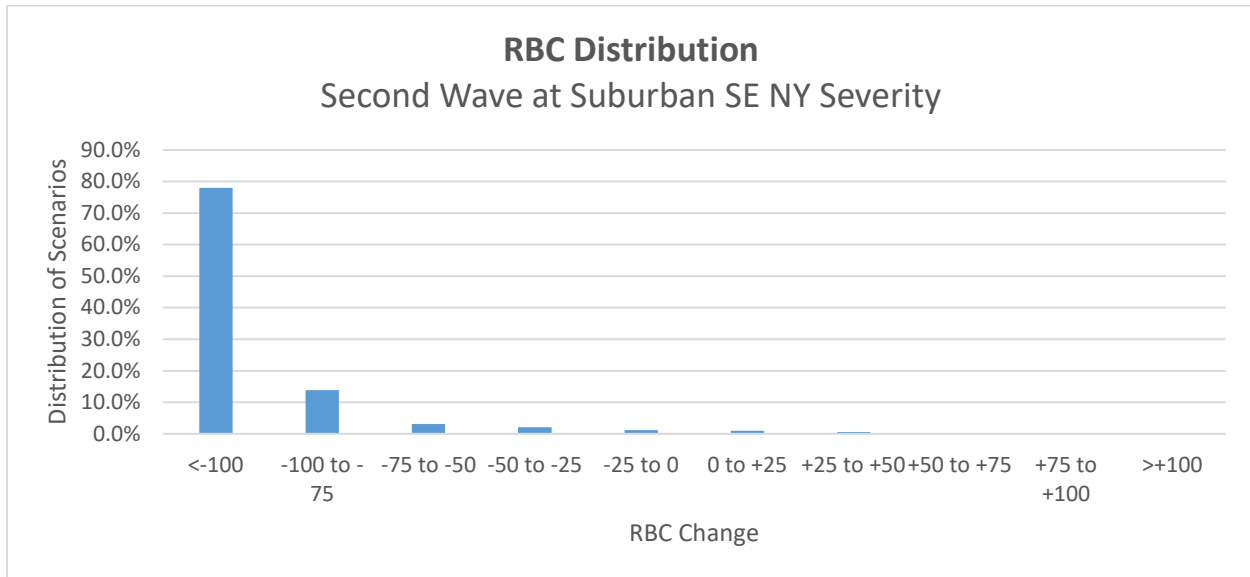
From the perspective of BCBSVT's financial position, this can be viewed as a best-case scenario, as this view maximizes the deferral of care while minimizing the realistic rate of infection that could provoke another round of severe social and economic restrictions. Even in this outlook, the improvement in claims costs has only a modestly favorable impact on BCBSVT RBC in most simulations—a vanishingly small number of simulations result in an increase in RBC of more than 75 percentage points.

### Suburban Southeastern New York Severity

The New York City metropolitan area experienced some of the highest incidence of COVID-19 cases in the country during the spring of 2020. As we discuss in the *Methodology* section, we

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consider it important not to model the *probability* of a specific outcome occurring, but rather the extent to which various plausible scenarios affect BCBSVT's RBC. It is therefore critical to model the results of a severe second wave. In this set of simulations, the direct costs of COVID-19 are profound, vastly overshadowing the dampening of claims in the spring of 2020 and the deferral of care during the second wave.

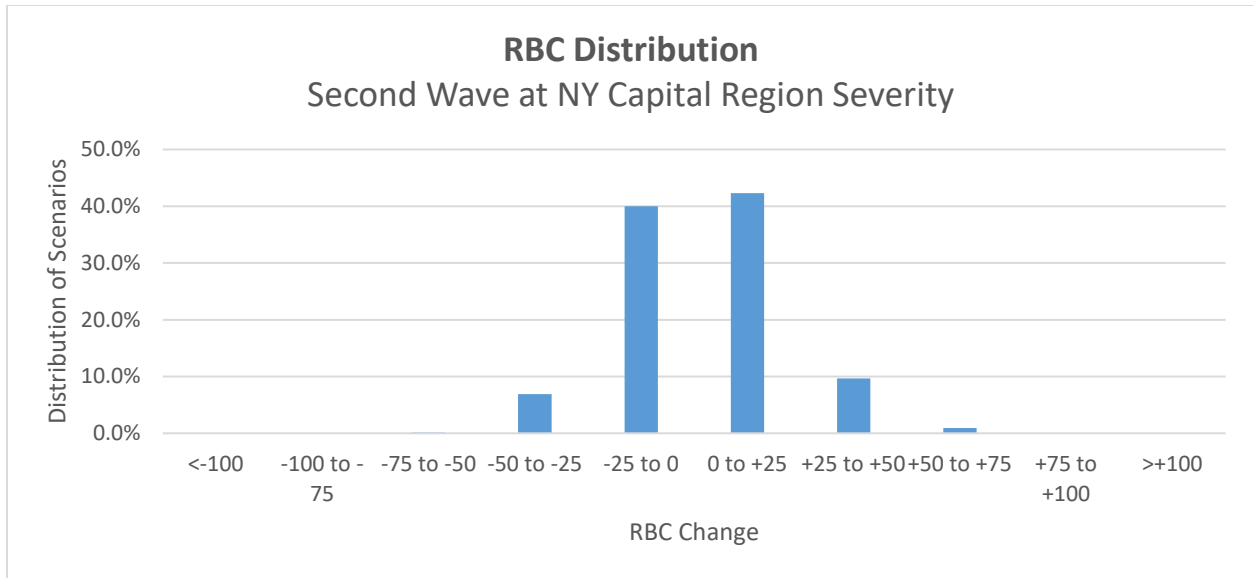


While we hope and believe that this is not the most likely path of COVID infection in Vermont, it is a plausible scenario that merits careful consideration. In almost all simulations, this level of disease burden would have a highly deleterious impact on BCBSVT's financial health.

### NY Capital Region Severity

The last two scenarios examine incidence levels of geographic regions close to Vermont that exceeded Vermont's level of COVID-19 cases during the first wave. First, we consider the Capital Region of New York, which saw a case rate approximately 3.5 times that of Vermont but less than 20 percent of that experienced in suburban southeastern New York. The scenarios are largely centered between a 25-point decrease and a 25-point increase to RBC. The second wave of shutdown creates additional deferred care, but this is offset to some degree by higher direct costs than those experienced in the first wave. These results are strikingly similar to those produced using an assumption of no second wave at all.

## Blue Cross and Blue Shield of Vermont COVID-19 Modeling

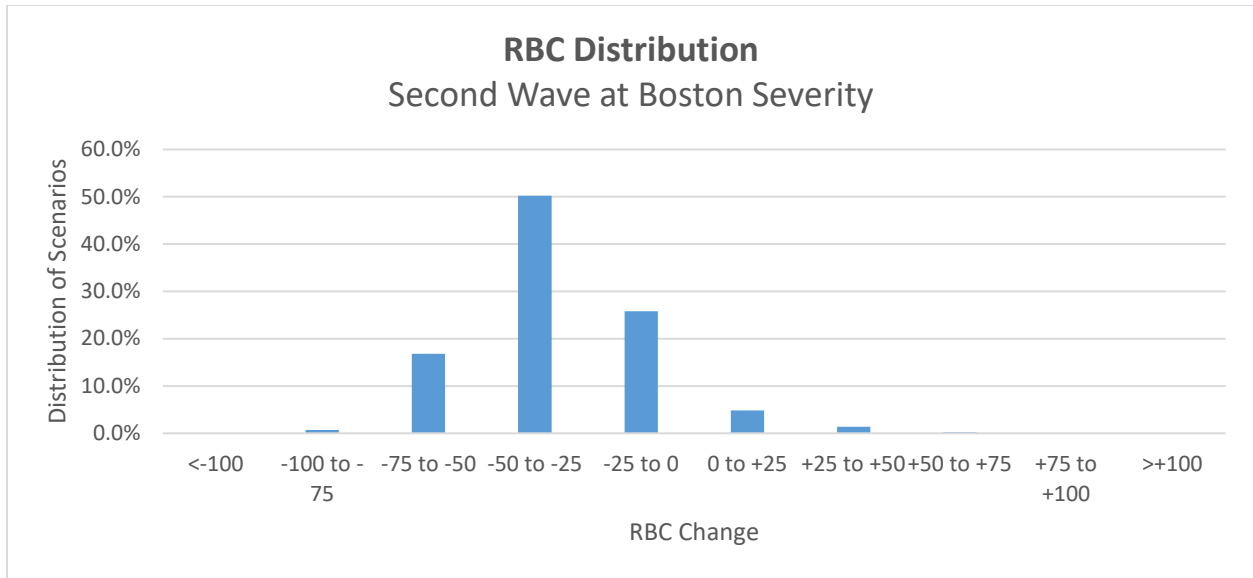


We consider this to be a reasonably plausible scenario in that an infection rate surpassing that experienced earlier this year in Vermont and tracking closer to that seen in a nearby region may very well lead to another partial shutdown of the Vermont economy and implementation of stringent social distancing measures. The impact to claims of such a scenario is neutral—it is unlikely that BCBSVT would benefit from a windfall or that financials would be significantly pressured based on the level of paid claims.

### Boston Severity

Lastly, we model the RBC impact of a second wave where the incidence is analogous to that of Boston's first wave. Boston experienced an infection rate nearly nine times that of Vermont, but less than half of the incidence recorded in suburban southeastern New York. The RBC impact is centered around the -50 to -25 range, indicative of the higher direct costs exceeding the deferral of care in the second wave.

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This is a relatively severe scenario that models the outlook should the spread of the disease throughout rural New England simply be delayed relative to, but not ultimately different from, urban New England. This plausible, yet perhaps not most likely, sequence of events results in most simulations in a modest decline in RBC position due to an escalation of claims cost above the level anticipated in the 2021 VISG rate filing.

Appendix E provides summary statistics for the geographic scenarios noted above.

[Summary of Results by Year](#)

We provide the modeled RBC impact by year for the above geographic scenarios in the table below. The 2022 impact includes only the completion of returning care from waves in 2020 and 2021, along with any vaccine costs incurred in 2022 (see *Purpose* section for a more thorough description).

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| Wave 2 Severity                | Average RBC Impact as of December 31, |      |      |       |
|--------------------------------|---------------------------------------|------|------|-------|
|                                | 2020                                  | 2021 | 2022 | Total |
| No Second Wave                 | +60                                   | -41  | -22  | -2    |
| Vermont                        | +98                                   | -56  | -25  | +18   |
| NY Capital Region              | +91                                   | -63  | -26  | +2    |
| Boston                         | +74                                   | -78  | -28  | -32   |
| Suburban Southeastern New York | +33                                   | -117 | -31  | -115  |

These results demonstrate rather dramatically the peril in considering only the 2020 impact of the pandemic on BCBSVT's financial position. To an even greater extent, BCBSVT's financial strength cannot be assessed using the RBC impact to date. This follows because the bulk of deferred care has yet to return, while ongoing COVID-related claims are likely to escalate. As BCBSVT has stressed throughout the rate review process, it has not added any COVID-related costs to its filed 2021 premiums and will instead pay any and all such costs through policyholder reserves. It is therefore necessary to consider the full projected impact through 2021 of a reasonable range of scenarios projecting the future path of the pandemic. It is only through such an assessment that one can reasonably evaluate the financial outlook of the company.

These results demonstrate that, while 2020 operating results are likely to be favorable, the claims impact of the full pandemic is likely to be fairly close to neutral in most scenarios, with the plausible outcomes ranging from modestly favorable to significantly unfavorable.

[Sensitivity to Assumptions other than Severity](#)

The timing of a vaccine directly affects the modeling results. Direct costs of COVID escalate with a later vaccine availability date, which drives the scenarios toward a decline in RBC as vaccine availability stretches later into 2021. In other words, BCBSVT's financial position will tend to deteriorate the longer it takes an effective vaccine to reach the market, all else being equal.

| RBC Impact by Vaccine Availability |         |         |         |         |         |            |
|------------------------------------|---------|---------|---------|---------|---------|------------|
| Vaccine Availability               | Q4 2020 | Q1 2021 | Q2 2021 | Q3 2021 | Q4 2021 | After 2021 |
| RBC Points                         | +17     | -2      | -11     | -20     | -26     | -30        |



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Lastly, we also consider the effects of returning care on RBC. As noted in the *Methodology* section, we consider 56.1 percent of deferred care returning to be our best estimate and set that as the mean in the stochastic model. Below, we provide the cumulative RBC impact under various ranges of returning care. Here, we find that, as expected, the deterioration of BCBSVT’s financial position is directly correlated with the amount of care that ultimately returns.

| RBC Impact by Deferred Care Returning Range |           |         |         |         |         |           |
|---|-----------|---------|---------|---------|---------|-----------|
| Range                                       | Above 65% | 60%-65% | 55%-60% | 50%-55% | 45%-50% | Below 45% |
| RBC Points                                  | -33       | -28     | -19     | -13     | -5      | +5        |

Appendix F provides the derivation of future costs for a single scenario.

## Conclusions

The COVID-19 pandemic has created unprecedented uncertainty in the level of paid claims BCBSVT will incur in the next 18 months. There is significant uncertainty beyond 2021 as well, related to waves of infection, vaccine availability, and vaccine efficacy, all of which may present profound impacts to BCBSVT’s members, employer groups, and risk-based capital position. This analysis exclusively considers direct costs in 2020 and 2021—the costs presented beyond 2021 only represent the tail of the claims impact of the 2020 and 2021 course of the pandemic. This is the most useful and appropriate information to consider in assessing BCBSVT’s financial position for purposes of the 2021 VISG filing.

BCBSVT has implemented a number of programs to help our members, employer groups, providers, and community in recent months. While this analysis considers a number of scenarios over the next 18 months, it does not provide a holistic view of the COVID-19 costs or risks faced by BCBSVT in the coming months and years. The additional operating costs that have a material impact on BCBSVT’s financial position are displayed in separate documentation delivered in response to Inquiry Letter 4.

The modeling outlined in the memorandum presents a number of scenarios under varying assumptions that produce disparate results. New information regarding the factors outlined in this memorandum continues to emerge and will directly affect BCBSVT’s financial position. Based on the best information known at the time this modeling was performed, the COVID-19 pandemic is likely to have an impact on claims costs ranging from modestly favorable to substantially unfavorable, with the majority of simulated results being fairly neutral. The modeling also shows that the likelihood of a significantly favorable impact on claims costs resulting in a “windfall” to BCBSVT is vanishingly small. While a significant deterioration of BCBSVT’s financial position due solely to escalated COVID-related claims costs may not be the most likely outcome, it would be imprudent to ignore the very real potential for such a

**Blue Cross and Blue Shield of Vermont  
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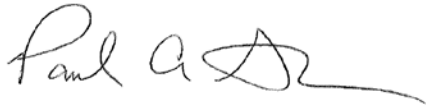
scenario in considering possible rate actions. For this reason, and in light of the more complete RBC development provided in the separate documentation referenced above, BCBSVT cannot responsibly reduce its 2021 VISG rate request below actuarially sound levels.

## **Actuarial Certification**

The purpose of this report is to model possible scenarios related to the COVID-19 pandemic on paid claims for Blue Cross and Blue Shield of Vermont and The Vermont Health Plan insured individual, small group, and large group plans. The model and results are intended to quantify the impact varying scenarios have on BCBSVT's risk based capital ratio (RBC) as a means of additional support for its Vermont Individual and Small Group Rate Filing (SERFF #BCVT-132371410). This report is not intended to be used for other purposes.

Appendix G lists applicable limitations and disclosures.

It is my opinion that the modeling presented in this report is reasonable and has been prepared in accordance with applicable Actuarial Standards of Practice. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries, and I meet the Academy's Qualification Standards to render this opinion.



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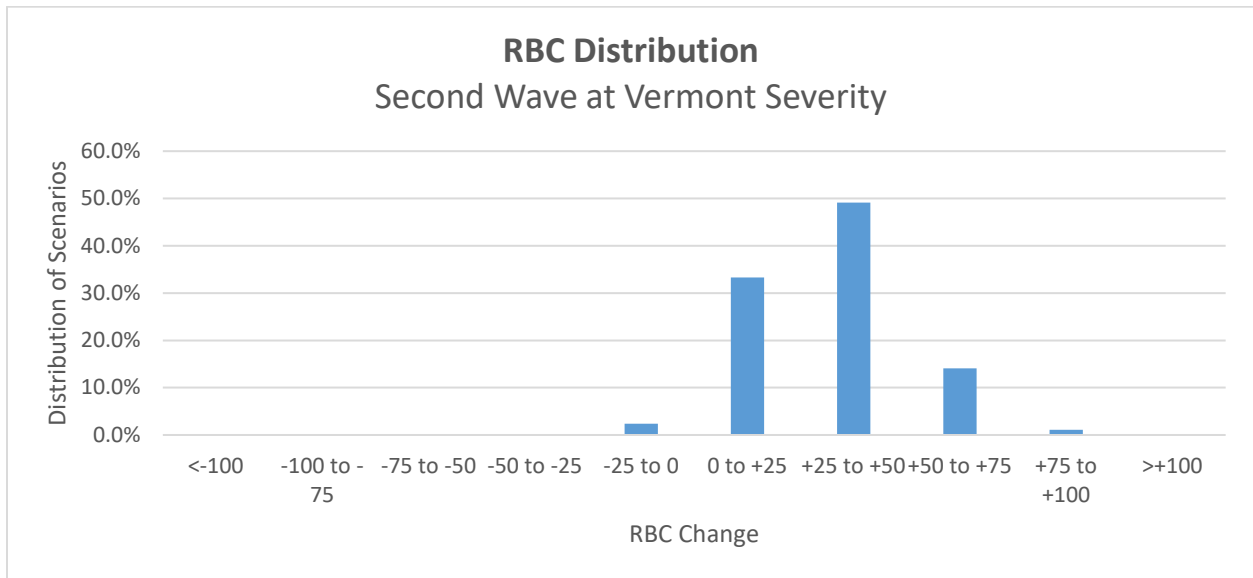
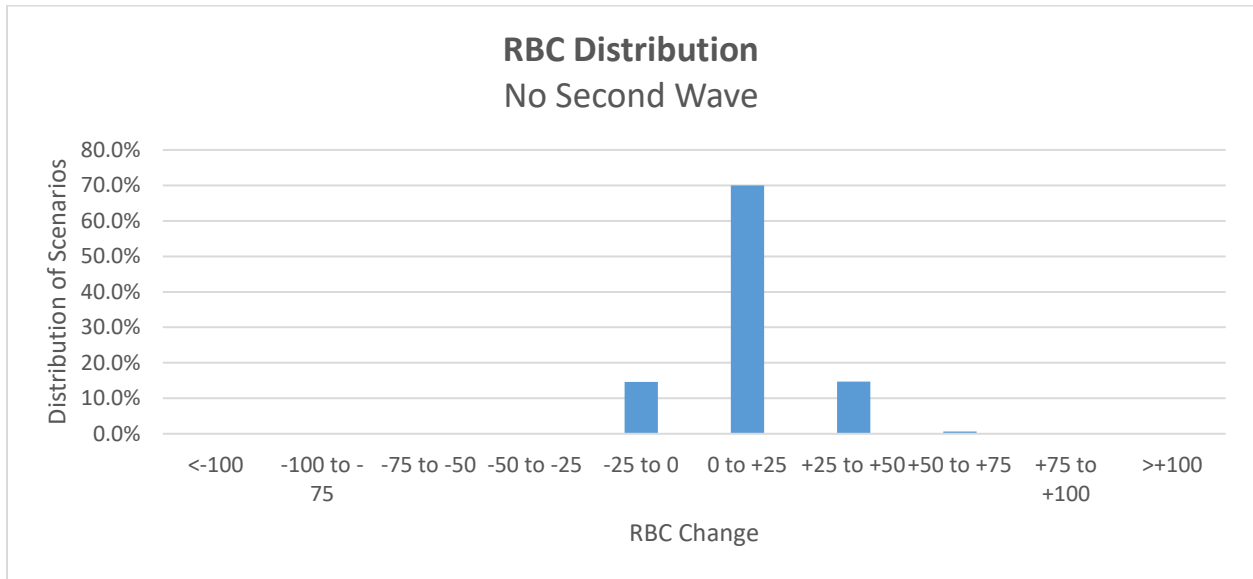
Paul A Schultz, F.S.A., M.A.A.A.

July 4, 2020

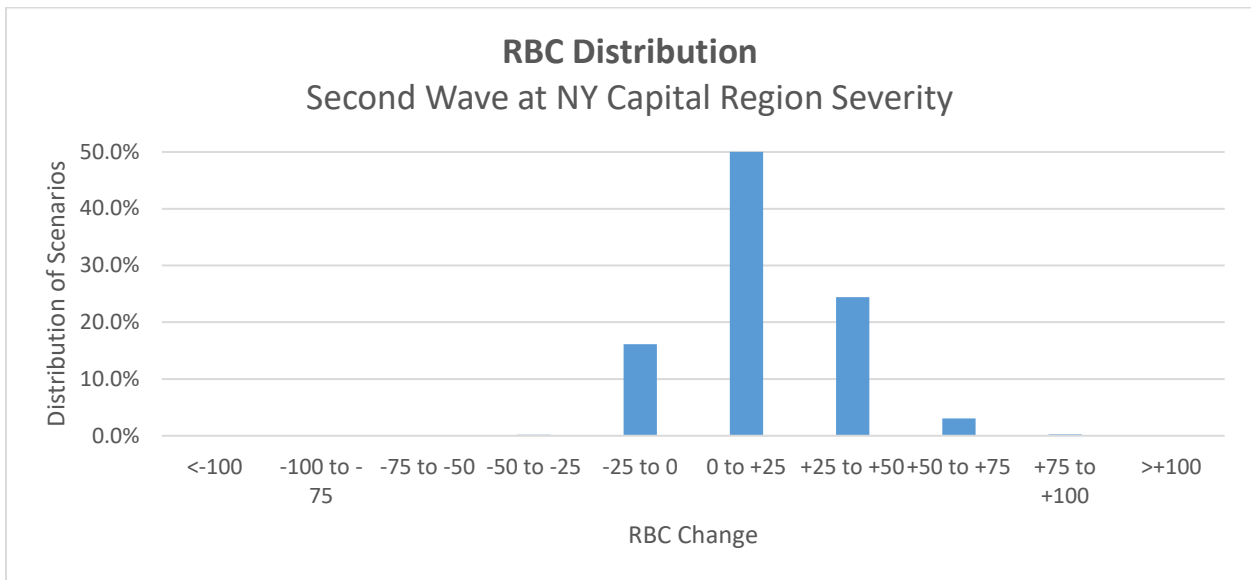
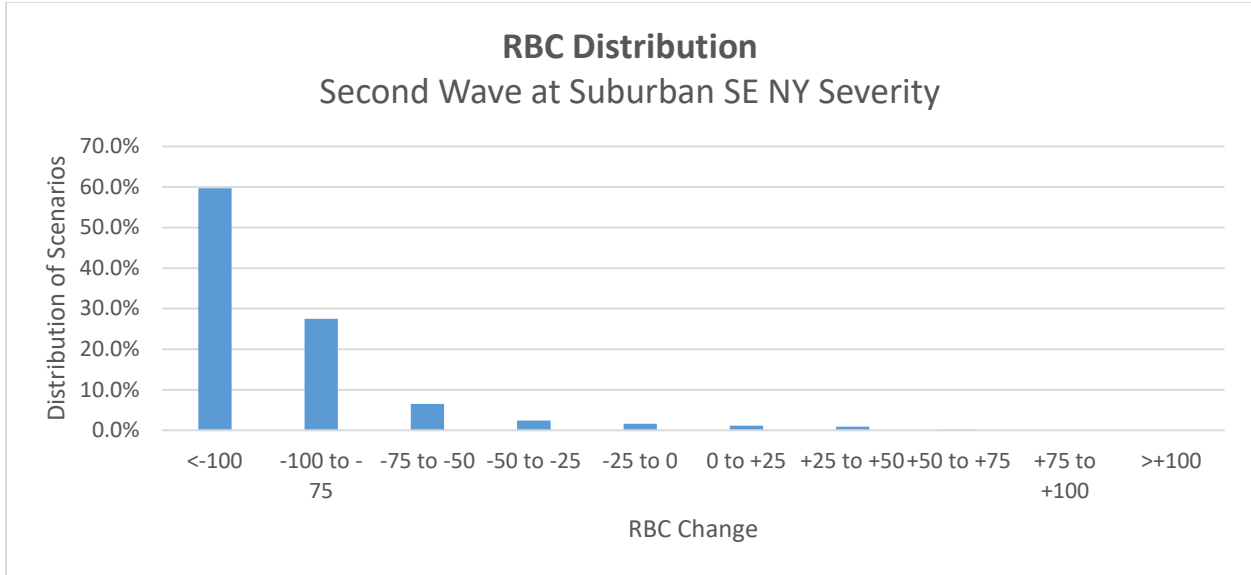
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## Appendix A: Results if Vaccine Cost is Publicly Funded

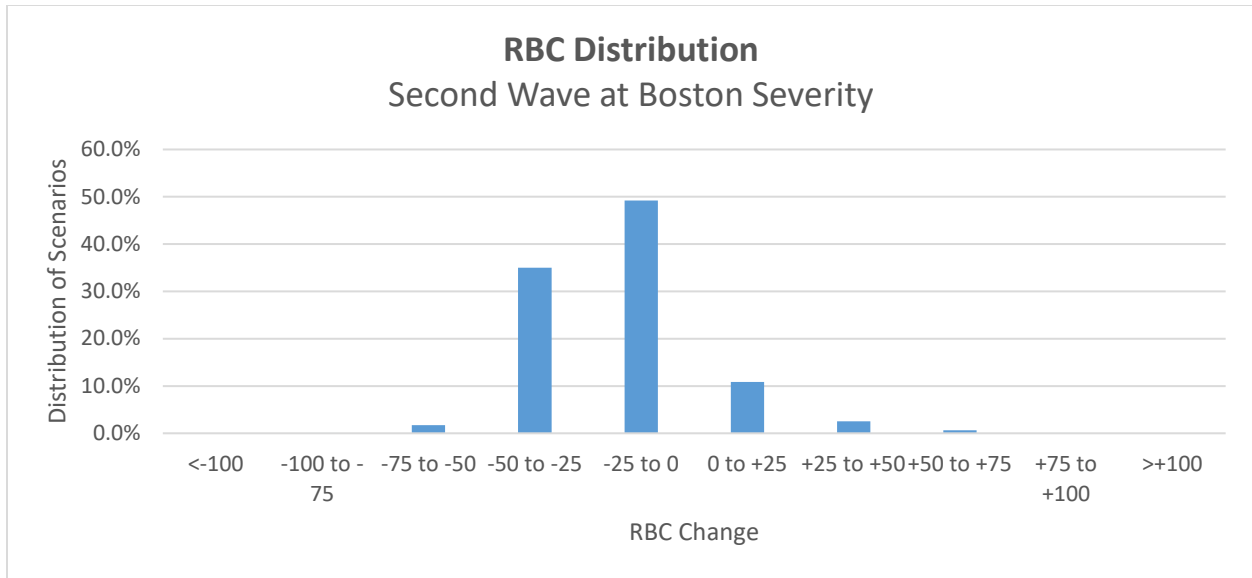
The below charts present modeling results from the *Analysis & Results* section in the circumstance that BCBSVT is not responsible for paying for the cost of a vaccine. The average impact of removing the cost of a vaccine is approximately 14 RBC points. For context, this shifts the graphs approximately a half range to the right as compared to the graphs shown in the *Results* section of the main report.



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| Wave 2 Severity                | Average RBC Impact as of December 31, |      |      |       |
|--------------------------------|---------------------------------------|------|------|-------|
|                                | 2020                                  | 2021 | 2022 | Total |
| No Second Wave                 | +61                                   | -30  | -18  | 13    |
| Vermont                        | +99                                   | -45  | -21  | +32   |
| NY Capital Region              | +91                                   | -52  | -23  | +16   |
| Boston                         | +74                                   | -67  | -25  | -18   |
| Suburban Southeastern New York | +33                                   | -106 | -28  | -100  |

| RBC Impact by Vaccine Availability |         |         |         |         |         |            |
|------------------------------------|---------|---------|---------|---------|---------|------------|
| Vaccine Availability               | Q4 2020 | Q1 2021 | Q2 2021 | Q3 2021 | Q4 2021 | After 2021 |
| RBC Points                         | 31      | 13      | 3       | -5      | -12     | -15        |

| RBC Impact by Deferred Care Returning Range |           |         |         |         |         |           |
|---|-----------|---------|---------|---------|---------|-----------|
| Range                                       | Above 65% | 60%-65% | 55%-60% | 50%-55% | 45%-50% | Below 45% |
| RBC Points                                  | -19       | -14     | -5      | 2       | 10      | 20        |

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If current regulation changes such that the cost of a vaccine is publicly-funded rather than borne by health insurers, the impact of the pandemic on projected claims cost is modestly favorable relative to the results presented in the body of this report. The impact is sufficiently small that the conclusions within each scenario, each set of scenarios, and in an overall sense are not impacted.

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Appendix B: Derivation of the Estimated Percentage of Returning Deferred Services

| Type of Service                                 | Benchmark PMPM | Slowdown PMPM | Percent Rescheduled Services |
|---|----------------|---------------|------------------------------|
| Mental Health (Inpatient)                       | \$4.40         | \$2.23        | 0%                           |
| Mental Health (Other)                           | \$13.28        | \$0.00        | 0%                           |
| Pregnancy/Newborn                               | \$20.00        | \$1.37        | 0%                           |
| Influenza/Pneumonia                             | \$1.44         | \$0.66        | 0%                           |
| Emergency and Urgent Care                       | \$34.30        | \$9.65        | 0%                           |
| Medical - Rx                                    | \$40.49        | \$0.00        | 0%                           |
| Ambulance                                       | \$2.42         | \$1.14        | 0%                           |
| DME   | \$1.93         | \$0.13        | 0%                           |
| Home Health & Hospice                           | \$8.50         | \$0.40        | 0%                           |
| Laboratory - Chronic                            | \$8.83         | \$2.56        | 100%                         |
| Laboratory - Other                              | \$13.95        | \$5.77        | 0%                           |
| Radiology - Chronic                             | \$12.00        | \$2.54        | 100%                         |
| Radiology - Other                               | \$28.76        | \$12.40       | 0%                           |
| Evaluation and Management - Chronic             | \$12.72        | \$1.60        | 100%                         |
| Evaluation and Management - Other               | \$22.48        | \$6.53        | 0%                           |
| Ophthalmology Services                          | \$2.26         | \$1.23        | 75%                          |
| PT & Chiropractic                               | \$16.53        | \$8.41        | 40%                          |
| Immunizations                                   | \$0.94         | \$0.29        | 100%                         |
| Cardiology/EKG/ECG/EEG                          | \$8.75         | \$4.52        | 30%                          |
| Surgery (knee/hip/shoulder + other bones)       | \$34.67        | \$18.46       | 100%                         |
| Surgery - GI                                    | \$26.22        | \$14.93       | 100%                         |
| Surgery - Respiratory (non-Influenza/Pneumonia) | \$4.20         | \$2.12        | 100%                         |
| Surgery - Renal/Pancreas/Integumentary          | \$13.55        | \$5.22        | 100%                         |
| Surgery - Reproductive System/Genital           | \$8.73         | \$4.29        | 100%                         |
| Surgery - Neuro                                 | \$7.85         | \$4.13        | 100%                         |
| Surgery - Eye                                   | \$2.78         | \$1.41        | 100%                         |
| Surgery - Other                                 | \$10.71        | \$3.97        | 100%                         |
| Surgery - Cardiac                               | \$11.76        | \$5.14        | 100%                         |
| Oncology Treatment                              | \$7.54         | \$1.34        | 100%                         |
| IP - Diseases and Disorders                     | \$10.56        | \$2.10        | 5%                           |
| Other Inpatient                                 | \$10.36        | \$2.31        | 5%                           |
| Other Outpatient                                | \$20.97        | \$7.99        | 30%                          |
| Other Professional                              | \$4.81         | \$2.08        | 30%                          |
| <b>Total</b>                                    |                |               | <b>56.1%</b>                 |

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Appendix C: Sample Deferred and Returning Care Factors

| Sample Deferred and Returning Care Factors |                  |                  |                  |                  |                  |                  |                  |                  |                  |                   |                   |                   |                   |                   |                   |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|  | <i>Example 1</i> | <i>Example 2</i> | <i>Example 3</i> | <i>Example 4</i> | <i>Example 5</i> | <i>Example 6</i> | <i>Example 7</i> | <i>Example 8</i> | <i>Example 9</i> | <i>Example 10</i> | <i>Example 11</i> | <i>Example 12</i> | <i>Example 13</i> | <i>Example 14</i> | <i>Example 15</i> |
| 202006                                     | 91.0%            | 82.0%            | 86.0%            | 93.0%            | 81.0%            | 95.0%            | 91.0%            | 86.0%            | 93.0%            | 91.0%             | 89.0%             | 90.0%             | 82.0%             | 96.0%             | 97.0%             |
| 202007                                     | 110.0%           | 110.0%           | 107.0%           | 106.0%           | 106.0%           | 107.0%           | 109.0%           | 105.0%           | 106.0%           | 110.0%            | 108.0%            | 112.0%            | 103.0%            | 112.0%            | 106.0%            |
| 202008                                     | 107.0%           | 110.0%           | 105.3%           | 105.9%           | 104.0%           | 107.0%           | 106.8%           | 103.4%           | 104.5%           | 110.0%            | 107.9%            | 111.5%            | 102.2%            | 108.0%            | 105.5%            |
| 202009                                     | 105.3%           | 107.8%           | 103.9%           | 105.1%           | 102.7%           | 105.0%           | 104.5%           | 103.4%           | 103.3%           | 109.9%            | 105.2%            | 110.7%            | 101.6%            | 107.0%            | 104.9%            |
| 202010                                     | 104.3%           | 95.0%            | 89.0%            | 103.3%           | 101.8%           | 103.0%           | 94.0%            | 94.0%            | 102.9%           | 109.2%            | 103.7%            | 89.0%             | 87.0%             | 90.0%             | 103.9%            |
| 202011                                     | 104.3%           | 80.0%            | 80.0%            | 102.3%           | 101.5%           | 102.5%           | 83.0%            | 85.0%            | 102.2%           | 106.8%            | 103.7%            | 78.0%             | 76.0%             | 77.0%             | 103.6%            |
| 202012                                     | 88.0%            | 91.0%            | 82.0%            | 101.7%           | 101.1%           | 102.5%           | 81.0%            | 68.0%            | 102.0%           | 100.0%            | 102.5%            | 69.0%             | 83.0%             | 79.0%             | 102.4%            |
| 202101                                     | 79.0%            | 110.0%           | 94.0%            | 93.0%            | 95.0%            | 102.1%           | 92.0%            | 75.0%            | 101.4%           | 100.0%            | 102.4%            | 76.0%             | 85.0%             | 94.0%             | 102.6%            |
| 202102                                     | 90.0%            | 110.0%           | 107.0%           | 78.0%            | 78.0%            | 101.5%           | 109.0%           | 86.0%            | 101.1%           | 100.0%            | 102.3%            | 87.0%             | 106.0%            | 110.0%            | 102.5%            |
| 202103                                     | 110.0%           | 108.8%           | 107.0%           | 84.0%            | 84.0%            | 87.0%            | 109.0%           | 108.0%           | 101.2%           | 100.0%            | 102.3%            | 102.0%            | 106.0%            | 112.0%            | 101.9%            |
| 202104                                     | 110.0%           | 105.6%           | 105.5%           | 92.0%            | 94.0%            | 75.0%            | 108.9%           | 108.0%           | 101.1%           | 100.0%            | 101.8%            | 112.0%            | 104.2%            | 107.7%            | 101.6%            |
| 202105                                     | 108.2%           | 103.9%           | 104.4%           | 106.0%           | 106.0%           | 85.0%            | 108.8%           | 108.0%           | 101.1%           | 100.0%            | 101.6%            | 111.7%            | 102.9%            | 104.8%            | 101.6%            |
| 202106                                     | 108.3%           | 102.0%           | 103.9%           | 106.0%           | 106.0%           | 89.0%            | 106.4%           | 107.5%           | 101.1%           | 100.0%            | 101.3%            | 111.6%            | 102.4%            | 104.2%            | 101.7%            |
| 202107                                     | 108.1%           | 100.0%           | 103.3%           | 104.8%           | 104.5%           | 106.0%           | 106.1%           | 107.4%           | 101.1%           | 100.0%            | 101.0%            | 107.7%            | 102.1%            | 103.7%            | 101.7%            |
| 202108                                     | 102.7%           | 100.0%           | 103.0%           | 104.0%           | 103.9%           | 107.0%           | 105.3%           | 107.0%           | 100.9%           | 100.0%            | 100.9%            | 105.4%            | 101.8%            | 103.4%            | 101.0%            |
| 202109                                     | 100.0%           | 100.0%           | 102.9%           | 103.5%           | 102.6%           | 104.9%           | 103.6%           | 105.0%           | 100.9%           | 100.0%            | 100.8%            | 104.3%            | 101.9%            | 103.5%            | 100.0%            |
| 202110                                     | 100.0%           | 100.0%           | 103.0%           | 103.0%           | 102.0%           | 104.4%           | 103.6%           | 104.1%           | 100.6%           | 100.0%            | 100.5%            | 103.8%            | 101.4%            | 102.9%            | 100.0%            |
| 202111                                     | 100.0%           | 100.0%           | 102.1%           | 102.5%           | 102.0%           | 103.8%           | 102.3%           | 102.6%           | 100.4%           | 100.0%            | 100.0%            | 103.6%            | 101.3%            | 101.9%            | 100.0%            |
| 202112                                     | 100.0%           | 100.0%           | 101.5%           | 101.7%           | 102.0%           | 102.7%           | 100.0%           | 102.1%           | 100.5%           | 100.0%            | 100.0%            | 103.3%            | 101.2%            | 101.4%            | 100.0%            |



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Appendix D: Stochastic Modeling Summary Statistics

| Stochastic Modeling Summary Statistics <sup>24</sup> |       |                |                |                |
|--|-------|----------------|----------------|----------------|
| Component  | Year  | Mean           | Min            | Max            |
| Diagnostic Testing                                   | 2020  | \$1,509,073    | \$977,170      | \$1,972,964    |
|  | 2021  | \$1,579,506    | \$22,464       | \$3,033,586    |
|  | Total | \$3,088,579    | \$1,034,025    | \$4,961,124    |
| Vaccine  | 2020  | \$97,135       | \$0            | \$4,639,124    |
|  | 2021  | \$2,322,204    | \$0            | \$6,958,686    |
|  | 2022+ | \$671,818      | \$0            | \$6,958,686    |
|  | Total | \$3,091,157    | \$1,268,658    | \$6,958,686    |
| Morbidity Impact Deferred Care                       | 2020  | \$459,855      | \$0            | \$1,536,880    |
|  | 2021  | \$1,560,779    | \$0            | \$3,847,882    |
|  | Total | \$2,020,634    | \$0            | \$5,204,758    |
| Treatment  | 2020  | \$6,375,550    | \$2,142,345    | \$39,845,555   |
|  | 2021  | \$5,988,348    | \$39,867       | \$41,302,844   |
|  | Total | \$12,363,898   | \$2,183,498    | \$44,320,984   |
| Delayed Care   | 2020  | (\$29,190,229) | (\$50,349,612) | (\$21,010,308) |
|  | 2021  | (\$4,865,075)  | (\$26,535,937) | \$0            |
|  | Total | (\$34,055,304) | (\$53,071,047) | (\$21,010,308) |
| Returning Care                                       | 2020  | \$5,458,029    | \$0            | \$15,147,964   |
|  | 2021  | \$8,886,333    | \$0            | \$22,097,478   |
|  | 2022+ | \$4,784,548    | \$0            | \$26,410,460   |
|  | Total | \$19,128,910   | \$8,268,772    | \$35,072,890   |

<sup>24</sup> We do not provide summary statistics for 'Changes in Demand' since its value is assumed to be constant across all scenarios.

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Appendix E: Breakout of Claims by Year

| Projected Paid Claims |               |               |                             |
|-----------------------|---------------|---------------|-----------------------------|
| 2020                  | 2021          | Subtotal      | 2022                        |
| \$339,991,579         | \$370,168,089 | \$710,159,668 | \$403,022,964 <sup>25</sup> |

| Claims by Year - No Second Wave                      |                       |                    |                    |                  |
|--|-----------------------|--------------------|--------------------|------------------|
|  | 2020                  | 2021               | 2022               | Total            |
| Direct Costs   | \$3,939,130           | \$4,165,943        |                    | \$8,105,073      |
| Vaccination Costs                                    | \$94,461              | \$2,348,869        | \$679,093          | \$3,122,423      |
| Delayed Claims                                       | (\$23,352,114)        | (\$173,726)        |                    | (\$23,525,840)   |
| Returning Claims                                     | \$6,593,707           | \$2,692,825        | \$3,918,811        | \$13,205,342     |
| Changes in Demand and Deferred Care Morbidity Impact | (\$160,204)           | (\$318,931)        |                    | (\$479,136)      |
| <b>Net Impact by Year</b>                            | <b>(\$12,885,021)</b> | <b>\$8,714,980</b> | <b>\$4,597,904</b> | <b>\$427,863</b> |

| Claims by Year - Vermont                             |                       |                     |                    |                      |
|--|-----------------------|---------------------|--------------------|----------------------|
|  | 2020                  | 2021                | 2022               | Total                |
| Direct Costs   | \$4,207,590           | \$4,330,322         |                    | \$8,537,912          |
| Vaccination Costs                                    | \$76,897              | \$2,303,485         | \$659,244          | \$3,039,627          |
| Delayed Claims                                       | (\$30,333,370)        | (\$5,613,017)       |                    | (\$35,946,387)       |
| Returning Claims                                     | \$5,240,162           | \$10,394,633        | \$4,588,808        | \$20,223,603         |
| Changes in Demand and Deferred Care Morbidity Impact | (\$158,599)           | \$504,075           |                    | \$345,476            |
| <b>Net Impact by Year</b>                            | <b>(\$20,967,319)</b> | <b>\$11,919,498</b> | <b>\$5,248,052</b> | <b>(\$3,799,769)</b> |

| Claims by Year - Suburban Southeastern New York      |                      |                     |                    |                     |
|--|----------------------|---------------------|--------------------|---------------------|
|  | 2020                 | 2021                | 2022               | Total               |
| Direct Costs   | \$19,493,467         | \$18,647,651        |                    | \$38,141,118        |
| Vaccination Costs                                    | \$78,719             | \$2,339,139         | \$680,408          | \$3,098,266         |
| Delayed Claims                                       | (\$31,384,962)       | (\$7,361,151)       |                    | (\$38,746,113)      |
| Returning Claims                                     | \$4,992,183          | \$10,841,606        | \$5,917,859        | \$21,751,648        |
| Changes in Demand and Deferred Care Morbidity Impact | (\$167,967)          | \$480,646           |                    | \$312,679           |
| <b>Net Impact by Year</b>                            | <b>(\$6,988,560)</b> | <b>\$24,947,890</b> | <b>\$6,598,267</b> | <b>\$24,557,597</b> |

<sup>25</sup> Straightforwardly estimated by applying the 2021-over-2020 increase to 2021 claims; useful simply for comparison to the magnitude of the 2022 tail of returning services and vaccinations.

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| <b>Claims by Year - NY Capital Region</b>            |                       |                     |                    |                    |
|--|-----------------------|---------------------|--------------------|--------------------|
|  | <b>2020</b>           | <b>2021</b>         | <b>2022</b>        | <b>Total</b>       |
| Direct Costs   | \$6,219,525           | \$5,944,833         |                    | \$12,164,358       |
| Vaccination Costs                                    | \$77,646              | \$2,319,631         | \$673,259          | \$3,070,535        |
| Delayed Claims                                       | (\$30,619,065)        | (\$5,792,809)       |                    | (\$36,411,873)     |
| Returning Claims                                     | \$5,140,645           | \$10,497,751        | \$4,813,893        | \$20,452,288       |
| Changes in Demand and Deferred Care Morbidity Impact | (\$160,894)           | \$499,371           |                    | \$338,477          |
| <b>Net Impact by Year</b>                            | <b>(\$19,342,143)</b> | <b>\$13,468,777</b> | <b>\$5,487,151</b> | <b>(\$386,215)</b> |

| <b>Claims by Year - Boston</b>                       |                       |                     |                    |                    |
|--|-----------------------|---------------------|--------------------|--------------------|
|  | <b>2020</b>           | <b>2021</b>         | <b>2022</b>        | <b>Total</b>       |
| Direct Costs   | \$10,244,335          | \$9,688,119         |                    | \$19,932,454       |
| Vaccination Costs                                    | \$75,680              | \$2,312,317         | \$669,171          | \$3,057,168        |
| Delayed Claims                                       | (\$31,005,470)        | (\$6,621,526)       |                    | (\$37,626,996)     |
| Returning Claims                                     | \$5,064,828           | \$10,732,632        | \$5,328,489        | \$21,125,949       |
| Changes in Demand and Deferred Care Morbidity Impact | (\$167,714)           | \$483,989           |                    | \$316,274          |
| <b>Net Impact by Year</b>                            | <b>(\$15,788,342)</b> | <b>\$16,595,531</b> | <b>\$5,997,661</b> | <b>\$6,804,850</b> |

| <b>Claims by Year - All</b>                          |                       |                     |                    |                    |
|--|-----------------------|---------------------|--------------------|--------------------|
|  | <b>2020</b>           | <b>2021</b>         | <b>2022</b>        | <b>Total</b>       |
| Direct Costs   | \$7,889,720           | \$7,567,854         |                    | \$15,457,575       |
| Vaccination Costs                                    | \$97,135              | \$2,322,204         | \$671,818          | \$3,091,157        |
| Delayed Claims                                       | (\$29,190,229)        | (\$4,865,075)       |                    | (\$34,055,304)     |
| Returning Claims                                     | \$5,458,029           | \$8,886,333         | \$4,784,548        | \$19,128,910       |
| Changes in Demand and Deferred Care Morbidity Impact | (\$163,779)           | \$313,512           |                    | \$149,733          |
| <b>Net Impact by Year</b>                            | <b>(\$15,909,124)</b> | <b>\$14,224,829</b> | <b>\$5,456,365</b> | <b>\$3,772,070</b> |

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**Appendix F: Detailed Calculations**

The below tables provide a calculation of future costs under an illustrative scenario.

| Table 1: Model Inputs |                   |
|-----------------------|-------------------|
| Vaccine Timing        | Q2 2021           |
| Wave 2 Start          | 202010            |
| Wave 2 End            | 202012            |
| Wave 2 Severity       | Capital Region NY |
| Members               | 47,338            |

| Table 2: Vaccine Dampening Factors |        |
|------------------------------------|--------|
| 202102                             | 83.33% |
| 202103                             | 50.00% |
| 202104                             | 16.67% |
| 202105                             | 0.00%  |

Vaccine

| Table 3: Vaccine          |                           |             |
|---------------------------|---------------------------|-------------|
| Vaccine Cost              | a                         | \$90.00     |
| Vaccine Immunization Rate | b                         | 82.0%       |
| Members                   | c                         | 47,338      |
| Vaccine Total             | $d = a \times b \times c$ | \$3,493,544 |

Direct Costs

| Table 4: 2020 Testing            |                                       |           |
|----------------------------------|---------------------------------------|-----------|
| Diagnostic Test Cost             | a                                     | \$98.28   |
| Diagnostic Testing Rate (Annual) | b                                     | 0.36      |
| Diagnostic Test Months           | c                                     | 7         |
| Members                          | d                                     | 47,338    |
| Diagnostic Test Total            | $e = b/12 \times c \times d \times a$ | \$977,047 |

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| Table 5: 2021 Testing    |         |              |                          |           |
|--------------------------|---------|--------------|--------------------------|-----------|
| Month                    | Cost    | Monthly Rate | Vaccine Dampening Factor | Product   |
| 202101                   | \$98.28 | 0.03         | 1                        | \$2.95    |
| 202102                   | \$98.28 | 0.03         | 0.833                    | \$2.46    |
| 202103                   | \$98.28 | 0.03         | 0.5                      | \$1.47    |
| 202104                   | \$98.28 | 0.03         | 0.167                    | \$0.49    |
| 202105                   | \$98.28 | 0.03         | 0                        | \$0.00    |
| Total x Members (47,338) |         |              |                          | \$348,945 |

| Table 6: Treatment Case Rate |                         |          |                   |
|------------------------------|-------------------------|----------|-------------------|
|                              |                         | Vermont  | Capital Region NY |
| Case Rate Per Million        | a                       | 1,531    | 5,516             |
| Monthly Conversion Factor    | b                       | 1.84     | 1.84              |
| Monthly Case Rate            | $c = a / b / 1,000,000$ | 0.08316% | 0.29960%          |

| Table 7: Admit per Case Rate |                  |                     |
|------------------------------|------------------|---------------------|
| Age Band                     | Age Distribution | NYC Admit/Case Rate |
| 0-17                         | 11.6%            | 8.9%                |
| 18-44                        | 37.6%            | 11.0%               |
| 45-64                        | 48.8%            | 24.1%               |
| 65-74                        | 1.8%             | 46.6%               |
| 75+                          | 0.2%             | 61.3%               |
| Weighted Average             | 17.9%            |                     |

| Table 8: Cost per Admit |                                   |           |
|-------------------------|-----------------------------------|-----------|
| Non-ICU Cost            | a                                 | \$30,000  |
| Non-ICU Distribution    | b                                 | 0.7       |
| ICU Cost                | c                                 | \$110,000 |
| ICU Distribution        | d                                 | 0.3       |
| Estimated Admit Cost    | $e = (a \times b) + (c \times d)$ | \$54,000  |

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| <b>Table 9: 2020 Treatment Costs</b> |                   |           |                  |                          |            |             |         |
|--------------------------------------|-------------------|-----------|------------------|--------------------------|------------|-------------|---------|
| Month                                | Geographic Region | Case Rate | Dampening Factor | Vaccine Dampening Factor | Admit Rate | Admit Cost  | Product |
| 202006                               | Vermont           | 0.08316%  | 0.6              | 1                        | 17.9%      | \$54,000    | \$4.82  |
| 202007                               | Vermont           | 0.08316%  | 0.6              | 1                        | 17.9%      | \$54,000    | \$4.82  |
| 202008                               | Vermont           | 0.08316%  | 0.6              | 1                        | 17.9%      | \$54,000    | \$4.82  |
| 202009                               | Vermont           | 0.08316%  | 0.6              | 1                        | 17.9%      | \$54,000    | \$4.82  |
| 202010                               | Capital Region NY | 0.29960%  | N/A              | 1                        | 17.9%      | \$54,000    | \$28.94 |
| 202011                               | Capital Region NY | 0.29960%  | N/A              | 1                        | 17.9%      | \$54,000    | \$28.94 |
| 202012                               | Capital Region NY | 0.29960%  | N/A              | 1                        | 17.9%      | \$54,000    | \$28.94 |
| Total x Members (47,338)             |                   |           |                  |                          |            | \$5,022,215 |         |

| <b>Table 10: 2021 Treatment Costs</b> |                   |           |                  |                          |            |            |         |
|---------------------------------------|-------------------|-----------|------------------|--------------------------|------------|------------|---------|
| Month                                 | Geographic Region | Case Rate | Dampening Factor | Vaccine Dampening Factor | Admit Rate | Admit Cost | Product |
| 202101                                | Vermont           | 0.08316%  | 0.8              | 1                        | 17.9%      | \$54,000   | \$6.43  |
| 202102                                | Vermont           | 0.08316%  | 0.8              | 0.833                    | 17.9%      | \$54,000   | \$5.35  |
| 202103                                | Vermont           | 0.08316%  | 0.8              | 0.5                      | 17.9%      | \$54,000   | \$3.21  |
| 202104                                | Vermont           | 0.08316%  | 0.8              | 0.167                    | 17.9%      | \$54,000   | \$1.07  |
| 202105                                | Vermont           | 0.08316%  | 0.8              | 0                        | 17.9%      | \$54,000   | \$0.00  |
| Total x Members (47,338)              |                   |           |                  |                          |            | \$760,445  |         |

| <b>Table 11: Direct Costs by Year</b> |             |             |             |
|---------------------------------------|-------------|-------------|-------------|
|                                       | 2020        | 2021        | Total       |
| Testing (tables 4 and 5)              | \$977,047   | \$348,945   | \$1,325,992 |
| Treatment (tables 9 and 10)           | \$5,022,215 | \$760,445   | \$5,782,660 |
| Net Impact by Year                    | \$5,999,262 | \$1,109,390 | \$7,108,652 |

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Deferred and Returning Care

| Table 12: 2020 Deferred and Returning Care |                     |             |               |                |
|--|---------------------|-------------|---------------|----------------|
| Month                                      | Medical Claims PMPM | Claim Level | Deferred Care | Returning Care |
| 202001                                     | \$417.34            | 100.0%      |               |                |
| 202002                                     | \$419.33            | 100.0%      |               |                |
| 202003                                     | \$451.06            | 84.5%       | -\$70.03      |                |
| 202004                                     | \$464.75            | 52.8%       | -\$219.50     |                |
| 202005                                     | \$484.74            | 68.2%       | -\$154.31     |                |
| 202006                                     | \$471.89            | 95.0%       | -\$23.59      |                |
| 202007                                     | \$482.07            | 106.5%      |               | \$31.16        |
| 202008                                     | \$469.06            | 106.5%      |               | \$30.32        |
| 202009                                     | \$471.40            | 106.5%      |               | \$30.47        |
| 202010                                     | \$536.74            | 80.0%       | -\$107.35     |                |
| 202011                                     | \$503.73            | 70.0%       | -\$151.12     |                |
| 202012                                     | \$523.58            | 80.0%       | -\$104.72     |                |
| Total x Members (47,338)                   |                     |             | -\$39,319,454 | \$4,352,270    |

| Table 13: 2021 Deferred and Returning Care |                     |             |               |                |
|--|---------------------|-------------|---------------|----------------|
| Month                                      | Medical Claims PMPM | Claim Level | Deferred Care | Returning Care |
| 202101                                     | \$450.01            | 90.0%       | -\$45.00      |                |
| 202102                                     | \$452.14            | 100.0%      |               |                |
| 202103                                     | \$486.46            | 106.5%      |               | \$31.44        |
| 202104                                     | \$501.17            | 110.7%      |               | \$53.56        |
| 202105                                     | \$522.69            | 110.7%      |               | \$55.86        |
| 202106                                     | \$508.88            | 110.7%      |               | \$54.38        |
| 202107                                     | \$519.82            | 106.5%      |               | \$33.60        |
| 202108                                     | \$505.76            | 106.5%      |               | \$32.69        |
| 202109                                     | \$508.29            | 106.5%      |               | \$32.85        |
| 202110                                     | \$578.70            | 106.5%      |               | \$37.40        |
| 202111                                     | \$543.16            | 105.3%      |               | \$29.02        |
| 202112                                     | \$564.53            | 103.8%      |               | \$21.40        |
| Total x Members (47,338)                   |                     |             | -\$2,130,267  | \$18,093,175   |

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| Table 14: Deferred Care Returning After 2021 |                        |              |
|--|------------------------|--------------|
| Deferred Care Returning: Expected            | a                      | 56.15%       |
| Deferred Care (tables 12 and 13)             | b                      | \$41,449,721 |
| Returning Care (tables 12 and 13)            | c                      | \$22,445,445 |
| Deferred Care Returning: Modeled             | $d = c / a$            | 54.15%       |
| Deferred Care Returning after 2021           | $e = (a - d) \times b$ | \$828,274    |

| Table 15: Deferred and Returning Care by Year |                |                |           |                |
|---|----------------|----------------|-----------|----------------|
|   | 2020           | 2021           | 2022      | Total          |
| Deferred Care (tables 12 and 13)              | (\$39,319,454) | (\$2,130,267)  |           | (\$41,449,721) |
| Returning Care (tables 12 to 14)              | \$4,352,270    | \$18,093,175   | \$828,274 | \$23,273,719   |
| Net Impact by Year                            | (\$34,967,184) | (\$15,962,908) | \$828,274 | (\$18,176,001) |

Other

| Table 16: 2020 Changes in Demand |                                    |             |
|----------------------------------|------------------------------------|-------------|
| Allowed PMPM                     | a                                  | -\$2.63     |
| Average AV                       | b                                  | 83.35%      |
| Members                          | c                                  | 47,338      |
| Months                           | d                                  | 6           |
| Change in Demand Total           | $e = a \times b \times c \times d$ | (\$623,633) |

| Table 17: 2021 Changes in Demand |                           |               |
|----------------------------------|---------------------------|---------------|
| Allowed PMPM                     | a                         | -\$2.63       |
| Average AV                       | b                         | 83.35%        |
| Members                          | c                         | 47,338        |
| Months                           | d                         | 12            |
| Change in Demand Total           | $e = b \times c \times d$ | (\$1,247,267) |



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| <b>Table 18: 2020 Deferred Care Morbidity Impact</b> |  |                                |           |
|--|--|--------------------------------|-----------|
| Month  | Medical and Pharmacy Claims PMPM <sup>26</sup> | Deferred Care Morbidity Factor | Product   |
| 202007   | \$643.98                                       | 0.0025                         | \$1.61    |
| 202008   | \$625.61                                       | 0.0025                         | \$1.56    |
| 202009   | \$630.31                                       | 0.0025                         | \$1.58    |
| 202010   | \$565.57                                       | 0.0025                         | \$1.41    |
| 202011   | \$488.51                                       | 0.0025                         | \$1.22    |
| 202012   | \$568.65                                       | 0.0025                         | \$1.42    |
| Total x Members                                      |  |                                | \$416,884 |

| <b>Table 19: 2021 Deferred Care Morbidity Impact</b> |                                  |                                |             |
|--|----------------------------------|--------------------------------|-------------|
| Month  | Medical and Pharmacy Claims PMPM | Deferred Care Morbidity Factor | Product     |
| 202101   | \$516.32                         | 0.0050                         | \$2.58      |
| 202102   | \$564.96                         | 0.0050                         | \$2.82      |
| 202103   | \$646.53                         | 0.0050                         | \$3.23      |
| 202104   | \$691.31                         | 0.0050                         | \$3.46      |
| 202105   | \$715.87                         | 0.0050                         | \$3.58      |
| 202106   | \$703.33                         | 0.0050                         | \$3.52      |
| 202107   | \$701.00                         | 0.0050                         | \$3.50      |
| 202108   | \$680.95                         | 0.0050                         | \$3.40      |
| 202109   | \$686.14                         | 0.0050                         | \$3.43      |
| 202110   | \$769.85                         | 0.0050                         | \$3.85      |
| 202111   | \$725.60                         | 0.0050                         | \$3.63      |
| 202112   | \$755.03                         | 0.0050                         | \$3.78      |
| Total x Members                                      |                                  |                                | \$1,930,655 |

| <b>Table 20: Changes in Demand and Deferred Care Morbidity Impact</b> |             |               |               |
|---|-------------|---------------|---------------|
|   | 2020        | 2021          | Total         |
| Changes in Demand (tables 16 and 17)                                  | (\$623,633) | (\$1,247,267) | (\$1,870,900) |
| Deferred Care Morbidity Impact (tables 18 and 19)                     | \$416,884   | \$1,930,665   | \$2,347,539   |
| Net Impact by Year  | (\$206,749) | \$683,388     | \$476,639     |

<sup>26</sup> Seasonally-adjusted, and adjusted for deferred/returning service level

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## Appendix G: Disclosures and Limitations

Information Date: The analysis provided in the report is based on information as known on July 1, 2020.

Scope: This result is intended to communicate the effect of possible scenarios related to the COVID-19 pandemic in 2020 and 2021 on BCBSVT's risk-based capital position. This modeling is not intended to predict the likelihood of any specific scenario or set of scenarios.

Uncertainty or Risk: Future events will affect the results presented in the report. The level of testing, treatment, infection, vaccine availability, vaccine efficacy, presence and severity of subsequent waves, future federal and state legislation, and additional factors related to the COVID-19 pandemic are unknown. Actual results may vary from the results presented herein, potentially to a significant degree.

Reliance on Other Sources for Data and Other Information: This report relies upon data from the BCBSVT data warehouse. I have reviewed the data for reasonableness, but no audit was performed. We also rely on knowledge provided by BCBSVT medical directors to develop the deferred care anticipated to return and longer-lasting changes to the care delivery system that will result from the pandemic. Lastly, this report relies upon several sources of information, which are cited as footnotes at their respective references. If any of the sources we have relied upon are incorrect or inaccurate, it may affect the accuracy of the results presented in the report.

Subsequent Events: New information related to the COVID-19 pandemic continues to emerge on a regular basis. Subsequent events may affect the results presented herein. The degree to which future events may materially change the results is unknown.

Intended Users: This material has been prepared for consideration by DFR and the GMCB, and their respective actuaries, relative to the BCBSVT 2021 Vermont Individual and Small Group rate filing (SERFF #BCVT-132371410). BCBSVT understands that the report will be made public. Distribution of this report to any third party should be made in its entirety. The report should be evaluated only by qualified users. The parties receiving this report should retain actuarial expertise in interpreting results.

# BCBSVT RBC Outlook 2020-2021

Prepared for DFR/GMGB

July 4, 2020

## Future COVID Wave Severity<sup>1</sup>

|  | Vermont     | New York<br>Capital<br>Region | No Second<br>Wave | Boston      | Suburban<br>SE New<br>York | Firmness of<br>Amount       | Expected<br>Timing | Notes   |
|--|-------------|-------------------------------|-------------------|-------------|----------------------------|-----------------------------|--------------------|---|
| <b>RBC as of December 31, 2019</b>   |             |                               | <b>567%</b>       |             |                            | actual                      |                    |   |
| Impact of changes in insured volume  |             |                               | 75%               |             |                            | baseline                    |                    |   |
| \$8.7M AMT credit expected in 2020   |             |                               | 42%               |             |                            | firm                        |                    |   |
| Projected impact of 2020 operating results   |             |                               | -17%              |             |                            | baseline                    |                    |   |
| Projected impact of 2020 investment results  |             |                               | 16%               |             |                            | baseline                    |                    |   |
| \$3.6M investment in Vermont Blue Advantage start-up costs   |             |                               | -20%              |             |                            | firm                        |                    |   |
| \$1.1M founding investment in CivicaRx   |             |                               | -6%               |             |                            | firm                        |                    |   |
| <b>Subtotal: "Baseline" 2020 View</b>  |             |                               | <b>657%</b>       |             |                            |                             |                    |   |
| Equity market losses (\$3M through May 2020)   |             |                               | -14%              |             |                            | actual                      | 5/31/2020          |   |
| Acceleration of remaining AMT credit refund (CARES Act)  |             |                               | 42%               |             |                            | firm                        | Sep-20             |   |
| 2019 Final & 2020 Projected Risk Adjustment true-up  |             |                               | 2%                |             |                            | firm                        | 6/30/2020          | Actual 2019: \$20,273,879 (vs. booked \$17,876,616)   |
| Litigation recovery – risk corridor judgement (90% of \$11M)   |             |                               | 46%               |             |                            | firm                        | 2020?              | Projected 2020: \$20,300,000 (vs. forecast estimate of \$22,219,351)  |
| Surplus impact of 1/1/21 pension valuation (year-end 2020)   |             |                               | -180%             |             |                            | estimate                    | 12/31/2020         | Timing of recovery not 100% certain   |
| <b>Subtotal: 2020 View before COVID impacts on operations</b>  |             |                               | <b>553%</b>       |             |                            |                             |                    | BCBSVT's pension assets recently experienced a substantial loss of value—as of May 31, 2020, approximately \$40.6M  |
| Estimated RBC impact of COVID related claims and deferred care in 2020   | 98%         | 91%                           | 60%               | 74%         | 33%                        | mean of stochastic modeling | 2020               | See <i>BCBSVT Actuarial Report_COVID-19 Modeling</i>  |
| Uncollectible premiums due to COVID Emergency Order  |             |                               | -21%              |             |                            | estimate                    | 2020               |   |
| Cancelled recoupment of Blueprint overpayments   |             |                               | -6%               |             |                            | actual                      | 2020               |   |
| Uncollectible provider advances (50% RBC at risk)  |             |                               | TBD               |             |                            |                             | 12/31/2020         |   |
| COVID response cost - for deductibles waived on wellness generics and insulins through 12/31/2020  |             |                               | -7%               |             |                            | estimate                    | 2020               |   |
| COVID response cost - increased retail pharmacy utilization (driven in part by the loosening of early refill edits and other measures to enhance access and affordability for members) |             |                               | -18%              |             |                            | projection                  | 2020               | We do not consider retail pharmacy in our COVID modeling. Based on 2020 actual experience through June, we estimate that pharmacy claims will be about \$4M higher than expected in the 2020 forecast.    |
| COVID response cost -waived cost sharing for emergent telehealth visits through our telehealth partner   |             |                               | 0%                |             |                            | estimate                    | 2020               | Very low impact to date   |
| COVID response cost - BCBSVT Pharmacy Assistance Program   |             |                               | 0%                |             |                            | estimate                    | 2020               | Very low impact to date   |
| COVID response cost - suspension of claims audit activity (FWA)  |             |                               | -19%              |             |                            | estimate                    | 2020               | The 2020 forecast assumed that FWA recoveries would continue at the same rate as 2018, about 1.42% of medical claims. The suspension of the program will increase claims by about \$4M above projections. |
| <b>Estimated RBC as of December 31, 2020</b>   | <b>581%</b> | <b>574%</b>                   | <b>543%</b>       | <b>557%</b> | <b>516%</b>                |                             |                    |   |
| Estimated RBC impact of COVID related claims in 2021   | -56%        | -63%                          | -41%              | -78%        | -117%                      | mean of stochastic modeling | 2021               | See <i>BCBSVT Actuarial Report_COVID-19 Modeling</i><br>Note an additional RBC impact of -22% to -31% in 2022   |
| Litigation recovery – CSR (90% of \$7M)  |             |                               | 29%               |             |                            | firm                        | 2021?              | Timing of recoveries not 100% certain   |
| Additional capital needed for Group Medicare Advantage growth  |             |                               | -9%               |             |                            | estimate                    | 2021               | Market demand is emerging   |
| Cost of COVID response support 2021  |             |                               | -TBD              |             |                            |                             |                    | Depends on duration of support programs   |
| GMCB approves hospital COVID allowances  |             |                               | -TBD              |             |                            |                             |                    | This amount could be large  |
| 2021 operating and investment results (net of COVID impacts and ACL increase due to health care cost trend)  |             |                               | 0%                |             |                            | estimate                    | 2021               | Our long-term CTR assumption of 1.5% is selected to allow RBC to remain flat if rates are approved as filed and membership remains at current levels  |
| <b>Estimated RBC as of December 31, 2021</b>   | <b>545%</b> | <b>531%</b>                   | <b>522%</b>       | <b>499%</b> | <b>419%</b>                |                             |                    |   |
| <b>Notes:</b>  |             |                               |                   |             |                            |                             |                    |   |
| Estimated RBC impact of tail of returning care and vaccinations extending into 2022  | -25%        | -26%                          | -22%              | -28%        | -31%                       | mean of stochastic modeling | TBD                | See <i>BCBSVT Actuarial Report_COVID-19 Modeling</i><br>Could be reflected in 12/31/2021 financials as a premium deficiency reserve if estimable at that time   |
| Total impact of COVID claim scenarios  | 17%         | 2%                            | -3%               | -32%        | -115%                      |                             |                    | Sum of rows 21, 31 and 40   |
| RBC as of May 31, 2020   | 695%        |                               |                   |             |                            |                             |                    |   |

### Key Assumptions:

- 2021 VISG rate increase is approved as filed
- No significant loss of membership due to economic downturn

<sup>1</sup> See *BCBSVT Actuarial Report\_COVID-19 Modeling* for a definition and detailed description of these scenarios.