



**State of Vermont**  
**Green Mountain Care Board**  
89 Main Street  
Montpelier VT 05620

Report to the Legislature

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**REPORT ON THE IMPACT OF EXPANDING VERMONT HEALTH CONNECT  
TO INCLUDE LARGE GROUP EMPLOYERS**

**In accordance with Section 15 of Act 54 (2015)**

*Submitted by the  
Green Mountain Care Board*

*February 11, 2016*

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# IMPACT OF EXPANDING VERMONT HEALTH CONNECT TO INCLUDE LARGE GROUP EMPLOYERS

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Prepared for the **Green Mountain Care Board**



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## EXECUTIVE SUMMARY

Vermont Act No. 54, enacted in 2015 by the General Assembly of the State of Vermont, charged the Green Mountain Care Board (“GMCB”) with analyzing the projected impact on rates in the large group market if large groups were allowed to purchase Qualified Health Plans (“QHPs”) through the State’s Health Insurance Marketplace, Vermont Health Connect (“VHC” or “Exchange”).

The GMCB retained Lewis & Ellis, Inc. (“L&E”) to perform the study on the financial implications of potentially opening up VHC to the large group market.

The four scenarios analyzed include:

1. **A Separate Large Group Risk Pool without Government Employees:** Establish an Exchange for large groups only within VHC. The current merged individual/small group market would keep the status quo and would remain separate from the large group Exchange. The government employees would remain self-insured.<sup>1</sup>
2. **A Separate Large Group Risk Pool including Government Employees:** This scenario is the same as the previous, with the exception that the government employees would be included as fully insured groups in the Exchange risk pool.
3. **Merged Risk Pool without Government Employees:** This scenario assumes a combined VHC risk pool including individuals, small groups, and all large groups, excluding the government employees which are assumed to remain self-insured.
4. **Merged Risk Pool with Government Employees:** This final scenario assumes a combined VHC risk pool including individuals, small groups, and all large groups.

Even if significant VHC enrollment gains are realized, it appears highly likely that allowing large employers to enter VHC will produce higher premiums on average in the large group market. It also appears that more Vermonters, including small group employees and individual policyholders, would be negatively impacted than positively impacted in all scenarios tested.

The table below summarizes the results from the modeling of these four scenarios.

Scenario	1	2	3	4
LG Premiums compared to Current VHC	+59%	+10%	+9%	+6%
Impact to Individual/Small Group Premium	N/A	N/A	+9%	+6%
Expected Participating Large Groups	76	103	103	115
Expected LG Exchange Enrollment	7,687	90,763	34,456	98,281
Number of Persons Positively Affected by Rate Change	2,568	27,690	27,751	29,798
Number of Persons Negatively Affected by Rate Change	5,049	61,679	83,645	141,068

<sup>1</sup> The "government employees" include members of two distinct groups that were designated as such in the carrier provided data.

## BACKGROUND & PURPOSE

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The State of Vermont has a history of pioneering healthcare reform. Currently, all individual and small group employees and their families are treated as a single risk pool across the State. They can access coverage from private carriers through Vermont Health Connect. Employees of larger companies (100+ employees) currently do not have this option and are not included in all of the rules established by the Affordable Care Act (“ACA”). Under the ACA, states have the option to expand an Exchange to allow employers with over 100 employees to participate.

Vermont Act No. 54, enacted in 2015 by the Vermont Legislature, charged the GMCB with analyzing the projected impact on rates in the large group market if large groups were allowed to purchase Qualified Health Plans (“QHPs”) through VHC. Section 15 is duplicated below.

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The Green Mountain Care Board, in consultation with the Department of Financial Regulation, shall analyze the projected impact on rates in the large group health insurance market if large employers are permitted to purchase qualified health plans through the Vermont Health Benefit Exchange beginning in 2018. The analysis shall estimate the impact on premiums for employees in the large group market if the market were to transition from experience rating to community rating beginning with the 2018 plan year.

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There are several Vermont stakeholders whose interests are relevant to evaluating the potential outcomes of allowing large employers on VHC. First, the GMCB is charged with improving the quality of care in the State while stabilizing and controlling costs.

Second, changes to the large group insurance market could impact not only Vermonters employed by large groups, but also those currently purchasing insurance through the Exchange as individuals or through small group employers. The impact of any change on the affordability of quality healthcare for those Vermonters is an important consideration for evaluating any proposed changes.

Third, Vermont’s employers would likely be impacted by the proposed changes in terms of premium differences and modified benefit coverage options.

Lastly, any changes must be evaluated to assess the impact on the private insurers and the competitive marketplace.

GMCB retained L&E to perform a study on the potential impacts of opening up the Exchange to the large group market. This report summarizes that study and documents the data and methodologies used.

This report focuses on two primary options available to Vermont policymakers:

- **Separate Risk Pool:** Create a separate risk pool of large groups only within VHC. That is, the results of the large group market would not directly impact the individual/small group markets.
- **Combined Risk Pool:** Open VHC to groups of all sizes, with the large group market joining the single risk pool, which currently contains the individual and small group markets.

## DEFINITIONS

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To improve the ease of reading the subsequent sections of the report, the following terms are defined:

**Actuarial Value ("AV"):** The percentage of projected healthcare costs that are paid by an insurance plan. A plan with an AV of 70% is expected to have an insurer cover 70% of an insured's healthcare costs, with the remaining 30% being paid by the member through cost sharing, such as deductibles, copays, and coinsurance. This report uses the Metal AV established by the Centers for Medicare and Medicaid Services ("CMS"), which may differ from actuarial values calculated by a carrier when pricing a product.

**Combined Risk Pool Scenario:** Modeled scenario assuming that all VHC members will be part of a single rating pool, regardless of employer size, group membership, or individual status.

**Community Rating:** A rating structure in which all policyholders pay the same premium, regardless of the individual's demographics, geographic rating area, medical history or existing medical conditions. The current VHC premium rates for the individual and small group populations are developed using a community rating methodology pursuant to Vermont Regulation H-99-4.

**Credibility:** The extent to which a group's historical claims dataset is considered large enough to be a reliable statistical estimator of next year's claims. If a group's claims data is not fully credible, a carrier usually pools their historical medical costs with the costs of similar groups to avoid large rate fluctuations annually.

**Essential Health Benefits ("EHBs"):** Benefits mandated by the ACA or by the State to be covered by QHPs sold on VHC. In Vermont, these include pediatric oral and vision benefits as well as standard health benefits like doctor's visits, hospital stays, and prescription drugs.

**Experience Rating:** A rating structure in which premiums are based in whole or in part on the cost for their group in the past. A group that consistently has lower than average costs thereby pays lower premiums than an average group, whereas high-cost groups pay more than average.

**Fully Insured:** A health insurance plan where another organization (e.g. insurance company) assumes the financial responsibility for the enrollees' medical claims and for all associated administrative costs in exchange for a premium.

**Large Group Market:** The set of all employers with 101 or more employees.

**Merged Market:** This refers to the combining of health insurance market segments into a single risk pool. Currently, VHC represents a merged market including both the individual and small group populations.

**Metal Tier:** Every QHP is required to fall within a 2% “de minimis” range of a target actuarial value. The targets are 60% for Bronze, 70% for Silver, 80% for Gold, and 90% for Platinum. For example, the AV of a Bronze plan must be between 58% and 62% to be certified as a QHP. To enable a comparison of current large group benefit plans (which are not required to fall within a de minimis range) to QHPs, this report expands the de minimis range from 2% to 5%. For example, a large group plan with an AV of 63% is considered a Bronze plan. Due to their similarity in Metal AV, Catastrophic plans and Bronze plans have been grouped into a single “Bronze” tier.

**Qualified Health Plan (“QHP”):** An insurance plan where the Exchange has certified that the plan is ACA compliant. QHPs must provide EHBs, meet specific standards for actuarial value, and follow established limits on cost sharing.

**Self-Insured:** A health insurance plan where an employer directly assumes the majority of the financial risk of covering medical expenses for its employees. Self-insurance plans can come in various forms, such as the employer assuming the entire risk or purchasing special coverage against large claims through stop-loss coverage. A popular arrangement includes employers contracting with insurance carriers or third party administrators for claims processing and other administrative services.

**Self-Insured Premium:** The amount of expected cost an employer endures for self-funding medical coverage for employees. This amount includes not only the administrative expense and stop-loss premium paid to a health insurance carrier, but also the expected claims paid by the employer.

**Separate Risk Pool Scenario:** Modeled scenario assuming that the current merged individual/small group markets will continue with the status quo and will be independent from the large group market for rating purposes.



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## THE LARGE GROUP MARKET

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### REGULATORY ENVIRONMENT

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While CMS has released detailed guidance regarding individual and small group Exchanges, the regulatory standing of large groups on the Exchange is uncertain. L&E contacted CMS representatives and was informed by the agency that there are currently no set regulations or procedures that detail how a state would implement the inclusion of large groups on an Exchange. Further, CMS's representatives indicated that they were not aware of any related studies from other states.

Therefore, there is a significant uncertainty surrounding large group Exchanges and how they relate to the single risk pool requirements of the ACA. The ACA clearly allows Vermont to put the large group market on VHC; however, it is unclear whether or not the large group market would be required to be included in the current individual/small group risk pool. If not included with the current VHC merged market, the large group market would be a separate and distinct risk pool within VHC.

Pursuant to Vermont Regulation H-99-4, if the Exchange is opened to large groups, it is assumed that the community rating rules would apply to the entire large group market. In the current large group market, groups with low claims experience generally have premiums that are lower than groups with high claims experience. Therefore, under a community rating approach, these groups with lower premiums would likely face the choice of accepting higher premiums or moving to a self-insurance program.

In many instances, the ACA treats the large group market differently than the small group market. This includes different Medical Loss Ratio ("MLR") requirements. The large group market must have an MLR of at least 85%, while small group market is only required to meet an 80% minimum.

Another difference is that the large group market is not required to cover essential health benefits ("EHBs"). These EHBs would need to be covered if the Exchange is opened up to include the large group market.

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### CURRENT STATE OF THE LARGE GROUP MARKET

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The distribution of groups by size varies significantly within the current Vermont large group market, as illustrated in the following exhibit:

**Figure 1 - Distribution of Total Large Group Enrollment by Group Size**

Group Size	Self-Insured Member Count	% of Self-Insured Members	Fully Insured Member Count	% of Fully Insured Members
≤250	8,993	7.6%	11,002	31.4%
251-500	6,007	5.1%	9,157	26.1%
501-1,000	12,706	10.7%	8,398	24.0%
1,001-5,000	12,641	10.6%	5,080	14.5%
5,001-10,000	8,599	7.2%	0	0.0%
≥10,001	67,653	56.9%	0	0.0%
Total	118,927	100.0%	35,030	100.0%

Currently, about 75% of large group employees are covered under self-insured plans in Vermont. As shown in Figure 1, the majority of the groups that are fully insured are the smallest of the large groups.

There are specific large governmental groups that make up a significant portion of the entire large group market. This presents a challenge for modeling efforts since a single decision made by one of these groups could have a material impact on the decisions made by the other large groups. As a result, it was necessary to test separate scenarios based on the decisions of those groups. For all other groups, Monte Carlo simulations<sup>2</sup> were used to generate a range of possible outcomes based on various decision patterns.

**Figure 2 - Age Characteristics of the Large Group Population**

Current Coverage	Average Age
Self-Insured	37.3
Fully Insured	36.9

Top 3 Largest Carriers	Average Age
Carrier 1	37.6
Carrier 2	36.4
Carrier 3	37.3

Metal Tier	Average Age
Platinum	37.6
Gold	36.0
Silver	36.2
Bronze	36.9
Total	37.2

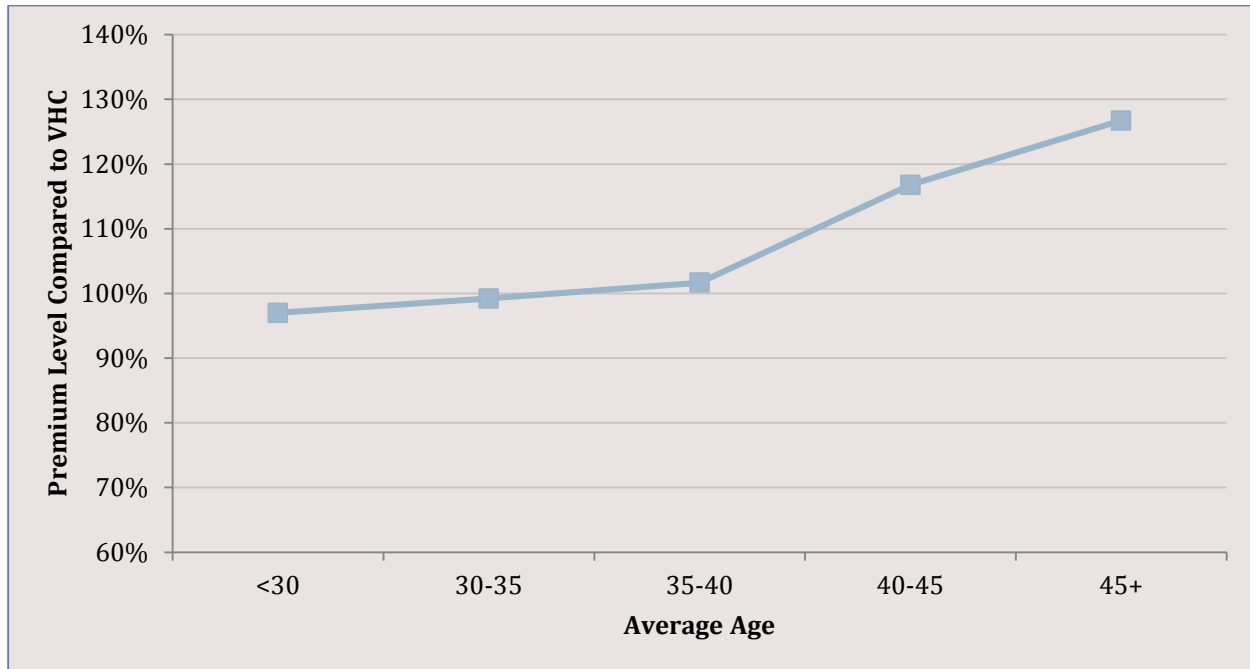
There does not appear to be a significant correlation between the average age of a large group and its benefit richness or the employers’ choice to self-insure. As shown in Figure 2, the average age does not vary materially by coverage status or benefit richness.

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<sup>2</sup> “Monte Carlo simulation” refers to randomly generating simulated outcomes and analyzing their distribution, where each outcome is treated as being equally likely. This is in contrast to scenario testing, which considers a set of possible outcomes with less attention placed on the complete range of possibilities.

Despite these observations, age is an important determinant of healthcare costs and premiums. Implementing a large group Exchange could significantly impact the decisions of each employer. The following graph summarizes the clear relationship between a group's average age and the premiums currently paid.

**Figure 3 - Ratio of Current Premiums to VHC Premiums by Large Group Average Age<sup>3,4</sup>**



In conjunction with Figure 2, this exhibit demonstrates that groups with older average ages are currently paying more for their coverage primarily due to their age. Because the VHC does not permit age rating, these older groups would likely benefit from being permitted to purchase VHC coverage since their high costs would be averaged with lower cost persons. Conversely, younger groups would not have much financial incentive to purchase coverage on VHC. Therefore, in general, it is expected that the large group Exchange population would be made up of older than average groups.

Another important difference between large group rates and Exchange rates is that Exchange rates are required to have fixed ratios between the single, couple, single head of household, and family tiers.<sup>5</sup> In effect, this requirement forces individuals and childless couples to subsidize coverage for families with children. This requirement is currently not

<sup>3</sup> This rate comparison has been adjusted for benefit differences as detailed in the "Methodology" section below.

<sup>4</sup> It is uncommon for a group's average age to significantly exceed 45, so the data was not split into age groups above that point.

<sup>5</sup> This was ordered on March 13, 2013, Docket No. 13-002-I. The factors are 1.00 for Single coverage, 2.00 for Couple, 1.93 for Single Head of Household, and 2.81 for Family.

applicable to the large group market. L&E has assumed that this requirement would be extended to the large group market.

## CONSIDERATIONS & QUALITATIVE ASSUMPTIONS

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The current Vermont insurance market is based on an extensive number of consumer choices and their inter-relationships. L&E has made several simplifying assumptions to aid in the modeling of a complex insurance market.

### ***Large Group Employers will not Leave/Enter Vermont due to this Change***

The analysis assumes that the options available to existing large employers do not include relocating outside Vermont. The changes in health insurance premiums are assumed to not be large enough to make an employer voluntarily leave the state. For purposes of this study, a given employer's options include whether to self-insure or purchase traditional fully insured coverage.

### ***Large Group Exchange Plans will be QHP Certified and Similar to Current Exchange Plans***

All Exchange plans, regardless of employer size, will be required to be QHP-certified and fall within the metal tiers as defined by CMS. Because some large group plans have Metal AVs below Bronze or greater than Platinum, some plans will have to accept an increase or decrease in coverage. Because Vermont currently requires that carriers offer certain standard plan designs in the individual and small group markets, it is assumed that those same standard plans would be available to large groups.

### ***Medical Trend will be Similar for all Markets***

While there are a myriad of factors that impact claim cost trend, L&E has assumed that each market is driven by similar forces. Therefore, a consistent trend level has been assumed.

### ***All Enrollment Changes Occur on January 1<sup>st</sup>***

If VHC is opened up to large group plans, it is assumed that all employers would have ample time to convert to the Exchange and they would not be prevented from doing so if their plan renewal date fell outside of the open enrollment period. Employees are assumed to remain active throughout the entire year.

### ***The Ability of Large Groups to Self-Insure will not be Restricted***

This analysis assumes that employers of the large group market will retain the ability to self-fund their employees' health coverage.

Whereas the mandate to purchase coverage in the individual insurance market exists to mitigate similar anti-selective tendencies, no such comparative regulation currently exists for large groups. A regulation restricting an employer's ability to self-insure would have a

significant impact on VHC and would likely create additional implications outside the scope of this study.

***Individuals and Small Groups will not Disenroll from the Exchange due to Increases Caused by the Large Group Market***

The ACA's individual shared responsibility provision (also known as the "Individual Mandate") calls for each person to have minimum essential coverage. Persons who are not covered by minimum essential coverage face financial penalties.

Vermont currently does not allow insurance carriers to offer major medical coverage outside of the Exchange.

Therefore, due to a limited number of health plan alternatives and the potential for financial penalties, L&E assumed that the persons currently covered by VHC would not leave as a result of premium increases stemming from the inclusion of the large group market.

## METHODOLOGY

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### DATA COLLECTION

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To investigate potential changes to the large group market, L&E started with a data request regarding the current status of large groups in Vermont. The group carriers operating in the state provided data on their large group segments. Those carriers are MVP Health Care (“MVP”), CIGNA Health and Life Insurance Company (“CIGNA”), and BlueCross BlueShield of Vermont (“BCBSVT”). The information provided included plan designs, enrollment, claims, premiums, and insurance funding mechanism (fully or self-insured) for both 2014 and 2015.

Due to internal issues such as IT system limitations, each carrier provided data that represented different subsets and different information for a given year. L&E made adjustments to the data to create a consistent reference point for comparison and modeling purposes.

There are approximately 150,000 covered lives across 238 reported groups. Of these lives, approximately 115,000 are in self-insured groups (i.e. approximately 75% of all groups). The total 2015 premium for these groups is approximately \$900 million.

Generally speaking, the largest groups tend to be self-insured, while smaller groups tend to be fully insured by a private carrier due to an employer’s lack of available resources and higher claim volatility. In practice, there are a variety of funding arrangements available to a large employer. For the purposes of this report, all groups have been classified as “fully insured” or “self-insured.”

Another data source included the 2015 Exchange policy forms approved by the Vermont Department of Financial Regulation and rates approved by the GMCB and published by VHC. This information was used for benefit and rate information regarding existing QHPs.<sup>6</sup> Exchange enrollment data came from the Unified Rate Review Templates which were submitted by carriers in their 2016 Exchange submissions.<sup>7</sup>

### ACTUARIAL VALUE CALCULATIONS

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The modeling began by establishing a common basis for comparing the benefits of existing large group plans with existing Exchange plans. This is particularly important for the “Combined Risk Pool” scenario. In that scenario, the large group plans entering VHC would

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<sup>6</sup> This rate data is currently available online at <http://info.healthconnect.vermont.gov/sites/hcexchange/files/2015Plan%20Designs%20with%20Final%20Rates.pdf>.

<sup>7</sup> Past rate filings can be viewed online at [http://ratereview.vermont.gov/view\\_filings](http://ratereview.vermont.gov/view_filings).

likely have an impact on the premiums paid by small groups and individuals. The magnitude of the result would be based on the current difference between individual/small group rates and large group rates.

Because the benefit structures of large group plans are not classified into metal tiers, CMS' AV Calculator was used to estimate the actuarial value for each of the current large group plans. This tool was designed specifically to compare the benefit levels of a wide range of plans for Exchange populations.<sup>8</sup> The AV Calculator was considered a reasonable, consistent, and replicable means for comparing various plan designs.

L&E considered making an adjustment to the Exchange rates to reflect differences in the MLR requirements between large groups and individuals/small groups. However, the loss ratios in the current individual/small group merged market are already above 85%. Therefore, this adjustment was determined not to be required. The only adjustments made were to reflect differences between the large group and individual/small group markets were the adjustments for additional EHBs and different AVs.

Generally speaking, the only material EHBs not covered by existing large group plans were related to pediatric supplemental services like dental and vision benefits. An adjustment was made to the plans that do not currently include those benefits. The adjustment was based on information provided to the GMCB in prior Exchange rate filings.

Additionally, there was one specific carrier who reported benefit plan options lacking some other minor EHB. These specific benefits were not determined to make up a material portion of the premiums on an individual basis. A small adjustment was included to encompass these benefits where applicable.

The chart below demonstrates how benefit richness differs between the current Exchange market and the large group market.<sup>9</sup>

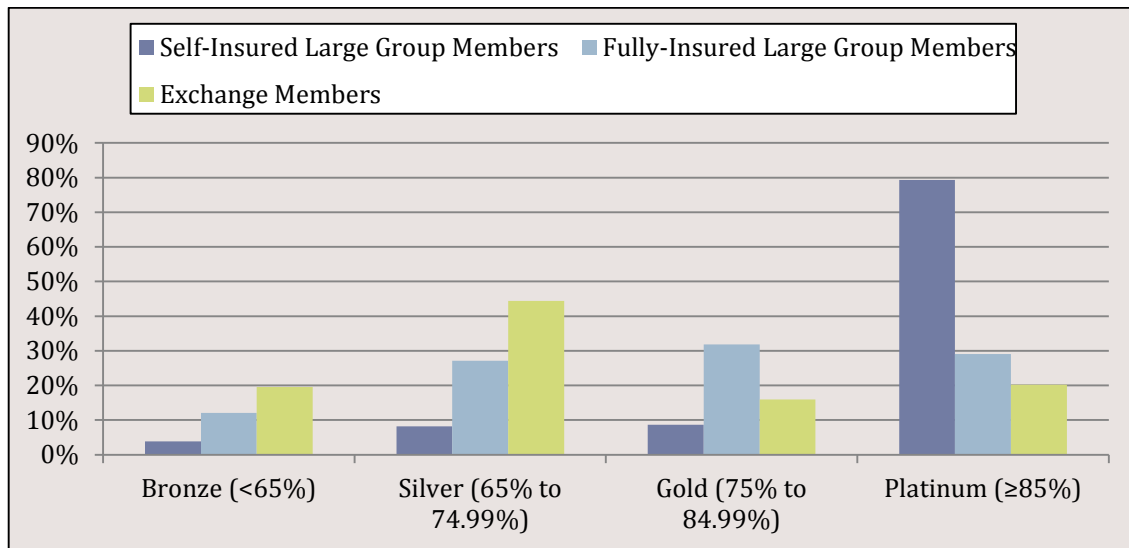
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<sup>8</sup> In practice, each carrier generally calculates a "Pricing AV" based on their own data that can differ significantly from the Metal AV. The modeling utilizes Metal AV as a reasonable proxy of the actual Pricing AV.

<sup>9</sup> Data on 2015 Exchange enrollment was taken from data provided by the carriers in their 2016 Exchange rate filings.



**Figure 4 - Current Distribution of Enrollment by Metal Tier**



A key insight from this exhibit is that members of currently self-insured plans have a high benefit richness compared to fully insured plans. Of self-insured groups, approximately 80% of members are covered by plans with estimated Metal AVs of 85% or greater. This result appears to be driven by the significant portion of the enrollees in the public sector.

Figure 4 also confirms the idea that the large group employees tend to have richer coverage than Exchange enrollees. This appears to hold true for both the currently self-insured and fully insured large group markets.

Once each large employer plan was assigned a Metal AV, premiums were standardized so that it was possible to evaluate the rate differences between the large group and Exchange markets after adjusting for benefit differences. A summary of these results is provided below. While the overall rate levels appear similar, there is a wide range due to the presence of experience rating and underwriting techniques in the large group market.

**Figure 5 - Distribution of Enrollment by Rate Level (as Compared to Current VHC Rates)**

Large Group Rates as % of VHC Exchange Rates	Group Count	% of Groups	Member Count	% of Members
< 50%	10	4.2%	1,315	0.9%
50% to 74.99%	29	12.2%	4,838	3.2%
75% to 89.99%	43	18.1%	11,803	7.9%
90% to 99.99%	39	16.4%	78,039	51.9%
100% to 109.99%	33	13.9%	25,279	16.8%
110% to 124.99%	30	12.6%	12,924	8.6%
125% to 149.99%	26	10.9%	11,928	7.9%
≥ 150%	28	11.8%	4,110	2.7%

As displayed in the first line of Figure 5, approximately 1% of large group members are paying less than half of what they would pay to obtain similar coverage on VHC. Approximately 35%<sup>10</sup> of large group members are currently paying more than their individual/small group counterparts for coverage similar to that available on VHC.

Because groups that are already self-insured tend to be much larger than other large groups, it is worthwhile to consider the differences in rate level variation between self-insured and fully insured groups. The following exhibit illustrates that the variation in rate level is much higher for fully insured groups.

**Figure 6 - Rate Level by Self-insured vs. Fully Insured**

Large Group Rates as % of VHC Exchange Rates	Self-Insured Member Count	% of Self-Insured Members	Fully Insured Member Count	% of Fully Insured Members
< 50%	804	0.7%	511	1.5%
50% to 74.99%	3,319	2.8%	1,519	4.5%
75% to 89.99%	7,366	6.3%	4,437	13.2%
90% to 99.99%	68,540	58.8%	9,499	28.2%
100% to 109.99%	20,216	17.3%	5,063	15.1%
110% to 124.99%	8,225	7.1%	4,699	14.0%
125% to 149.99%	6,775	5.8%	5,153	15.3%
≥ 150%	1,354	1.2%	2,756	8.2%

<sup>10</sup> (16.8% + 8.6% + 7.9% + 2.7% = 36%)

These results indicate that there are a substantial number of self-insured and fully insured plans that are currently paying higher rates than they would otherwise on the Exchange due to higher claims experience. These groups would be expected to be the ones likely to choose an Exchange option if it were available.

Another insight is that the variation in morbidity by group is significant. The projected claim costs currently being assumed for large groups are either based on fully credible group experience or based on a blend with the average cost for similar groups. Even with this credibility blending, some groups are assumed to have per member costs equal to 3 times that of other groups (after adjusting for benefit differences). This can partly be explained by differences in age and gender, but also reflects differences between industries and the influence of high-cost individuals.

This variation highlights a key issue in evaluating the impact of a large group Exchange. Because the VHC does not include self-insured plans, each large group will have the option of being fully insured in the VHC or rated individually as a self-insured group. Groups whose current rates are below Exchange rates will have little to no financial reason to participate in the Exchange, unless required. The groups who will enter the Exchange will likely be disproportionately unhealthy. This anti-selective impact means that the prevailing rate for the large group Exchange will be higher than if all large group claims experience were combined into a single risk pool.

The aggregate anti-selection impact in the large group market could be significant, but it would ultimately be affected by each specific employer's understanding of its own population's underlying health status, as well as the group's willingness and resources available to take on the risk and volatility associated with self-insuring.

## MODEL STRUCTURE

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The next step in the analysis was to simulate employer decisions regarding whether to choose an Exchange plan or self-insurance. If a healthy group chooses to become self-insured, it is expected that a less healthy population would enroll on the Exchange, which in turn would increase the community rate.

Because there are many unknowns involved with regards to an insurance decision to self-insure, L&E based its model on a probability distribution, not a rigid rule. L&E compared the most similar QHP to each employer's current plan (based on Metal AV). The formula used to calculate the likelihood of choosing self-insurance is provided below:

**Figure 7 - Employer Choice Algorithm**

*Probability of Choosing Self-Insurance*

$$= \begin{cases} (\# \text{ of Members})^{\alpha} x \left( \frac{\text{Adjusted Exchange Premium}}{\text{Adjusted Self-Insured Premium}} - 1 \right)^{\beta} & \text{if fully insured} \\ \Gamma x (\# \text{ of Members})^{\alpha} x \left( \frac{\text{Adjusted Exchange Premium}}{\text{Adjusted Self-Insured Premium}} - 1 \right)^{\beta} & \text{if self-insured} \end{cases}$$

Where  $\alpha$ ,  $\beta$ , and  $\Gamma$  are constants. The value obtained in this manner was then capped by 5% below and 95% above, to reflect the fact that no group's decision can be predicted with complete certainty.

This formula is based on the following concepts:

- Probabilities must be within zero and 1;
- Employers will have some preference for maintaining the status quo and will not automatically make a change when it is the apparent optimal choice;
- Some groups will make decisions based on factors that have not been considered by the algorithm. Therefore, the model avoids assuming that any group is guaranteed to make a particular choice;
- All else being equal, employers prefer to be fully insured because it reduces premium volatility and risk exposure;
- The likelihood of an employer changing its coverage is dependent on the level of savings available from that decision;
- Groups with more members are more likely to self-insure due to having the resources necessary to successfully manage the risk of a self-insured option.

The premiums used in the formula are adjusted so that they are on the same basis regarding:

- Differences in benefit richness (AV);
- Differences in retention between the self-insured and fully insured markets;
- The inclusion of required EHBs.

The coefficients in this model serve various purposes. The  $\Gamma$  coefficient adjusts the projected likelihood for whether a group is currently choosing self-insurance. This information provides a useful insight into the risk tolerance and openness to self-insurance of a group. The  $\alpha$  coefficient is an elasticity factor measuring the impact of group size on an employer's decision whether to self-insure. As illustrated in Figure 1, smaller groups are much less likely to self-insure than larger groups. Similarly, the  $\beta$  coefficient is an estimate of the elasticity between an employer's choice to self-insure and the expected cost differential between full insurance and self-insurance.

The boundaries of 95% and 5% on the probabilities are to account for the uncertainty surrounding a group's decision making process beyond purely financial incentive. There are

variables that go into the decision that cannot be accounted for as explicit variables in the model, such as politics, imperfect information, etc.

The modeling described above relies primarily on two values: the cost of self-insurance and the cost of fully insured coverage through the Exchange. If a group is currently self-insured, the cost to self-insure is already known. Similarly, a fully insured group is currently paying the actual cost to fully insure. A key difference in expected cost for self-insured and fully insured groups is the difference in carrier administrative items, e.g. premium taxes and other fees. A reduction of 3% was applied to the fully insured group's current premium to calculate the group's equivalent self-insured premium.<sup>11</sup>

In order to model which groups will choose Exchange coverage, it is necessary to first estimate what the price of large group Exchange plans will be. Unfortunately, this is not a straightforward exercise. One approach would be to calculate the price once, and then apply the employer choice algorithm to this initial price to estimate how many groups would elect Exchange coverage.

This method does not take into consideration that the groups choosing to go onto the Exchange may not be representative of the large group population as a whole, and so the initial price that was calculated may be too high or too low. This issue, known as anti-selection, would be considered by a carrier offering large group coverage through the Exchange.

The groups most likely to enter the Exchange are those with poor claims experience. Therefore, as a result of these higher cost groups entering the Exchange, the Exchange premiums will generally increase to be higher than the current average large group rates. As the Exchange rates increase, fewer groups see the benefit of going onto the Exchange.

In order to model this situation, L&E began by assuming that large group Exchange premiums would be equal to current VHC premiums. The model was designed to predict the groups that would elect Exchange coverage based on this premium level. Because the model uses probabilities rather than deterministic projections, this step was repeated 1,000 times to find an average outcome. Combined, those 1,000 trials make up the first iteration of the model.

As noted above, this first iteration assumes that large group Exchange premiums will be equal to current VHC premiums. There is no guarantee that this will be the case. The groups that choose Exchange coverage in the first iteration have higher morbidity than average. So, L&E then considered what rate increase is needed to properly fund coverage for those groups, thus creating a new community rate made up specifically of groups projected to

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<sup>11</sup> The assumption of 3% was based on reported carrier estimates for premium taxes, ACA insurer fees, and consideration of carrier margin/risk charge that would be eliminated under a self-insured arrangement.

participate in the first iteration. The next iteration used this new, higher premium to determine which groups would elect Exchange coverage at this new rate level.

Several iterations of the simulation were necessary for the system to reach an equilibrium state. Each iteration consisted of simulating the group decision at the current community rate level, then updating the community rate based on those decisions. Each iteration was performed 1,000 times to find the average community rate. This average rate was carried forward to the next iteration until there was no material difference between iterations. It is at this point of convergence where the large group Exchange premium was anticipated to actually fall.

The derivation of the community rate differed between the first two scenarios and the latter two scenarios. For the “Separate Risk Pool” scenarios, the community rate was based on the large groups which chose to be fully insured. Such groups would make up the entire community rate.

For the “Combined Risk Pool” scenarios, the community rate included consideration of the individual and small group members who make up that risk pool. The “Combined Risk Pool” scenarios converged to an average community rate much more quickly since the presence of the small group/individual members lowered the volatility of the decisions made by each large employer.

## PARAMETER ESTIMATION

The parameters  $\alpha$ ,  $\beta$ , and  $\Gamma$  have an important impact on the results of the employer choice algorithm. Care was taken to select values that reasonably reflect employer choices. The choice for large groups to elect Exchange coverage has not been available to large groups previously. Therefore, data regarding sensitivity of the decision to self-insure to different savings levels is not available.

The best estimate parameters used in the employer choice algorithm are as follows:

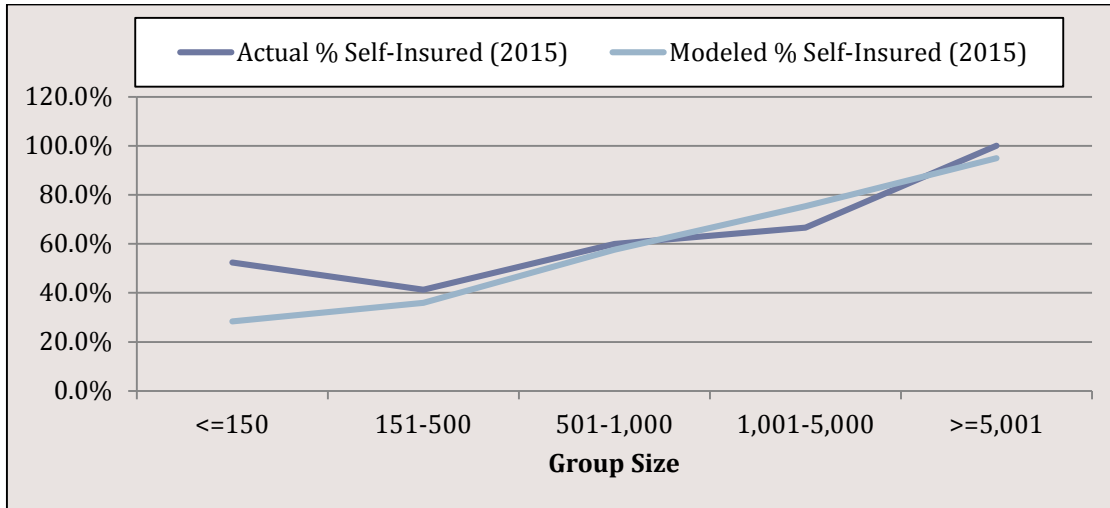
**Figure 8 - Best Estimate Employer Choice Algorithm Parameters**

$\alpha$ (alpha)	0.3
$\beta$ (beta)	0.9
$\Gamma$ (gamma)	2.5

A major step in the model calibration was to consider the choice made by large group employers in 2015. Each employer had the option of self-insurance and fully insured coverage. This choice reveals whether the approximately 3% rate difference between self-insurance and fully insured coverage was more valuable to employers than transferring risk to an insurance company. It provides additional insight into the employers’ risk appetite in regards to choosing self-insurance over fully insured coverage.

The following illustration considers the choices by groups of various sizes. It is used to investigate whether the model and parameter estimates are consistent with the choices actually made for 2015 coverage by large groups in Vermont.

**Figure 9 - Calibration of Employer Choice Algorithm**



As demonstrated in Figure 9 above, the model and parameter estimates appear to reasonably approximate the actual coverage choice of Vermont large groups in 2015.<sup>12</sup>

To further evaluate whether the model reasonably represented historical results, L&E also assessed the choices made in 2013 and 2014 in addition to 2015. After a close review of the additional data, it was revealed that the changes in choice of coverage from year-to-year were immaterial. Therefore, only 2015 information was used.

Other considerations were taken into account in setting the parameters. For instance, most self-insured plans carry attachment points at approximately 125% of expected claims.<sup>13</sup> As a result, a plan that would save more than 25% by switching to a self-insured plan is expected to make the switch. Similarly, if self-insurance is more expensive than fully insured coverage, there is little financial incentive for the employer to elect self-insurance.<sup>14</sup> Accordingly, the probability of choosing self-insurance should be approximately 0% when the rate difference is 0% and approximately 100% when the rate difference is 25% or more. The selected parameters ensure that these conditions were reasonably met.

<sup>12</sup> A sensitivity analysis was performed on these parameters to gain further understanding of their impact on the results. For documentation of this analysis, see Appendix A - Sensitivity Analysis.

<sup>13</sup> The "attachment point" is the maximum claim liability a self-insured plan must pay before the aggregate stop loss provision of its plan takes over.

<sup>14</sup> It is acknowledged that there may be some other incentives to self-insure; however, financial implications are assumed to be the dominant motivator.

## RESULTS

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The modeled scenarios produced a wide range of results based on the underlying assumptions. Some scenarios suggest that a large group Exchange may be a viable option; however, other scenarios demonstrate that a large group Exchange may be unaffordable and volatile.

Vermont is a small state that has a limited number of large groups. Large governmental groups constitute over a third of its total large group population. With over 57,000 lives, the government groups' decisions to self-insure or enter the Exchange would have a significant impact on the model's results. Therefore, the analysis was performed separately based on the decision of the government groups.

The four scenarios tested included:

1. **A Separate Large Group Risk Pool without Government Employees:** Establish an Exchange for large groups only within VHC. The current merged individual/small group market would keep the status quo and would remain separate from the large group Exchange. The government groups would remain self-insured.
2. **A Separate Large Group Risk Pool including Government Employees:** This scenario is the same as the previous, with the exception that the government groups would be included as fully insured groups in the Exchange risk pool.
3. **Merged Risk Pool without Government Employees:** This scenario assumes a combined VHC risk pool including individuals, small groups, and all large groups, excluding the government groups which are assumed to remain self-insured.
4. **Merged Risk Pool with Government Employees:** This final scenario assumes a combined VHC risk pool including individuals, small groups, and large groups.

### SCENARIO 1: LARGE GROUP ONLY EXCHANGE - WITHOUT GOVERNMENT GROUPS

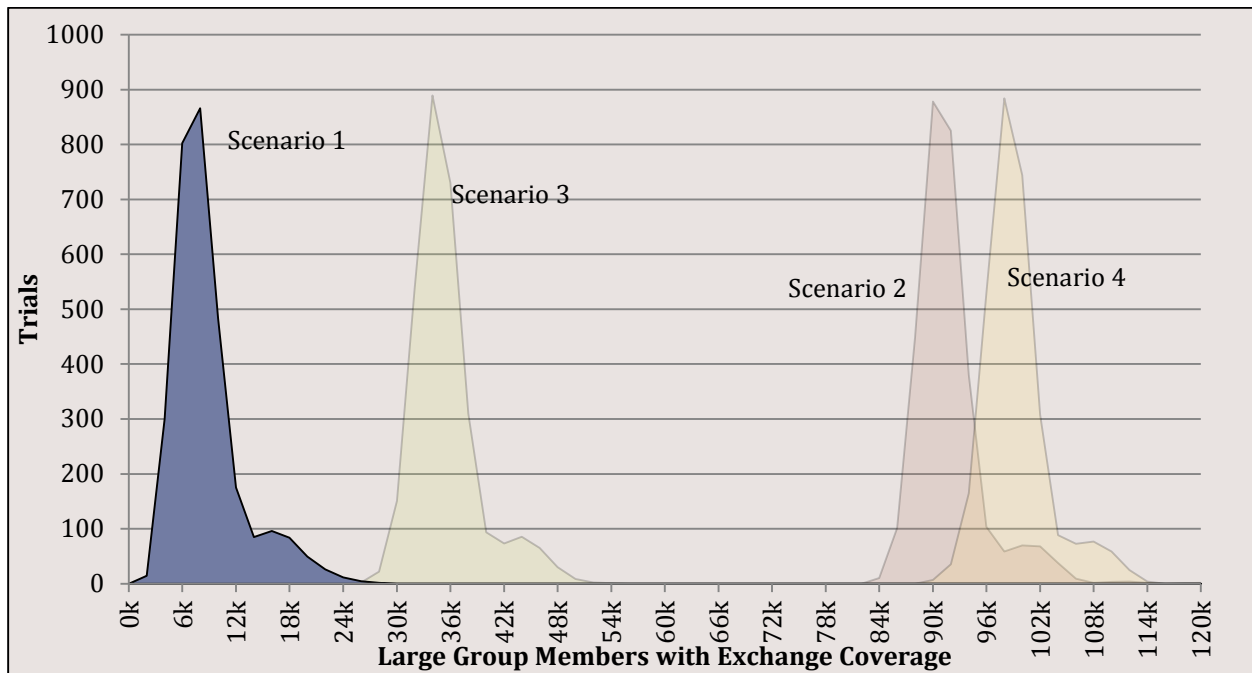
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Many of the forces that might dictate whether the governmental groups would take part in a large group Exchange are outside the scope of this investigation. Therefore, L&E explored the possibility of those employer groups choosing to self-insure rather than seek coverage through the Exchange.

The following table compares the projected large group participation in the Exchange as compared to other scenarios. Because each group has the freedom to choose self-insurance and this choice cannot be predicted with perfect precision, there is a range of possible outcomes. The accentuated curve represents Scenario 1, with the other scenarios displayed alongside.



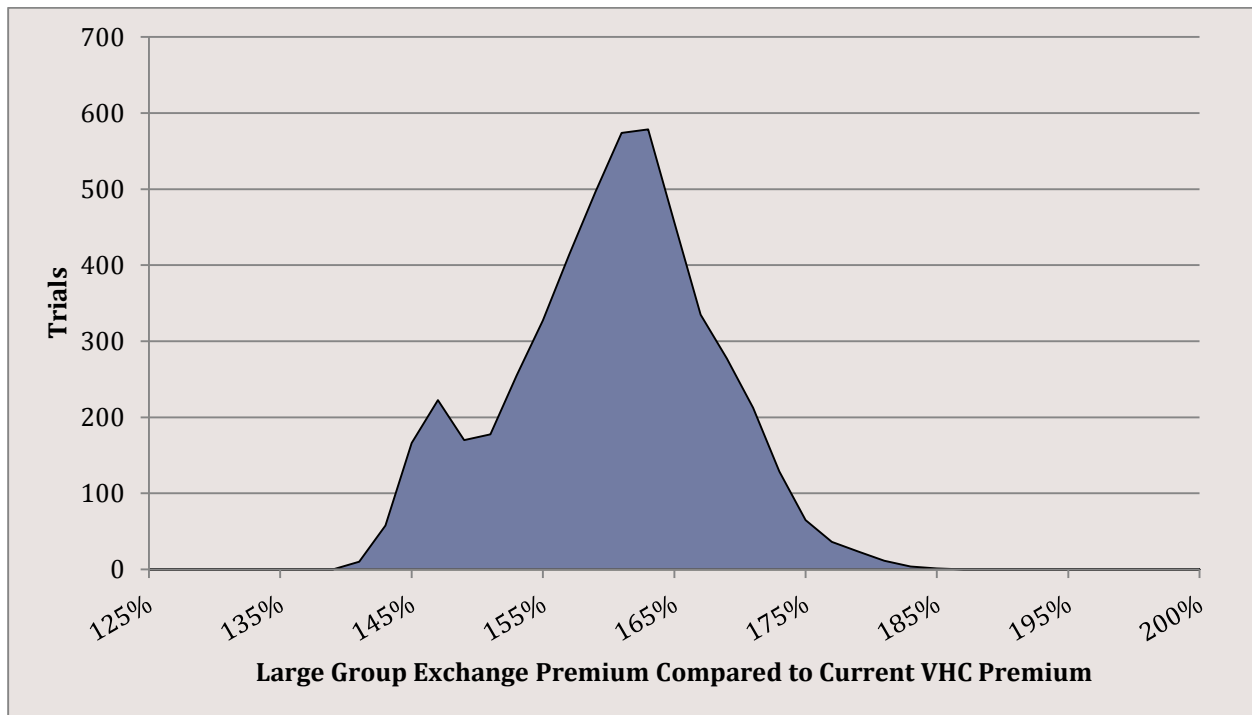
**Figure 10 - Large Group Participation (Scenario 1)**



The expected low enrollment in this scenario is due to the very high rates needed to support the claims experience of the projected population. In this scenario, new Exchange members are much more likely to be from large groups which chose Exchange coverage because of their current high rates. As such, the Exchange rate levels are projected to be high and the Exchange population significantly smaller. Therefore, due to a significant anti-selection element and the lack of the governmental groups, few groups elect to participate. The projections suggest that participation would likely be less than 10,000 enrollees.

The next exhibit details the projected range of the potential rate level required for adequacy for this subset of the large group population.

**Figure 11 - Large Group Exchange Premiums Compared to VHC (Scenario 1)**



The projections indicate that the mean equilibrium rate level for this scenario is approximately 59% higher than comparable rates on VHC. Only the sickest groups choose to enter the Exchange, while healthier groups have a strong economic incentive to self-insure. In this scenario, the population is small and therefore volatile. The modeled standard deviation of the equilibrium rate level is approximately 7%, which suggests that there is a wide range of possible outcomes around the best estimate.

**Figure 12 - Large Group Exchange Premiums Relative to VHC (Scenario 1)**

LG Premiums compared to Current VHC	+59%
Impact to Individual/Small Group Premium	N/A
Expected Participating Large Groups	76
Expected LG Exchange Enrollment	7,687

This scenario appears to create a "rate spiral," where more and more groups would choose not to participate and rates would continue to increase. Therefore, it does not appear that this scenario would produce adequate enrollment to maintain rate stability and affordability.

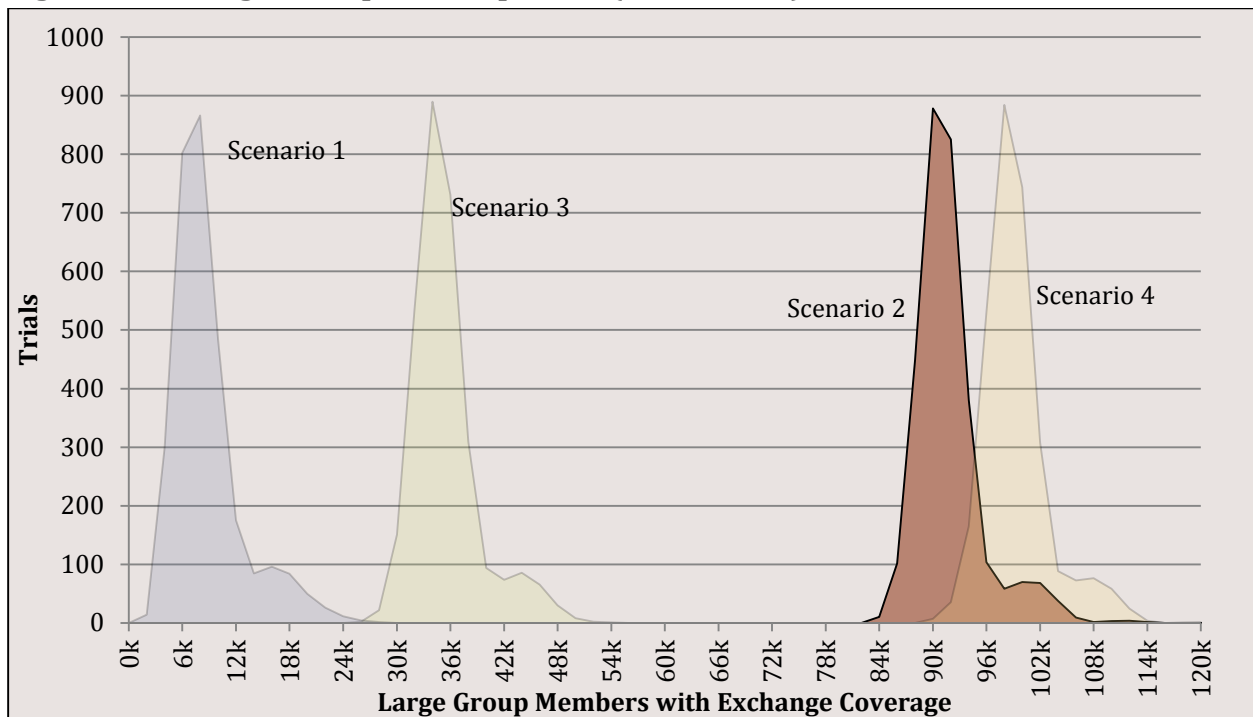
## SCENARIO 2: LARGE GROUP ONLY EXCHANGE - WITH GOVERNMENT GROUPS

This modeled scenario assumes that the Vermont governmental groups decide to participate on the large group Exchange regardless of the estimated premium impact.

In this scenario, there is a substantial increase in the projected membership level. This substantial enrollment increase helps reduce volatility and assists in insulating the Exchange community rate level against the highest-claim groups.

The projections indicate that the number of members who would join the large group Exchange in this scenario is approximately 91,000. Those members would come from approximately 100 groups. Because no group’s decision can be predicted with perfect accuracy or precision, there is a degree of uncertainty surrounding these results. The estimated enrollment range is illustrated in the chart below.

**Figure 13 - Large Group Participation (Scenario 2)**



The inclusion of the governmental groups also creates an influx of more groups that would otherwise be expected to avoid participating on the Exchange. This is due to the reduced rate level achieved as a result of the inclusion of the governmental groups.

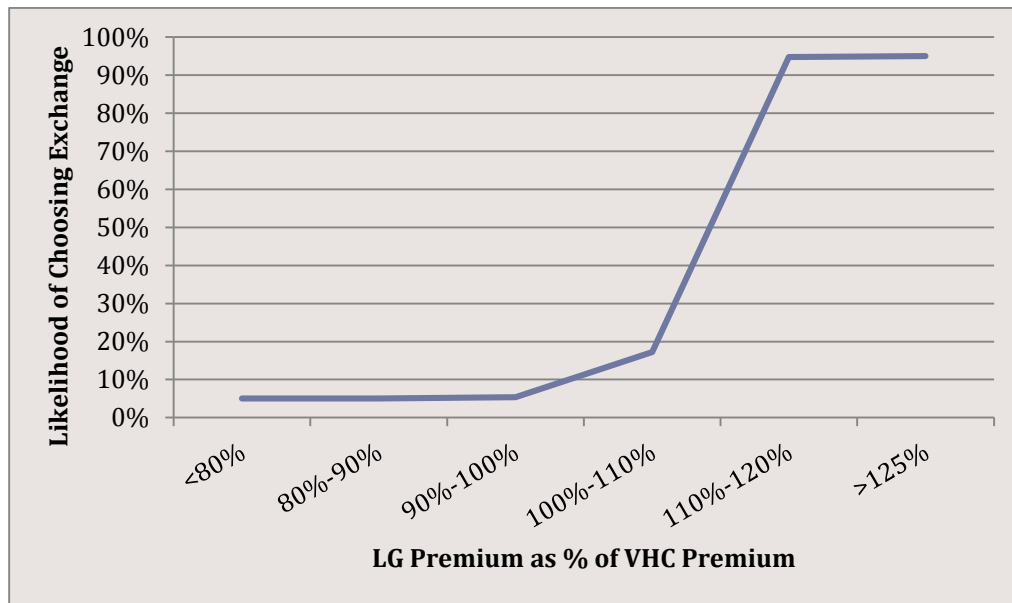
Projections indicate an increase in the rate level as compared to VHC rates in this scenario; however, the resulting increase is significantly less severe than the results of Scenario 1. Therefore, due to the significant membership increase from the inclusion of the government groups, rate spiraling appears averted.

**Figure 14 - Large Group Exchange Premiums Compared to VHC (Scenario 2)**

LG Premiums compared to Current VHC	+10%
Impact to Individual/Small Group Premium	N/A
Expected Participating Large Groups	103
Expected LG Exchange Enrollment	90,763

There are clear differences between groups anticipated to go onto the Exchange and those which elect self-insured coverage. Not surprisingly, one of the key variables is the current rate level. As can be seen in the following exhibit, groups that are currently paying high rates due to their unfavorable experience are overwhelmingly projected to choose to go onto the Exchange.

**Figure 15 - Likelihood of Exchange Participation by Rate Level (Scenario 2)<sup>15</sup>**



Even though there is a projected increase of 10% to the rates in this scenario, a separate large group risk pool may be considered viable if the government groups participated.

**SCENARIO 3: COMBINED VHC/LARGE GROUP EXCHANGE - WITHOUT GOVERNMENT GROUPS**

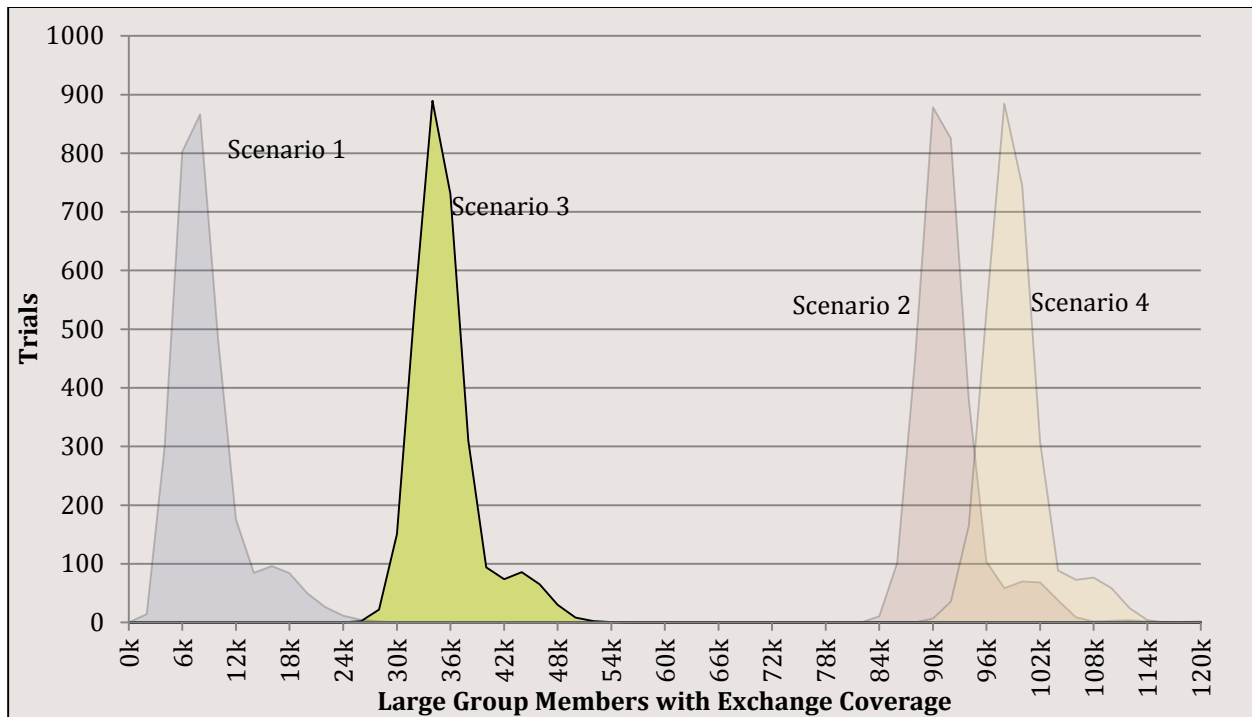
In the next two model scenarios, the results of combining the large group Exchange with the existing Exchange were investigated. Merging the large group and VHC risk pools would provide a large population base which would help mitigate the effect of anti-selection from

<sup>15</sup> The governmental groups were excluded from this exhibit, as their choices were assumed rather than modeled.

the large group market. This increased enrollment would yield additional rate stability and would help promote further enrollment of large groups on the Exchange.

For Scenario 3, the model assumes that Vermont’s governmental groups remain self-insured. The figure below displays the expected large group enrollment under the assumption that large group market is merged with the current VHC population.

**Figure 16 - Large Group Participation (Scenario 3)**



As illustrated above, merging the large group risk pool with the VHC risk pool is projected to increase overall large group participation materially when compared to Scenario 1. The estimated increase in participation, in terms of membership, is an increase of an additional 26,000 compared to Scenario 1’s enrollment estimates. This result is driven by the lower premium level required due to the inclusion of the current VHC population. This dampens the impact of anti-selection that occurs in Scenario 1. A summary of these results including the projected rate change associated is provided in the table below.

**Figure 17 - Large Group Exchange Premiums Compared to VHC (Scenario 3)**

LG Premiums compared to Current VHC	+9%
Impact to Individual/Small Group Premium	+9%
Expected Participating Large Groups	103
Expected LG Exchange Enrollment	34,456

This outcome features a lower number of large group members participating in the Exchange than the previous scenario; however, lower rates for large group employees are produced.

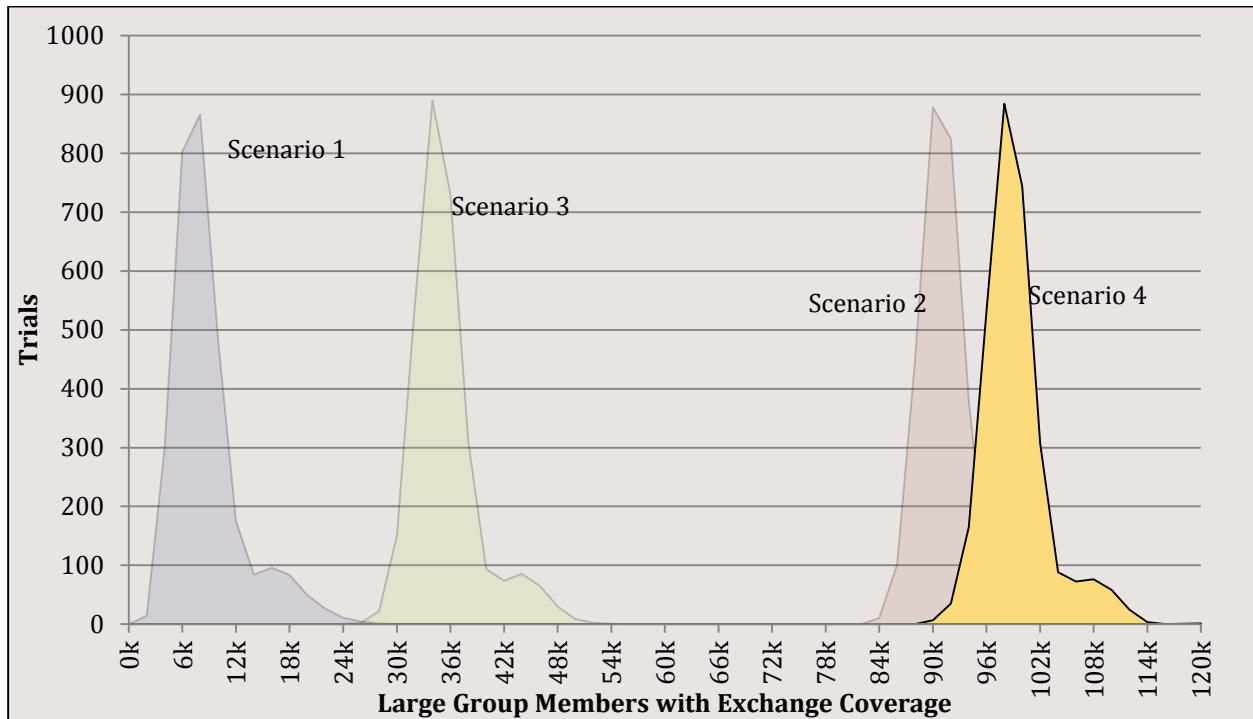
This is because the small group and individual rates have been increased to subsidize the large groups who elect Exchange coverage.

**SCENARIO 4: COMBINED VHC/LARGE GROUP EXCHANGE – WITH GOVERNMENT GROUPS**

In this scenario, a single Exchange is established which incorporates all fully insured Vermonters in the individual, small group, and large group markets. The rate level is held more stable relative to the other scenarios due to the inclusion of the individual and small group enrollees and the governmental groups. This creates a lower level of anti-selection than what was modeled in any of the previous scenarios.

The following table demonstrates the modeled probabilities of how many large group employees would be covered through the Exchange in this scenario.

**Figure 18 - Large Group Participation (Scenario 4)**



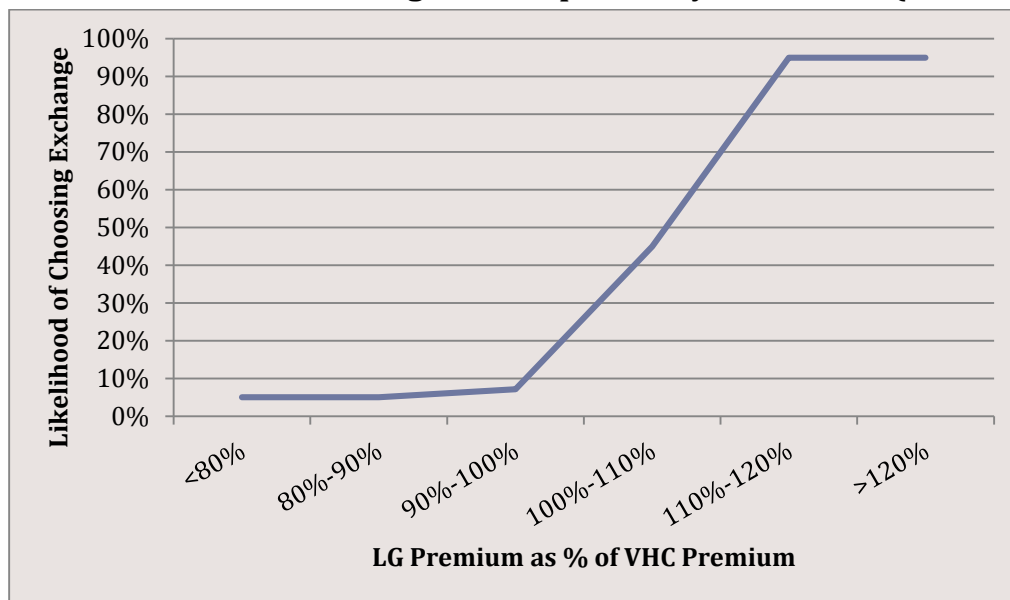
Not only does this scenario achieve the highest participation rate for the large group Exchange, but it also achieves the lowest rates for those members. The following table shows the expected outcome for this scenario.

**Figure 19 - Large Group Exchange Premiums Compared to VHC (Scenario 4)**

LG Premiums compared to Current VHC	+6%
Impact to Individual/Small Group Premium	+6%
Expected Participating Large Groups	115
Expected LG Exchange Enrollment	98,281

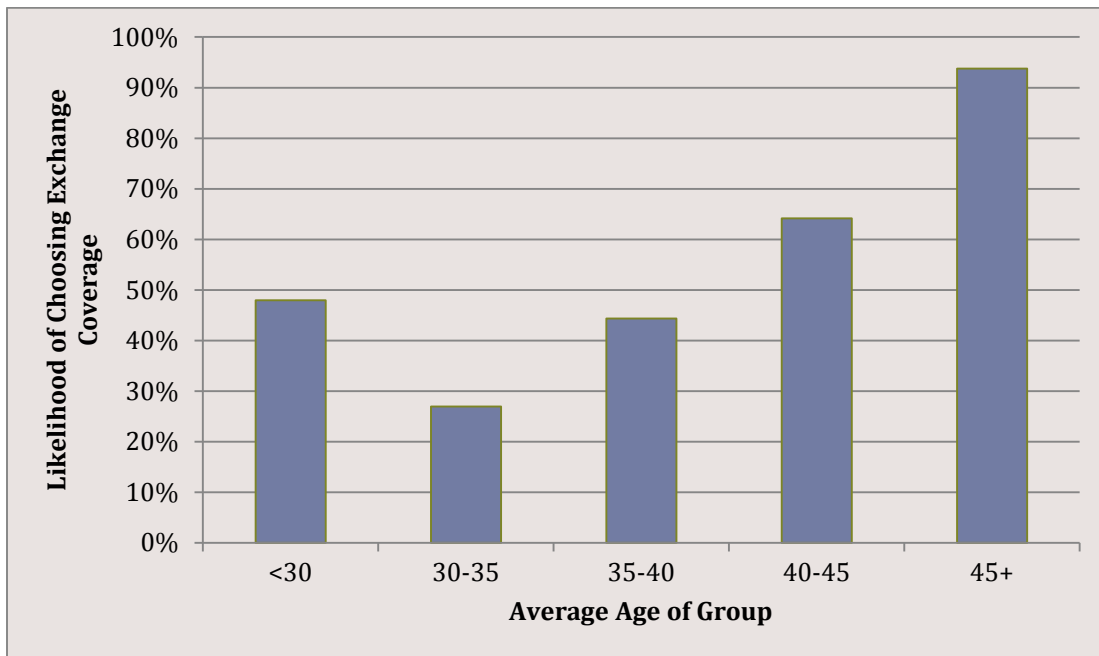
The choice of whether to participate in the Exchange is driven primarily by the current premium level. This can be seen from the following exhibit, which demonstrates the relationship between current premium level and projected likelihood of participating in the large group Exchange.

**Figure 20 - Likelihood of Exchange Participation by Rate Level (Scenario 4)**



The projections indicate that very few groups who currently pay less than Exchange rates will participate in the Exchange. These groups generally pay less for their coverage due to favorable past claims experience. This can be caused by many factors, but can partially be attributed to age, as illustrated in the table below.

**Figure 21 - Likelihood of Choosing Exchange by Average Age (Scenario 4)**



There is a clear pattern of older groups selecting to go onto the Exchange. This is consistent with expectations that older groups benefit from community rating. The following table demonstrates that the option of choosing community rating (through the Exchange) or experience rating (through self-insurance) creates a noticeable difference in the age of these two populations.

**Figure 22 - Average Age by Projected Coverage Decision (Scenario 4)**

Projected Coverage	Average Age
Self-Insured	35.5
Fully Insured	38.1

Regarding Figure 21, it should be noted that the groups with an average age less than 30 are generally small employers. As a result of their small size, these groups tend to choose fully insured coverage to reduce the volatility in annual rate changes. This underlying variable helps explain the bump on the far left of Figure 21.

## CHANGES TO CURRENT LARGE GROUP RATES

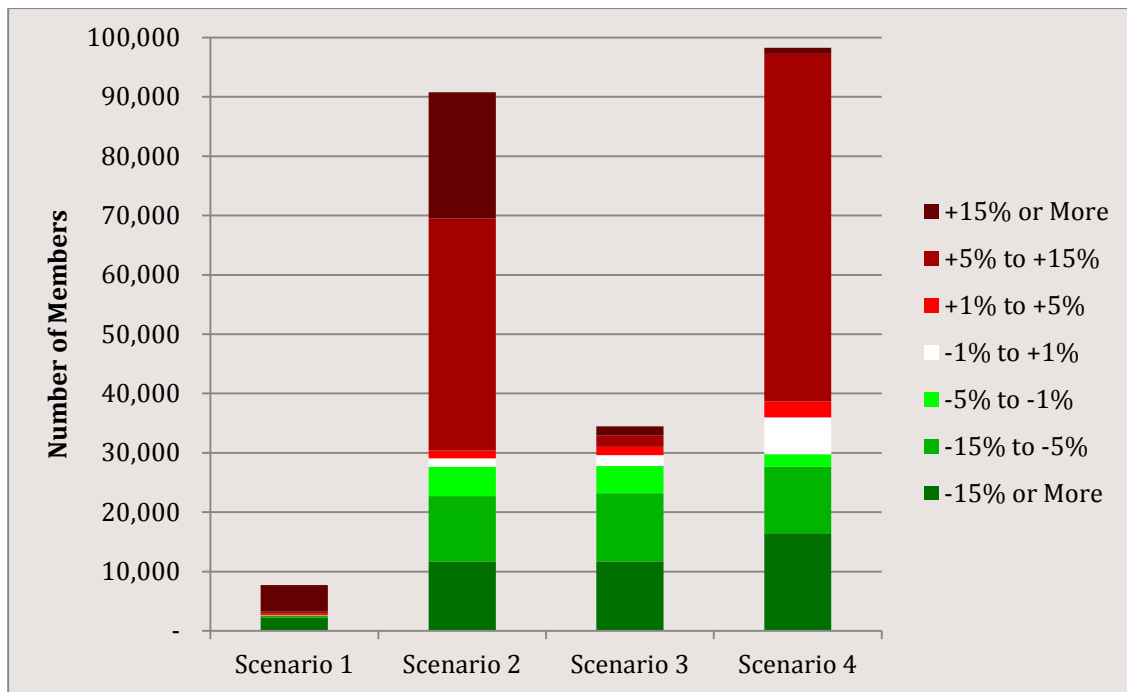
The primary directive of the analysis was to estimate the impact on rates in the large group health insurance market if large employers are permitted to purchase QHPs through VHC beginning in 2018.



Based on the results of the four modeled scenarios, it appears highly likely that allowing large employers to enter VHC will produce higher premiums on average in the large group market. It also appears that more Vermonters, including small group employees and individual policyholders, would be negatively impacted than positively impacted in all scenarios tested.

The following figure summarizes the number of persons expected to see reduced premiums if the VHC is expanded and the number of persons who would expect to see increased premiums as a result of VHC expansion.<sup>16</sup>

**Figure 23 - Impact to Premiums - Large Group Exchange Members Only**



In the above figure, shades of red highlight the number of persons expected to see premium increases, while the shades of green highlight the number of persons expected to see premium decreases.

Because the governmental groups are currently paying low rates relative to other large groups and to the VHC, these governmental groups would be expected to have material rate increases if they were covered on VHC. These increases would be necessary to offset the costs of the high cost groups expected to join (Scenarios 2 and 4).

<sup>16</sup> Member-level premiums are not available at this time, and may not exist in cases where the premium is employer paid. The rate change is measured at the group level, even though some members may experience a higher or lower rate change due to tiering differences, age rating, and other differences between current rating structure and community rating.

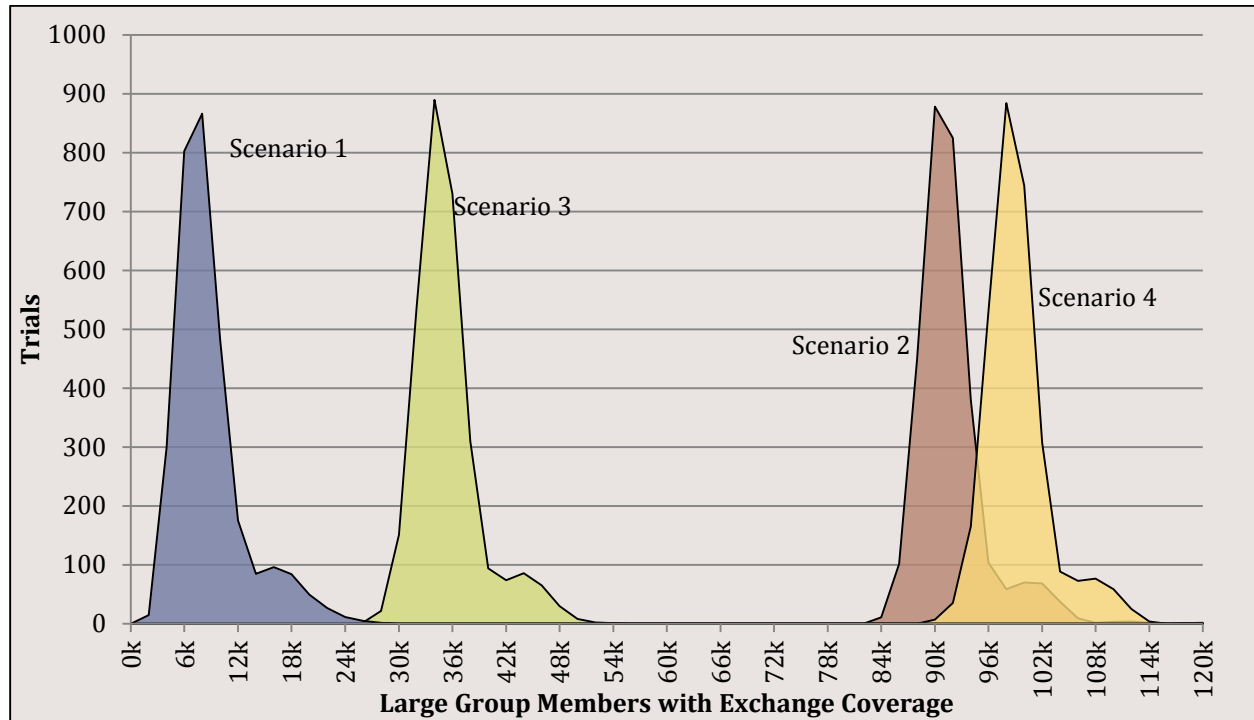
Scenarios 1 and 3 illustrate the impact if the governmental groups stay self-insured. In Scenario 1, the number of Vermonters who are positively affected by the implementation of a large group Exchange is very low, as demonstrated by the small shaded green area.

In Scenario 3, many large group employees and their families are expected to realize significant rate decreases; however, this result is achieved by increasing the premiums for persons currently covered in the small group and individual markets.

## SUMMARY

In general, the analysis indicates that a large group Exchange has the highest likelihood of being successful (as defined by reducing volatility and minimizing the expected average increase in premiums) as membership increases. The anticipated participation under the different scenarios is outlined below.

**Figure 24 - Large Group Participation (All Scenarios)**



Even if significant VHC enrollment gains are realized, it appears highly likely that allowing large employers to enter VHC will produce higher premiums on average in the large group market.

The table below summarizes the results from the modeling of the four scenarios.

**Figure 25 - Comparison of Model Results by Scenario**

Scenario	1	2	3	4
LG Premiums compared to Current VHC	+59%	+10%	+9%	+6%
Impact to Individual/Small Group Premium	N/A	N/A	+9%	+6%
Expected Participating Large Groups	76	103	103	115
Expected LG Exchange Enrollment	7,687	90,763	34,456	98,281
Number of Persons Positively Affected by Rate Change	2,568	27,690	27,751	29,798
Number of Persons Negatively Affected by Rate Change	5,049	61,679	83,645	141,068

While the expected financial impact in the large group market is a significant issue, it is not the only consideration with regards to establishing a large group Exchange. Other considerations include:

**1. The Impact to the Individual and Small Group Markets:**

The estimate of the increase in rates that would be observed by current enrollees in VHC is at a minimum 6% (as shown in Figure 25 - Comparison of Model Results by Scenario).

**2. Expansion in Coverage for some Children:**

Children whose parents work for large employers may not have insurance coverage for pediatric dental and vision services. Enrollment in a QHP on the Exchange could extend this coverage to many children in Vermont.

**3. Availability of Private Exchanges for the Large Group Market:**

The goal of a private exchange is to:

- Lower costs, in part through a defined contribution approach.
- Provide more health insurance options for employees.
- Relieve employers of plan administration duties.

The presence of a private exchanges in VT could materially impact the enrollment in VHC.

**4. Reduced Benefit Offerings**

The VHC currently offers only a limited number of benefit packages. In the current large group market, benefit design flexibility is allowed and can be tailored for a specific employer.

**5. Technology**

Across the country, there have been technology issues that have caused slowed and lowered enrollment in employer Exchanges. Any impediment to enrollment growth could materially affect the premiums borne by those that are enrolled.

Whether or not the large group market is combined with the VHC risk pool, the general rate level of a large group Exchange is projected to be higher than that of the existing Exchange. The primary reason for this increase is that there is no perfect solution to eliminate anti-selection when groups have the option of self-insuring.

## APPENDIX A - SENSITIVITY ANALYSIS

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Many numerical assumptions were necessary in order to generate projections of future outcomes. All results shown above use the best estimates of these assumptions. This appendix demonstrates how changes to those assumptions impact the findings in this report. Alternate projection scenarios were considered and the model was run again based on assumptions which differed from the best estimates.

These scenarios describe hypothetical outcomes and are not being assigned discrete probability values. They do not explicitly represent best or worst case scenarios. The alternate outcomes analyzed are listed below, followed by the results:

1. **Extreme Selection:** This scenario entails all groups looking exclusively at their pricing options and group size when deciding whether to participate in the large group Exchange, and assumes they do so rationally. This was modeled by changing the maximum and minimum probabilities in the choice algorithm from 95%/5% to 100%/0%. This hurts the Exchange because it assumes groups are better informed (and therefore more capable of selecting against carriers).
2. **Size Important:** This scenario assumes that groups are more concerned with their size than data suggests when determining whether to self-insure. This scenario is included because the relationship between group size and the choice to self-insure varies significantly across carriers. To measure variation in this scenario the  $\alpha$  coefficient was modified from 0.3 to 0.4 for this sensitivity test.
3. **Size Unimportant:** This scenario is the opposite of the previous. When modeling this scenario, a value of  $\alpha = 0.1$  was assumed for this sensitivity test. The outcome of the analysis is not particularly sensitive to this assumption.
4. **Fear of Self-Insurance:** This scenario considers the possibility that employers who currently do not self-insure are highly risk-averse and are unlikely to do so without extreme economic incentive to do so. This was achieved by reducing the maximum and minimum probabilities of electing self-insurance from 95%/5% to 80%/0%.
5. **Inexpensive Self-Insurance:** Assumes that the reduction in expected costs from electing self-insurance is greater than expected. This could be due to the current assumption being inaccurate, or from carriers attempting to discourage participation in the large group market. This assumes self-insurance achieves a savings of 6% (before the implementation of single risk pool requirements).
6. **Expensive Self-Insurance:** The opposite of the previous scenario assumes that choosing self-insurance actually only saves 1% of total cost relative to traditional large group insurance.
7. **High Rate Sensitivity:** This scenario assumes that employers respond very strongly to premium differences, with little regard for the added risk of self-insurance. This was achieved by changing the  $\beta$  coefficient in the formula from 0.9 to 0.6.

The primary results from the modeling are the number of large group participants who obtain QHP coverage through the Exchange and the premium level that those individuals are charged.

The exhibit below summarizes the impact of the alternative scenarios on each of the key results. All sensitivity scenarios assume that the large group Exchange is part of a single risk pool with VHC and that the government employees will be covered through the Exchange (i.e., Scenario 4). “Rate Level” is defined as the change in the rate for a given scenario as compared to the rate level of the current VHC population.

**Figure 26 - Sensitivity Analysis**

Scenario	Rate Level	LG Exchange Enrollees
Best Estimate	5.6%	98,281
Extreme Selection	6.0%	96,995
Size Important	5.6%	95,837
Size Unimportant	5.0%	117,100
Fear of Self-Insurance	5.3%	106,854
Inexpensive Self-Insurance	7.2%	93,540
Expensive Self-Insurance	4.5%	100,806
High Rate Sensitivity	5.6%	94,338

Several important insights can be gained from these results. First, the projected rate level resulting from opening the Exchange to large groups is not particularly sensitive to the numerical assumptions used in modeling. The range of outcomes is from 4.5% to 7.2%.

Second, an important issue for the viability of a combined individual/small group/large group Exchange is for employers to find self-insurance unappealing. Whether it is because they refuse to accept it regardless of cost or because it does not provide adequate cost savings, employers refusing self-insurance leaves them with Exchange coverage as their only option, which would help to spread risk and reduce anti-selection.

Third, the greatest risk to the Exchange is increased access to and acceptance of self-insurance by large group employers. As more employers select self-insurance, the remaining health status of the Exchange would deteriorate.

## APPENDIX B - LIST OF FIGURES

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The following list contains the location of all numerical and graphical exhibits included in this report.

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## APPENDIX C: ASOP 41 DISCLOSURES

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The Actuarial Standards Board (ASB), vested by the U.S.-based actuarial organizations,<sup>17</sup> promulgates actuarial standards of practice (ASOPs) for use by actuaries when providing professional services in the United States.

Each of these organizations requires its members, through its Code of Professional Conduct,<sup>18</sup> to observe the ASOPs of the ASB when practicing in the United States. ASOP 41 provides guidance to actuaries with respect to actuarial communications and requires certain disclosures which are contained in the following.

### IDENTIFICATION OF THE RESPONSIBLE ACTUARY

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The responsible actuaries are:

- David Dillon, FSA, MAAA, MS, Vice President & Principal at Lewis & Ellis, Inc.
- Jacqueline Lee, FSA, MAAA, Vice President & Principal at Lewis & Ellis, Inc.
- Johnathan O'Dell, ASA, MAAA, MS, Associate Actuary at Lewis & Ellis, Inc.

These actuaries are available to provide supplementary information and explanation.

### IDENTIFICATION OF ACTUARIAL DOCUMENTS

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The date of this document is February 4, 2016. The date (aka "latest information date") through which data or other information has been considered in performing this analysis is December 31, 2015. As an ordinary practice, these actuaries and L&E do not retain drafts of such work products.

### DISCLOSURES IN ACTUARIAL REPORTS

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- The purpose of this study is to assist the GMCB in assessing the implications of the potential implementation of a health insurance marketplace (i.e., "Exchange") for the large group insurance market.
- Lewis & Ellis, Inc. is financially and organizationally independent from the insurance carriers participating in this study. L&E is not aware of anything that would impair or seem to impair the objectivity of the work.
- The responsible actuaries are qualified as specified in the Qualification Standards of the American Academy of Actuaries.
- L&E has reviewed the data provided by the carriers for reasonableness, but it has not been audited. Neither L&E nor the responsible actuaries assume responsibility for these items that may have a material impact on the analysis. To the extent that there

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<sup>17</sup> The American Academy of Actuaries (Academy), the American Society of Pension Professionals and Actuaries, the Casualty Actuarial Society, the Conference of Consulting Actuaries, and the Society of Actuaries.

<sup>18</sup> These organizations adopted identical *Codes of Professional Conduct* effective January 1, 2001



are material inaccuracies in, misrepresentations in, or lack of adequate disclosure by the data, the results may be accordingly affected.

- L&E is not aware of any subsequent events that may have a material effect on the actuarial findings.
- There are no other documents or files that accompany this report.

## ACTUARIAL FINDINGS

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

## METHODS, PROCEDURES, ASSUMPTIONS, AND DATA

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

L&E reviewed the data for overall appropriateness. These reviews indicated several deficiencies and inconsistencies therein. L&E made a concerted effort to address all such known instances. Several attempts to rectify data concerns with the individual carriers were made with some success. Ultimately, the data used to develop this analysis was accepted to be sufficiently accurate and reasonable under the constraints and circumstances. However, it is reasonable to expect that results may deviate from those expressed in this report, perhaps significantly, if the data provided is not accurate.

## ASSUMPTIONS OR METHODS PRESCRIBED BY LAW

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This report was prepared as prescribed by applicable law, statutes, regulations and other legally binding authority.

## RESPONSIBILITY FOR ASSUMPTIONS AND METHODS

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The actuaries do not disclaim responsibility for material assumptions or methods.

## LIMITS ON DISTRIBUTION AND UTILIZATION

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This report has been prepared for the use of the GMCB and the Vermont Legislature regarding the impact of allowing the large group market to be sold on Vermont Health Connect. The data and information presented is not appropriate for any other purpose.

The authors are aware that this report may be distributed to other parties; however, any user of this report must possess a certain level of expertise in actuarial science and/or health insurance so as not to misinterpret the data presented.

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### CONFIDENTIALITY OF REVIEW & RELIANCES

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L&E recognizes that in the performance of the work, it acquired or had access to records and information considered confidential by the GMCB, MVP, CIGNA, and BCBSVT.

L&E took steps to comply with all laws and regulations relating to confidentiality and privacy. Likewise, L&E took reasonable steps to ensure the physical security of such data under its control.

L&E's work was based upon data and information obtained through the GMCB, MVP, CIGNA, and BCBSVT. L&E has relied upon the above parties to attest to the accuracy of the information provided.

### DEVIATION FROM THE GUIDANCE OF AN ASOP

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