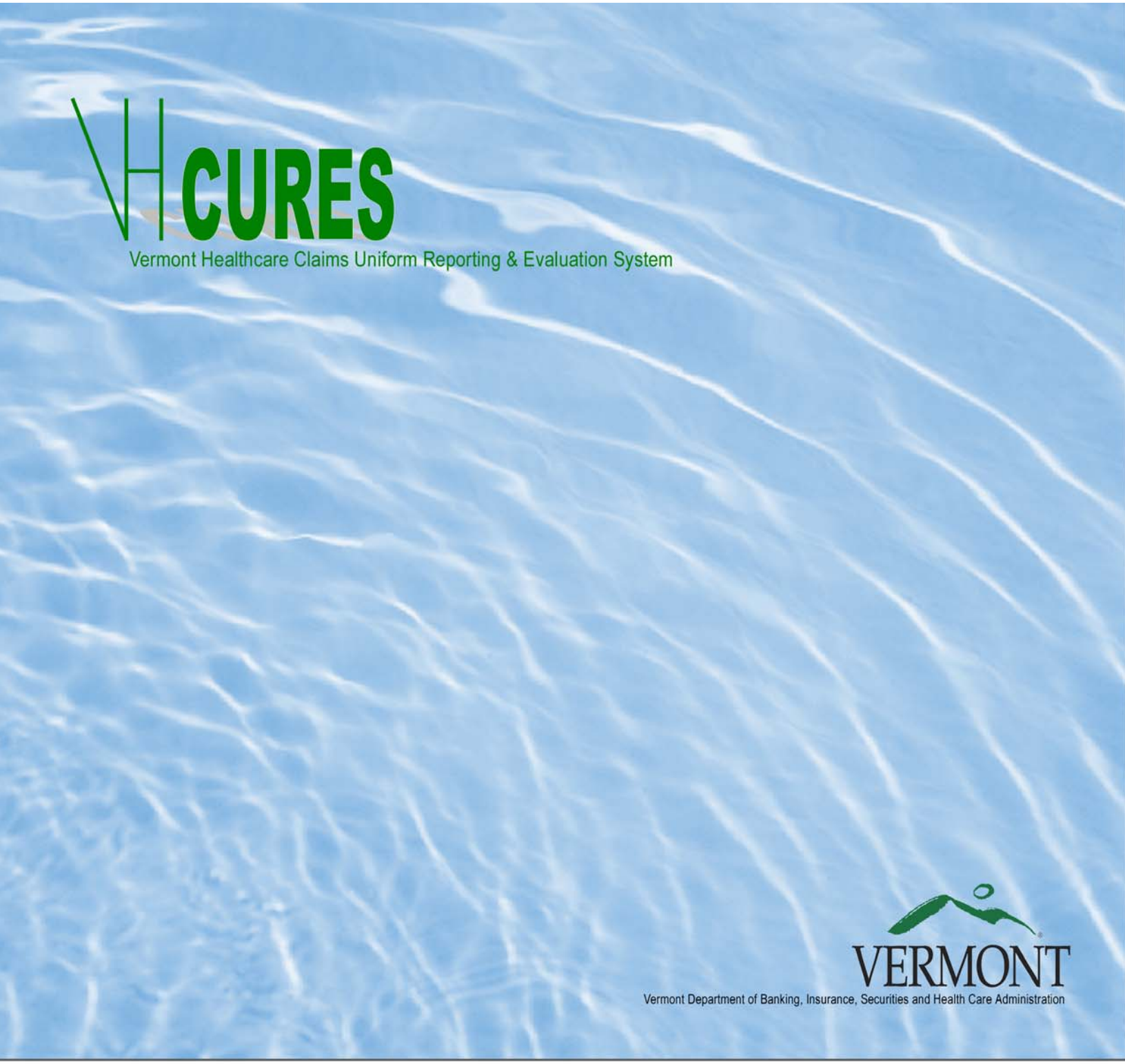

Assessment of Vermont's Claims Database to Support Insurance Rate Review

July 2011

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Assessment of Vermont's Claim Database to Support Insurance Rate Review

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EXECUTIVE SUMMARY

The State of Vermont utilized rate review grant funds provided under the authority of the Federal Patient Protection and Affordable Care Act's (PPACA) to investigate the usefulness of its multi-payer healthcare claims database (VHCURES) to support enhanced insurance rate review activities. This report presents the results of that project.

Vermont has been a leader on many fronts in the evolution of its healthcare system. VHCURES, which contains enrollment and claims data on health services provided to major segments of Vermont's insured residents, is an important resource for many important avenues of research and analysis. Vermont's rate review process is also a national leader. On July 1, 2011, Vermont was determined by the Federal Centers on Medicare and Medicaid Services to have an effective rate review program in all markets. VHCURES has tremendous potential to further PPACA goals of enhancing the effectiveness and transparency of the rate review process by allowing independent validation of underlying data and assessment of actuarial assumptions used in rate filings. The detailed claims can allow analysts to understand, at any level of detail required, the service utilization and payment history underlying specific rate filings. In order to realize this potential, a link between VHCURES claims and rate filings submitted to the State's insurance regulator would need to be established.

Toward this end, the following activities were pursued in the project: (i) evaluation of the usefulness of existing VHCURES reports in rate review, (ii) evaluation of existing national rate filing typologies for linkage to VHCURES, and (iii) detailed analysis of alternatives for linking claims and eligibility data in VHCURES to insurer rate filings. To carry out the analysis, two large rate filings from a major insurer were chosen as test cases. The documentation for these rate filings was analyzed in detail. In addition, VHCURES data elements were evaluated for two purposes: (i) identification of fields that could be used for linking to rate filings, and (ii) identification of fields that contain measures that could be used to validate quantitative information contained in rate filings (e.g., membership and claims payments). Attempts were made to select data from VHCURES that matched the rate filings, and an assessment was made of whether key data elements in the rate filing were supported by the VHCURES data.

We have concluded that many aspects of the rate filings are derived from claims and enrollment data and therefore the source data could be validated with correctly linked data from VHCURES and therefore many key assumptions in the rate filing could be assessed by a reviewing actuary using comparable data. There are also some additional data elements not currently in VHCURES that might be added that would increase the usefulness of VHCURES for this purpose.

Through our analysis we have identified some opportunities and modifications that would enable VHCURES to be a viable data source for use in rate filing reviews. The findings warranting further investigation are:

1. Existing data in VHCURES cannot provide a complete one-to-one link to data associated with specific rate filings at this point in time. Additional data obtainable from carriers can improve the linking between VHCURES and the reference data used for rate filings.
2. Claims and eligibility for people who work in Vermont (and have health insurance coverage through their employer), but who live outside Vermont are not currently included in VHCURES. However, insurance premiums for employer groups are based on all covered employees, regardless of Vermont residency status.
3. VHCURES cannot support the review of quarterly rate filings for small carriers (less than 500 members) because they are only required to submit data annually.

Recommended next steps to resolve current variances between VHCURES data and rate filings are:

1. Consider an addition to VHCURES data requirements to tag claims and eligibility with a "rate filing identifier" which corresponds to rate filings made by the carrier, and to pursue additional analysis and design work related to formulation of a rate filing ID scheme.
2. Change VHCURES requirements to include claims and eligibility for people who are insured through Vermont employers but who live outside Vermont so the associated data can be included in reports used to support rate review. Claims and members fitting these criteria should be tagged so that they can be excluded from other VHCURES reports limited to Vermont residents.
3. Focus the use of VHCURES to support rate review on the large carriers.
4. Engage in a design process in consultation with larger carriers to carry out steps 1 and 2 above.

Additional details on these findings and recommendations are contained in the full report.

Assessment of Vermont's Claim Database to Support Insurance Rate Review

I. Introduction

The State of Vermont has been a leader in innovative health policy for many years and so was well positioned to capitalize on provisions contained in the Federal Patient Protection and Affordable Care Act (PPACA), most notably with the passage of Green Mountain Care and its aim to establish universal health coverage. Among the other provisions of the PPACA that Vermont was well prepared to address was the new section 2794 added to the Public Health Service Act (42 U.S.C. 300gg-91 et seq.) that provides grants to states to improve the effectiveness and transparency of their insurance rate review processes. Vermont had the foresight to establish a multi-payer claims database, which has the potential to be a valuable resource to aid enhancing the effectiveness and transparency of the rate review process.

The Vermont Department of Banking, Insurance, Securities and Health Care Administration (BISHCA) carries out a statutory mandate (per 18 V.S.A. § 9410) to provide the Vermont Healthcare Claims Uniform Reporting and Evaluation System (VHCURES), a database with health care claims and eligibility data, intended to aid in measuring and improving healthcare system performance. Recognizing the potential that VHCURES has to improve the State's ability to carry out effective rate review processes, BISHCA directed rate review grant funds to procure consulting services to analyze this potential. Through a competitive bidding process, the services of Onpoint Health Data, and its sub-contractor, Compass Health Analytics, Inc. were retained.

The goals of the study summarized in this report are to move toward customizing VHCURES reporting requirements to support rate review by:

- Comparing the VHCURES categorization applied to the Annual Expenditure & Utilization Report and the Healthcare Report Card to the categorizations of enrollment/demographics, utilization and expenditures used by the State's actuaries; and
- Identifying an inventory of insurance product types reported to VHCURES, and evaluating the categorizations in relationship to the insurance rate review process, and identifying the categories that would be most applicable to the rate review process.

In the course of pursuing these tasks, issues in creating the alignment envisioned in the scope of work were also identified and analyzed, with options and recommendations formulated for their resolution. Specifically, we investigated identification of fields that contain measures that could be used to validate quantitative information contained in rate filings (e.g., membership and claims payments). Attempts were made to select data from VHCURES that matched the rate filings, and an assessment was made of whether key data elements in the rate filing were supported by the VHCURES data.

II. Background

Before discussing the details of the use of VHCURES data in rate review, we summarize basic information about the current rate review process in Vermont and about the VHCURES database.

A. Health Insurance Rate Filings in Vermont

The State of Vermont regulates the comprehensive major medical insurance market, with rate filing requirements varying by segment: small group, large group, non-group (individual), and self-funded. Approval of rates is on a "prior approval" basis, meaning that rates must be approved by the state before they can be implemented in the market.

Small groups include employers with 1 to 50 employees (including sole proprietors) as well as associations that are not exempt and trusts. Small groups are guaranteed issue and subject to community rating. Small group premium rates must be filed for review and approval by BISHCA.

Large groups include employers with more than 50 employees. Large employer groups may be experience-rated. Therefore BISHCA reviews and approves the methodology, trends, and administrative expenses used in developing large group premium rates prior to issue, but the final premium rates, due to the experience of each particular group, for a specific employer group are not currently reviewed.

Similar to small group, non-group health insurance plans are guaranteed issue and community rated. The premium rates must be reviewed and approved by BISHCA prior to the effective date. Catamount Health, a product that was developed to reduce the level of uninsured persons in Vermont, is considered a non-group product.

Self-funded plans are liable for paying their own health care claims. They are subject to ERISA, a federal law, and not subject to most state laws or BISHCA regulation.

Vermont requires all carrier rate filings to be submitted using the System for Electronic Rate and Form Filing (SERFF), a system established by the National Association of Insurance Commissioners (NAIC). BISHCA receives the rate filings through SERFF and then reviews and comments on and either approves or rejects each filing. To help identify what type of filing is being submitted, the carrier assigns a type of insurance (TOI) and sub-TOI that defines the insurance type (Life, Accident, Disability, Health, HMO, Medicare Supplement, Limited Benefit, Specified Disease, etc.) and market segment (non-group, small group, large group, any size group) as well as the product type (HMO, PPO, POS, other, etc.). A listing of the Health and Health Maintenance TOIs and sub-TOIs are in Appendix A. The TOIs and sub-TOIs for which VHCURES holds data are indicated in Appendix A with bold font.

For the market segments that require review and approval, rate filings generally include information in the solid bulleted list below.

The items in the sub-bullets represent detail that may or may not be present in a rate filing.

- Enrollment
    - Historical member months and contract months
    - Contract counts by plan type (single, 2-person, family, etc.)
    - Member and/or contract counts by:
        - gender
        - age groupings
        - geography
    - Members by entry and exit month (lapse study)
- Base period claims
    - Uncompleted incurred claims
    - Completion factor
    - Completed incurred claims
    - Exclude large claims
    - Exclude claims for capitated services
- Trend factor
    - In aggregate or by major service category
    - Allowed and/or benefit paid trends
    - PMPM trends
    - Utilization trends
    - Cost trends (Provider contract changes and change in mix of services)
    - Leveraging impacts
- Projected period claims
    - Trended base period claims
    - Provision for large claims
    - Benefit adjustments
- Non-claim components
    - Capitation
    - Administrative expenses
    - Risk/profit load
    - Taxes and assessments
- Comparison of current rates to proposed rates
    - By benefit and plan type
    - In aggregate, weighted by contracts

In its implementation of the Affordable Care Act (ACA), for rate increases filed with effective dates on or after September 1, 2011, CMS evaluated whether each state has an effective rate review program based on criteria outlined in the HHS regulations. On July 1, 2011, CMS determined that Vermont has an "Effective Rate Review Program in all markets." To earn this effective rating, which exempts Vermont

from Federal Rate Review, the State's rate review of small group and non-group products was demonstrated to include examination of:

1. the reasonableness of the assumptions used by the health insurance issuer to develop the proposed rate increase
2. the validity of the historical data underlying the assumptions
3. the health insurance issuer's data related to past projections and actual experience
4. the impact of medical trend changes by major service categories
5. the impact of utilization changes by major service categories
6. the impact of cost-sharing changes by major service categories
7. the impact of benefit changes
8. the impact of changes in enrollee profile
9. the impact of any overestimate or underestimate of medical trend for prior year periods related to the rate increase
10. the impact of changes in reserve needs
11. the impact of changes in administrative costs related to programs that improve healthcare quality
12. the impact of changes in other administrative costs
13. the impact of changes in applicable taxes, licensing or regulatory fees
14. medical loss ratio
15. the health insurance issuer's capital and surplus

Much of the data contained in rate filings is derived from claim and eligibility data and so is potentially verifiable by analysis of Vermont's claim database, VHCURES. For example, the base period claim and enrollment data could be tested for accuracy. Claim "lag triangles," from which claim completion factors and historical claim trends are derived by actuaries, could be produced to assist the reviewer in developing a reasonable range for these factors, which are used to project the base period claims to the rating period. VHCURES would not be helpful in assessing the non-claim portion of the rating assumptions, such as administrative costs or risk and profit charges.

B. The VHCURES Claims and Eligibility Database

VHCURES is a database that is comprised of core data sets for medical claims, pharmacy claims, medical membership, and pharmacy membership. In addition, there are supporting data sets (that contain the detail for the core data sets) and reference data sets (that contain all valid codes and labels). Detailed information about the filing requirements for VHCURES can be found at the following URL:

http://www.bishca.state.vt.us/health-care/health-insurers/vermont-healthcare-claims-uniform-reporting-and-evaluation-system-vhcure

Health insurers are required to regularly submit claim and eligibility data relating to healthcare provided to Vermont residents by Vermont providers and out of state providers in an electronic format specified by BISHCA for each health line of business, for both underwritten and self-insured business. Claims and eligibility data for people with health insurance coverage through a Vermont employer, but who live

outside Vermont, are not included in VHCURES. For Medicare Supplement, only eligibility data is required to be submitted currently and submission of claim data is optional. The data submission schedule for VHCURES is dependent upon the number of members a given reporting entity insures (see below).

- >= 2,000 members – monthly submission
- 500-1,999 members – quarterly submission
- 200-499 members – annual submission
- <200 members – no submission required

Onpoint Health Data, the State of Vermont's contractor for VHCURES, receives data from carriers at the frequency detailed above, however, data is consolidated in VHCURES on a quarterly basis. The chart below shows the anticipated schedule for 2011 VHCURES quarterly updates.

2011 VHCURES Update Schedule	Carrier Submission Frequency	Carrier Submission Deadline(s)	Data Paid and Incurred Through
1st Consolidation – 03/31/2011	Monthly	11/30/2010	10/31/2010
		12/31/2010	11/30/2010
		01/31/2011	12/31/2010
	Quarterly	01/31/2011	12/31/2010
	Annual	n/a	03/31/2010
2nd Consolidation – 05/31/2011	Monthly	02/28/2011	01/31/2011
		03/31/2011	02/28/2011
		04/30/2011	03/31/2011
	Quarterly	04/30/2011	03/31/2011
	Annual	04/30/2011	03/31/2011
3rd Consolidation – 08/31/2011	Monthly	05/31/2011	04/30/2011
		06/30/2011	05/31/2011
		07/31/2011	06/30/2011
	Quarterly	07/31/2011	06/30/2011
	Annual	n/a	03/31/2011
4th Consolidation – 11/30/2011	Monthly	08/31/2011	07/31/2011
		09/30/2011	08/31/2011
		10/31/2011	09/30/2011
	Quarterly	10/31/2011	09/30/2011
	Annual	n/a	03/31/2011

Data with dates of service back to 2007 has been collected in VHCURES since 2008, providing a rich, detailed resource for healthcare expenditures in Vermont. Harnessing its potential to enhance rate review requires a careful alignment and assessment of the information contained in rate filings and the information contained in VHCURES.

III. General Approach to Evaluating the Use of VHCURES to Enhance Rate Review

Three assessments were made in applying VHCURES data to the rate review process.

- *Use of Existing VHCURES reports*[1]. The first task in the study was to compare the VHCURES categorization applied to the Healthcare Utilization & Expenditure Report (HUER) and Healthcare Report Card, both of which are produced annually, to the categorizations of enrollment/demographics, utilization and expenditures used by the State's actuarial consultant. Information at a level of detail that lines up with specific rate filings would be most helpful to the reviewing Actuary. Rate filings are typically submitted at the carrier and market segment level of detail, and sometimes go down to product and specific group level of detail. Both the HUER and the Healthcare Report Card are at a more aggregated level of detail than rate filings, which prompted a deeper dive into the VHCURES data elements to see if the level of detail and available codes could be compatible with rate filings (see third bullet below). The information included within the two reports was also reviewed and compared to the type of information and level of detail that is included in typical rate filings. An assessment was made of which information in the reports might be useful in rate review, particularly if the reports could be produced at the more detailed product and segment breakout that corresponds to those used for rate filings.
- *Use of NAIC Categorizations.* The second task was to evaluate the relationship of the VHCURES insurance product types to the insurance rate review process. We reviewed the VHCURES eligibility and claim data sets, the NAIC's TOI and sub-TOI categorizations, and a handful of 2011 rate filings. We quickly determined that the TOI and sub-TOI categorizations were fairly broad and not detailed enough to map directly to a specific rate filing, so we embarked on a path to see if we could map rate filing data to data elements in VHCURES.
- *Use of Existing VHCURES Data Elements to map to rate filings.* Since existing reports are too aggregated to support rate review, are produced only on an annual basis with inflexible incurred and paid dates, and existing categorization schemes are too general to support rate review, the analysis of how VHCURES could best be used for rate review focused on three questions:
    - Can the population in the rate filing be identified in VHCURES?
    - Do the data elements in the rate filing map to data elements in VHCURES?
    - Is the VHCURES update schedule compatible with the timing of the rate filing submissions as well as the incurred and paid dates included within the rate filings?

In order to assess the ability of VHCURES to support the review of rate filings, two BCBSVT rate filings were chosen as test cases, and an attempt was made to answer the three questions posed above.

Each of the three approaches above is described in more detail in the following sections.

[1] VHCURES reports can be found at the following URL: http://www.bishca.state.vt.us/health-care/health-insurers/vermont-healthcare-claims-uniform-reporting-and-evaluation-system-vhcure#VHCURES_Reports

IV. Potential Uses of Existing VHCURES Reports in Rate Review

A. Annual Expenditure & Utilization Report

The Vermont Healthcare Utilization & Expenditure Report (HUER) provides measures of service utilization and payments by major categories similar to those used in the annual Vermont Health Care Expenditure Analysis & 3-Year Forecast. These categories are based on the model used by the Centers for Medicare and Medicaid Services (CMS) for measuring national health care expenditures (NHE). Services related to mental health and substance abuse are categorized separately. In particular, the HUER was developed to provide utilization detail for the annual health care expenditure analysis published by BISHCA and for the financial modeling tool for the Vermont Blueprint Medical Home project.. The report contains information for the preceding calendar year in total for the state, and then by thirteen hospital service areas (H.S.A.) and by major carrier for the commercial, under age 65, Vermont residents population. For each major service category (inpatient, outpatient, professional, pharmacy, and other) and for service category detail, the report shows the number of patients, utilization units, and payments by plan and member as well as utilization per 1000 members and plan plus member paid PMPMs.

A primary obstacle in the use of the HUER for rate review is that the report is more aggregated (i.e., includes more covered lives and insurance products) than any individual rate filing, but at the same time does not include non-residents that are insured through Vermont employers. Actuaries would find the reports much more applicable and helpful if the reports could be produced in more subsets, where those subsets matched the population in each rate filing, and included data for non-residents. Rate filings are typically submitted at the carrier and market segment level of detail (e.g., individual, small group), and sometimes go down to product and specific group level of detail (e.g., Catamount). We discuss how this matching might be accomplished further below in the report; assuming this matching could be achieved, there are a number of ways that the HUER might be useful in rate review:

- Helping to understand the drivers of the claim portion of the rate increase. For example, if the claim portion of the proposed rates suggests a very high trend (12%) compared to projections from the previous year (8%), there may have been a shortfall in the trend used in the previous year's projected claims. The reviewer could use the categorizations in HUER to review trends in the major service categories and identify cost drivers. In this example,, if the large increase was caused by outpatient services, further drill-down is available in HUER to determine whether the increase was driven by utilization or cost in surgery, radiology, lab, emergency room, etc. Then it might be possible to assess whether the increase was due to a one-time event that is not likely to repeat, or if the increase is likely to impact future trend and carry forward to the rating period.
- Some rate filings include total base claims and total claim trend without any service detail, while other rate filings may include base claims and trends for major service categories such as inpatient, outpatient, professional, and prescription drug. The service categories in the HUER are more detailed than a rate filing would include, but the service detail could

potentially be useful when assessing the rate impact of benefit changes, such as physician or emergency room copays.

- In developing rates, mental health and substance abuse (MH/SA) claims may be excluded from the base claims if the carrier has a capitation arrangement with a vendor. If the logic used in the HUER to identify MH/SA claims matches the carrier logic, it could be used in validating the exclusion, but this would clearly need to be tested.
- Longer time frames would also be helpful to the reviewing actuary. Actuaries typically compare statistics using time periods such as 3-month rolling or 12-month rolling periods to look for emerging patterns in the annual rate of change, so it would be helpful to have three to four years of calendar year data. Since the VHCURES data goes back to 2007 dates of service, this would be possible with some minor changes to the criteria and output currently used to produce HUER.

B. Annual Healthcare Report Card

The Vermont Healthcare Report Card, produced annually, was designed to provide tools needed to better understand measures of health status, effectiveness of care, use, and cost. The 2010 report shows allowed (combined plan and member paid) medical and pharmacy claims incurred in 2007, 2008, and 2009 (with three months of run-out) for insured and self-insured comprehensive major medical insurance and benefit plans. Sections included in the report are:

- Demographics (members/contract, average age, percentage female)
- Payments by:
  - Medical versus Pharmacy
  - Contract Type
  - Age Band and Gender
  - Employee versus spouse/dependent
- Disease Prevalence & Payments
- Utilization by Type of Service
- Payments by Type of Provider
- High Cost Cases (defined as allowed claims over $50,000 for a member in a calendar year)
- HEDIS Measures
- Episodes of Care
- Quality & Cost-Effectiveness Summary

Similar to the HUER, the Healthcare Report Card could potentially be used by the State's actuarial consultant, to help understand the drivers of the claim portion of the rate increase if the report could be subdivided into rate filing population segments for each carrier. In addition, the report might be modified in the following ways to make it more useful for rate review:

- The demographics section of the report would be more helpful to an Actuary if it could be modified to include the member months by age and gender grouping (as defined by the Actuary), as opposed to the average age and percent of female members that are included in

the report. The Actuary would then have the ability to apply demographic risk factors to the member distribution to see if the risk due to demographic changes explains part of the observed claim trend.

- The payments by contract type reflect the sum of plan and member payments, however premium rates are based solely on plan payments. This section could help in assessing the fairness of the contract tier factors (e.g. single, 2-person, family, etc) used in the rate calculation if the plan payments and member payments were shown separately.
- High cost cases are important to consider when doing trend analysis as they often explain fluctuations in claim trend. The section of the report on high cost cases reports on the sum of plan and member payments for members exceeding $50,000 in a single year. This section would be more helpful to the reviewing Actuary if the payment could be split into member paid and plan paid. Also if the dollar threshold could be flexible as the appropriate attachment point differs depending on the size of the population and the benefit design. Additionally, it is common for carriers to increase the attachment point over time to keep pace with the trend in total cost of healthcare.

In addition to the use of existing reports, identification of a clean link between VHCURES data and the rate filing categories would allow development of any additional reports that actuarial reviewers would find helpful. Identification of such a link is discussed in Section VII.

V. Assessment of NAIC TOI Categorization

Of all the NAIC TOI categories, there are three that relate to health insurance: Health, Health Maintenance (HMO), and Medicare Supplement. Appendix A lists all the TOIs and sub-TOIs with respective descriptions for Health and Health Maintenance (HMO). Medicare Supplement is not in scope for this project (since only eligibility is currently required to be submitted to VHCURES), so is not included in Appendix A.

Within Health, there are many TOI codes that go well beyond data in VHCURES, such as accident, specified disease, disability, short term care, sickness, travel, vision, etc. and are not relevant to this project. The codes that would relate to data in VHCURES are shown in bold in the Appendix.

Some parts of the TOI descriptions (e.g. Group versus Individual in H15G and H15I) could be distinguished using fields from VHCURES such as Market Category, but other parts of the TOI description (e.g. Hospital/Surgical/Medical Expense versus Major Medical in H15G and H16G) cannot be distinguished with existing data fields. Additionally some of the TOIs are more broad, such as H21 Health – Other, which does not give enough information to know what is in the filing (other than it relates to Health) and therefore cannot be mapped. Similarly, some sub-TOIs may give an indication as to the group size that is included in the filing (e.g. H15G.002 Large Group Only and H15G.003 Small Group Only), while other sub-TOIs are for any size group (H15G.001). Some sub-TOIs also provide some information about the product such as PPO or POS, but there is a catch-all product called 'Other' that

may mean it is a product different from the others listed, or it may mean that the rate filing has multiple products.

Overall, there are one-to-many, many-to-one, and unknown relationships that would exist when attempting to map the TOIs to specific fields/codes in VHCURES. As a result, we conclude that the TOI scheme is not useful for rate review purposes and did not pursue the mapping of TOIs and sub-TOIs further. In order to link rate filings with VHCURES data, another method of categorizing claims which does not have these ambiguities is necessary. In the next section we explore VHCURES data elements that might be used to develop such a mapping.

VI. Attempting to Identify Rate Filing Level Information in VHCURES

As touched on several times in the foregoing, a direct link allowing selection of VHCURES data that corresponds with specific rate filings would be the most useful and broadly applicable way to realize the potential VHCURES has to support an enhanced rate review process. Establishing such a link requires exploration of three questions:

- Can the population in the rate filing be identified in VHCURES?
- Do the data elements in the rate filing map to data elements in VHCURES?
- Is the VHCURES update schedule compatible with the timing of the rate filing submissions as well as the incurred and paid dates included within the rate filings?

The primary focus of the work reported here was exploration of these three questions, each of which are discussed below.

A. Population Identification

One fundamental component to pulling data from VHCURES to support rate filing review is the ability to accurately and efficiently identify the population that is represented in each rate filing. The following VHCURES data fields have been identified for possible use in matching rate filing populations.

- PAYERID: to identify the carrier (BCBSVT, CIGNA, MVP, etc.)
- MARKET_CATEGORY: to identify the market segment (Non-group, Large Group, Small Group); Note: the market category code is available in the Medical and Pharmacy Member data set, but is not available in the Medical Claim and Pharmacy Claim data sets. Member ID could be used to link claims to membership to assign the market segment.
- COVERAGE_TYPE: to separately identify underwritten versus self-funded.
- INS_GROUP: These are detailed identifiers for insurance groups of the type that appear on a members' insurance card. Each insurance product would contain many group numbers.
- PRODUCT: to separately identify HMO, PPO, POS, Indemnity, and High Deductible health plans

These fields by themselves don't identify rate filings, but can be used in conjunction with a mapping of group numbers to specific rate filing categories. For purposes of testing such a match, the Catamount

and Vermont Education Health Initiative (VEHI) filings were identified as suitable for testing and group numbers that corresponded to each were requested and obtained from Blue Cross Blue Shield of Vermont (BCBSVT).

Testing a Match with a Group Number Mapping

A match was attempted using the VHCURES claim and enrollment data to two BCBSVT rate filings; the First Quarter 2011 Catamount and July 1, 2011-June 30, 2012 VEHI rate filings. These two populations could not be identified with market category code, coverage type, or product code, so BISHCA obtained a list of group numbers from BCBSVT to identify Catamount and VEHI. Data was pulled from VHCURES using the group numbers and the results of the testing are discussed below.

The Catamount rate filing contained membership and claim experience by incurred month for June 2008 through June 2010, paid through July 2010 (2 months of runout). The base period used in the rating calculation was incurred 12 months ending May-10, paid through July 2010, and completed for runout. The Catamount membership matched somewhat, within ±2% for each eligibility month in the test period (Jun-08-Jun-10). The Catamount claims were more problematic. The medical and pharmacy claims incurred Jul-09-Jun-10 in VHCURES were 3% lower than the claims in the rate filing. However, for the period Jul-08-Jun-09, the medical claims were lower by an average 18%, and the pharmacy claims were lower by an average 28% from VHCURES. Upon further examination of the VHCURES data, it was discovered that for some group numbers, there were members showing up in 2008 and early 2009, but there were no claims for those members until around Jul-09. Further research indicated that some claims were tagged with 'Individual' as a group number, even though the members that generated those claims were tagged with a specific group number tied to Catamount.

Since the Catamount members were relatively close in total for the entire testing period, a second attempt was made to pull the Catamount claim data, this time using the member IDs associated with the Catamount group numbers from the member data set. The results were much closer, but still had discrepancies that are problematic. The VHCURES claims were 4% lower than the rate filing claims for the period Jul-08-Jun-09[2]. The VHCURES claims incurred Jul-09-Jun-10 were still lower than the rate filing claims by 3%, but there were slightly fewer claims than in the first test, most likely because the VHCURES eligibility records reflect a 'snapshot' and are not adjusted for retroactivity, so claims for any members that were added late (after the eligibility snapshot was taken) would be missing when member ID is used for identification. It should be noted that pulling claim data by matching member ID from the member data set to the member ID in the claim data set is significantly more computation-intensive than pulling the claim data by group number or some other identifier. Also, reliance on a list of group numbers is not ideal because it requires frequent communication with the carrier to maintain that list and ensure that it is complete and up-to-date. This approach is technically feasible but not operationally practical.

[2] Note that the discrepancies were fairly constant by month, suggesting that there is a mismatch of data rather than an issue with mis-estimation of IBNR in the rate filing.

The VEHI rate filing contained members and contracts by product for the single month of June 2010 and claims and members by product for the base period used in the rating calculation (12 months ending Jun-10, paid through Aug-10 and completed for runout). Historical claims and members were not shown separately, but PMPMs for 12-month rolling periods ending Jan-08 through Aug-08 were included. The first attempt in trying to match data, using the group numbers provided by BCBSVT, resulted in the following variances (VHCURES versus rate filing). The Jun-10 contract count differences were as follows: Indemnity/JY – VHCURES was 2% lower, POS – VHCURES was 4% higher, Medicare Supplement – VHCURES was 22% lower. Since the majority of VEHI contracts were POS, the aggregate difference was 1% (VHCURES was higher in total). The variances in claims were as follows (VHCURES was lower in all cases): Indemnity/JY/MedSupp Medical – 18%, POS Medical – 1%, and Prescription Drug (all products) – 10% for an aggregate difference of 7%. Since both membership and claims were not matching, further research was performed on the BCBSVT Payer ID to see if there might be some group numbers missing from the list. A search was conducted for 'Supervisory Union' and any variant on 'Supervisory Union' in the group name, and then a manual review of those groups was performed to make sure only union schools were included. The addition of group numbers with any variation on 'Supervisory Union' in the group name improved the total difference slightly (to 6%), where the Indemnity difference became smaller but the POS and Rx differences became slightly larger. The latter result of fewer claims compared to the first attempt may be due to missing late additions to membership, as discussed in the previous paragraph. The testing results are inconclusive, but it is highly likely that some of the VEHI discrepancy is explained by VEHI members who are not Vermont residents, as VHCURES was designed to analyze health data for Vermont residents and claims for non-residents are generally not collected. However, there are some members and claims in VHCURES that are coded with a USEFLAG of '9' (which indicates a non-Vermont zip code). Inclusion of claims with USEFLAG of '9' decreased but did not eliminate the difference; since it is likely that only some non-Vermont resident claims are in the VHCURES data, it is not certain whether submission and inclusion of all such claims would resolve the difference. Other possible causes for the discrepancy include group numbers still missing from the list or miscoded data in VHCURES or in the source used for the rate filing. It is also possible that not all the VEHI data is loaded into VHCURES or that claims are overstated in the VEHI rate filing.

Another development with group number is that Onpoint has found that for one large carrier, the medical claims and the behavioral claims have completely different coding for group numbers. It is possible that similar issues could complicate the reliance on other data fields as well.

Market Category and Coverage Type

The two test cases discussed above relied on Payer ID and Insurance Group for population identification. The Market Category and Coverage Type fields were not tested and would be logical fields to use to match other rate filings such as small group and individual. However the use of these fields requires further evaluation as complications have arisen in some other work that Onpoint has performed that involved these two fields.

The first issue is that Market Category and Coverage Type are populated in eligibility, but not in claims. Use of these fields to pull claims for a given population (for example, underwritten large group) would

require identification of underwritten large group members in the eligibility data set, and then a match of Member ID in the claims data set. Because Member ID is encrypted from a variety of information, Onpoint has observed that Member IDs are not linkable completely for all carriers and all types of claims. Onpoint found that for mental health and substance abuse carve-out payers 25%-35% of the claim data set could not be linked by Member ID. It should be noted however that this is not an issue for the largest carriers of insured business as they include carve-out claims in their major medical claims submitted to VHCURES, resulting in 97%-99% of claims data being supported by eligibility. Without the ability to link on Member ID, the claims cannot be categorized into underwritten/ASO or market segment using the Market Category and Coverage Type fields. One solution could be to add these fields to the claims data set, which would eliminate the need to link the claims and eligibility by member ID.

Another issue that Onpoint has encountered while working on ad hoc reports is that for a significant portion of eligibility records, the Market Category and Coverage Type fields are not populated. The fields would need to be populated close to 100% of the time before they could be relied upon for use in reviewing rate filings.

B. Comparison of Data Elements in VHCURES and Rate Filings

The second step in the process was to map the components of the rate filings (data, actuarial assumptions, and calculations), and then categorize each component into one of three categories:

1. Data available in VHCURES to validate data, assumption, or calculation (some would require a modification to VHCURES and all would require testing in phase II)
2. Data not currently available in VHCURES but recommend adding
3. Data not currently available in VHCURES but do not recommend adding

The rate filings that were chosen to review were the 1st Quarter 2011 Catamount filing and the July 1, 2011 through June 30, 2012 Vermont Education Health Initiative (VEHI) filing. In reviewing these filings, it became evident that some of the components referenced additional filings as a source for some of the rating factors, namely the Trend filing, the Provision for Large Claims and Stoploss filing, and the Administrative Charges and Contribution to Reserves filing. While these additional filings were not mapped in detail for this project, they were considered in the data pulls that were ultimately designed to support rate review. The results of the mapping are shown in Appendix B.

Other Potential Issues

In the course of mapping the data and exploring VHCURES processes, a couple of other potential issues were identified and are described below. The significance of these issues can not be known until the issues preventing a match on population are resolved.

- Membership – membership in VHCURES is a snapshot and does not reflect retroactivity (late additions and deletions). The membership used in the rate development and shown in rate filings may or may not reflect retroactivity. Additionally, as mentioned previously, linking claims by member ID to access fields and codes that are only available on the eligibility records may result in missing claims if a member is added after the snapshot is taken.

- Consolidation of Paid Claim Adjustments - currently, for adjusted claims, the paid date does not remain constant for all the claim pieces (original and adjustments) because the consolidation process compresses the original and any adjustments into one and then stores two paid dates, the earliest paid date and the latest paid date. This could cause differences in the creation of lag triangles (which are claim dollars arrayed by month of service and month of payment) if there are a lot of claim adjustments that are processed in different months from the original process month. Lag triangles are used by actuaries to develop the base claims and trends used to project the claim portion of the rates.

Additional testing will be required to confirm the accuracy of the data populating the VHCURES fields mentioned above and other data fields included in any recommended data pulls.

Another step in the process was to think of additional data fields that could further enhance the support of rate review. Appendix C contains a list of additional data fields, some of which were found in the Massachusetts All-Payer Claims Database Member Eligibility File that we reviewed. Many of the recommended additions relate to benefit plan identification.

C. Timing Issues

The third fundamental question to answer involves looking at the timing of VHCURES data availability in relation to the timing of rate filing submissions and the rate filing data requiring validation. For example, BCBSVT filed the 1st Quarter 2011 Catamount rates on 9/15/2010. Included within the filing were claims incurred through May 31, 2010 and paid through July 31, 2010. BISHCA and their Actuarial consultants reviewed the filing in late September through early October, 2010. According to the VHCURES update schedule in Section II above (set back one year), the data that would have been available to the reviewer would have been data paid and incurred through June 30, 2010 (3rd consolidation) which has one month less runout than data included in the rate filing. While the timing is not quite a perfect match, the reviewer could make an estimate of completion for the claims incurred through May with one month of runout. However, for small carriers (rather than BCBSVT) that are only required to submit data to VHCURES annually, the data available in VHCURES would have only been paid and incurred through 3/31/10. The reviewer would not have been able to validate the base period, and would have had to rely on projections. As this example illustrates, it will be challenging to review rates for carriers with fewer than 500 members given the data available in VHCURES. It is therefore advisable to either limit the use of VHCURES data to support rate review to carriers with more than 500 members, or require all carriers to submit data at least quarterly.

Another aspect related to timing is how soon the data pull could be provided to the reviewer. In the previous example, VHCURES would have been updated by July 31, 2010. The data pull would need to be run and available to the reviewer by September 15 to ensure timely review of the rate filing.

VII. Conclusions and Recommendations

The conclusions and recommendations fall into two categories:

1. How to select data in VHCURES to align with populations captured in rate filings
2. Which data elements to select and use for reporting once such a link is established

Selecting Populations from VHCURES to Align with Rate Filings

Based on our analysis of the data contained in VHCURES and in insurer rate filings, we conclude that:

1.) Existing data elements in VHCURES cannot provide a link to data associated with specific rate filings.
2.) Additional data obtainable from carriers can improve the linking but still fails in some cases and leaves unanswered whether failure to match incurred claim amounts results from inaccurate linking information or true discrepancies in claim amounts in VHCURES vs. rate filings.
3.) Inclusion of non-resident claims and eligibility in VHCURES would be necessary to match data in employer group rate filings. This would not likely improve data matching for individual populations such as Catamount since individual policies require Vermont residency.
4.) It is advisable to consider an addition to VHCURES data requirements to tag claims and eligibility with a "rate filing identifier" which corresponds to rate filings made by the carrier, and to pursue additional analysis and design work related to formulation of a rate filing ID scheme.
5.) Carriers with fewer than 500 members submit data to VHCURES annually, which does not coincide with the frequency of rate filings, many of which are quarterly. It is suggested that linking of claims with rate reviews should be limited to carriers with more than 500 members, or else all carriers should be required to submit data quarterly, at a minimum.

It is clear that given the limitations of the existing VHCURES data fields for the purpose of supporting rate filing reviews, significant resources would be required for report generation and testing of results, with no guarantee that the data will ultimately match. An alternate approach would be to add a rate filing identification field(s) to VHCURES that would be required to be populated 100% of the time by the carrier for every member and claim record. This would allow the reviewer to pull data that the carrier has identified as belonging to a specific rate filing instead of trying to guess using existing data fields and potentially incomplete group number lists. Note that some carriers may have filings that span multiple market segments and therefore claims may be included in multiple filings causing a one-to-many relationship. For example, BCBSVT may include small group claims in 1) the Small Group rate filing, 2) the Provision for Large Claims and Stoploss filing, and 3) the Trend filing. It may be likely than that additional fields or code extensions would be required to indicate inclusion or not in the filings that span multiple market segments or related companies. We recommend that BISHCA pursue additional work on this issue to allow full use of VHCURES for rate review purposes.

Data Elements to Support Rate Review

With respect to the data elements in VHCURES and how they might support rate review we conclude:

1.) Many aspects of rate filings are derived from claims and enrollment data and therefore could be validated with correctly linked data from VHCURES.
2.) Specific data pulls and validation checks could be made and would provide very useful information for purposes of reviewing rate filings.
3.) Existing reports such as the HUER and the Report Card could provide additional data to help with analysis of claim costs with minor modifications.
4.) Additional data elements not currently in VHCURES that might be added would increase the usefulness of VHCURES for this purpose.

Assuming resolution of the linking issue just discussed, in its current form, VHCURES could potentially be used to assist the reviewing actuary in items related to claims and enrollment data (items 2 through 10 of the rate review tasks listed in Section II-A), but VHCURES would not be able to support the review tasks that do not relate to claims and enrollment. To support items 2 through 10, we recommend standard reports be written to address most of the tasks. Ad hoc reports may be necessary to support rate impact analyses for unknown future changes, such as benefit design and legislative mandates. Three recommended data pulls and the purpose for each are summarized below and detailed in Appendix D. The output is intended to be flexible enough to allow for customized reports to be designed that would include aggregations and calculations to match the level of detail in each rate filing. The recommended data pulls are preliminary and would need to be refined based on additional work BISHCA may want to pursue, and would need to be modified based on the results of testing.

1. Data Pull #1: Claims and Enrollment
   - Validate historical enrollment, claims, and PMPMs (allowed and benefits paid)
   - Create lag triangles to validate completion factors
   - Independent trend analysis (by service categories)
2. Data Pull #2: Enrollment Demographics
   - Age/gender analysis
   - Lapse rate analysis
   - Geography analysis
3. Data Pull #3: High Dollar Claims
   - Stoploss or pooling analysis
   - Allow for smoothing in trend analysis

In the initial testing that was performed, as described in earlier sections of this report, some of the data fields included in the initial design were not found to be reliable, either due to carriers not populating the data fields, inconsistencies between eligibility and claim data sets, incomplete list of group numbers, or there is a true discrepancy between the rate filing data and the data submitted to VHCURES. Further testing is going to be required, and depending on the outcome of that testing, data will need to be cleaned up, or alternate logic may need to be considered.

Finally, data elements not currently in VHCURES but displayed in Appendix B and Appendix C would improve the usefulness of VHCURES for rate review purposes. The most helpful of these data fields are related to benefit design and the addition of premium, which would enable loss ratio studies and would help the reviewer analyze enrollment shifts between benefit plans, which have an impact on claim trend. These additional fields will support the reviewer in tasks suggested by CMS that include premium.

Appendix A TOI Groupings page 1 of 4

Health					
TOI	TOI Description	Sub-TOI	Sub-TOI Description	# Submitted on SERFF 01/01/10-06/16/11	PPACA Eligible
H01	Health - Assumption Agreement	H01.000	Health - Assumption Agreement	4	
H02G	Group Health - Accident Only	H02G.000	Health - Accident Only	36	
H02I	Individual Health - Accident Only	H02I.000	Health - Accident Only	31	
H03G	Group Health - Accidental Death & Dismemberment	H03G.000	Health - Accidental Death & Dismemberment	43	
H03I	Individual Health - Accidental Death & Dismemberment	H03I.000	Health - Accidental Death & Dismemberment	12	
H04	**Health - Blanket Accident/Sickness**	**H04.000**	**Health - Blanket Accident/Sickness**	**46**	**X**
		H04.001	**Student**	**16**	**X**
H05	**Health - Champus/Tricare Supplement**	**H05.000**	**Health - Champus/Tricare Supplement**	**1**	
H06	**Health - Conversion**	**H06.000**	**Health - Conversion**	**8**	**X**
H07G	Group Health - Specified Disease - Limited Benefit	H07G.001	Critical Illness	26	
		H07G.002	Dread Disease	2	
		H07G.002A	Dread Disease - Cancer Only	0	
		H07G.003	HIV Indemnity	0	
H07I	Individual Health - Specified Disease - Limited Benefit	H07I.001	Critical Illness	32	
		H07I.002	Dread Disease	4	
		H07I.002A	Dread Disease - Cancer Only	22	
		H07I.003	HIV Indemnity	0	
H08I	Individual Health - Intensive Care - Limited Benefit	H08I.000	Health - Intensive Care - Limited Benefit	1	
H09G	Group Health - Organ & Tissue Transplant - Limited Benefit	H09G.000	Health - Organ & Tissue Transplant - Limited Benefit	3	
H09I	Individual Health - Organ & Tissue Transplant - Limited Benefit	H09I.000	Health - Organ & Tissue Transplant - Limited Benefit	0	
H10G	**Group Health - Dental**	**H10G.000**	**Health - Dental**	**101**	
H10I	**Individual Health - Dental**	**H10I.000**	**Health - Dental**	**27**	
H11G	Group Health - Disability Income	H11G.001	Business Overhead Expense	0	
		H11G.002	Short Term	41	
		H11G.003	Long-Term	46	
		H11G.004	Other	17	
		H11G.005	Combined Short Term and Long-Term	0	

Health (cont.)					
TOI	TOI Description	Sub-TOI	Sub-TOI Description	# Submitted on SERFF 01/01/10-06/16/11	PPACA Eligible
H11I	Individual Health - Disability Income	H11I.001	Business Overhead Expense - Unrelated to marketing with employer or association groups	1	
		H11I.002	Short Term - Unrelated to marketing with employer or association groups	8	
		H11I.003	Long-Term - Unrelated to marketing with employer or association groups	10	
		H11I.004	Other	29	
		H11I.005	Business Overhead Expense - Related to marketing with	3	
		H11I.006	Short Term - Related to marketing with employer or association groups	10	
		H11I.007	Long-Term - Related to marketing with employer or association groups	2	
		H11I.008	Combined Short Term and Long-Term - Unrelated to marketing with employer or association groups	9	
		H11I.009	Combined Short Term and Long-Term - Related to marketing with employer or association groups	4	
H12	**Health - Excess/Stop Loss**	**H12.001**	**Accident & Sickness**	**10**	
		H12.002	**Managed Care**	**0**	
		H12.003	**Provider**	**9**	
		H12.004	**Self-Funded Health Plan**	**30**	
H13G	Group Health - Short Term Care	H13G.001	Home Health Care	0	
		H13G.002	Nursing Home	0	
		H13G.003	Adult Day Care	0	
H13I	Individual Health - Short Term Care	H13I.001	Home Health Care	0	
		H13I.002	Nursing Home	5	
		H13I.003	Adult Day Care	0	
H14G	Group Health - Hospital Indemnity	H14G.000	Health - Hospital Indemnity	11	
H14I	Individual - Hospital Indemnity	H14I.000	Health - Hospital Indemnity	26	
H15G	**Group Health - Hospital/Surgical/Medical Expense**	**H15G.001**	**Any Size Group**	**19**	**X**
		H15G.002	**Large Group Only**	**17**	**X**
		H15G.003	**Small Group Only**	**18**	**X**
H15I	**Individual Health - Hospital/Surgical/Medical Expense**	**H15I.001**	**Individual Health - Hospital/Surgical/Medical Expense**	**25**	**X**

Health (cont.)					
TOI	TOI Description	Sub-TOI	Sub-TOI Description	# Submitted on SERFF 01/01/10-06/16/11	PPACA Eligible
H16G	Group Health - Major Medical	H16G.001A	Any Size Group - PPO	3	X
		H16G.001B	Any Size Group - POS	0	X
		H16G.001C	Any Size Group - Other	25	X
		H16G.002A	Large Group Only - PPO	7	X
		H16G.002B	Large Group Only - POS	1	X
		H16G.002C	Large Group Only - Other	30	X
		H16G.003A	Small Group Only - PPO	3	X
		H16G.003B	Small Group Only - PPO Basic	0	X
		H16G.003C	Small Group Only - PPO Standard	0	X
		H16G.003D	Small Group Only - POS	0	X
		H16G.003E	Small Group Only - POS Basic	0	X
		H16G.003F	Small Group Only - POS Standard	0	X
		H16G.003G	Small Group Only - Other	18	X
		H16G.004	Short Term	0	
H16I	Individual Health - Major Medical	H16I.005A	Individual - PPO	5	X
		H16I.005B	Individual - POS	0	X
		H16I.005C	Individual - Other	25	X
		H16I.004	Short Term	0	
H17G	Group Health - Prescription Drug	H17G.000	Health - Prescription Drug	14	
H17I	Individual Health - Prescription Drug	H17I.000	Health - Prescription Drug	0	
H18G	Group Health - Sickness	H18G.000	Health - Sickness	0	
H18I	Individual Health - Sickness	H18I.000	Health - Sickness	3	
H19G	Group Health - Travel	H19G.000	Health Travel	2	
H19I	Individual Health - Travel	H19I.000	Health Travel	4	
H20G	Group Health - Vision	H20G.000	Health - Vision	33	
H20I	Individual Health - Vision	H20I.000	Health - Vision	0	
H21	Health - Other	H21.000	Health - Other	98	X

Health Maintenance (HMO)					
TOI	TOI Description	Sub-TOI	Sub-TOI Description	# Submitted on SERFF 01/01/10-06/16/11	PPACA Eligible
HOrg01	Health Organizations - Assumption Agreement	HOrg01.000	Health Organizations - Assumption Agreement	0	
HOrg02G	**Group Health Organizations - HMO**	**HOrg02G.001**	**Conversion**	**0**	**X**
		HOrg02G.002A	**Any Size Group - PPO**	**0**	**X**
		HOrg02G.002B	**Any Size Group - POS**	**1**	**X**
		HOrg02G.002C	**Any Size Group - HMO**	**13**	**X**
		HOrg02G.002D	**Any Size Group - Other**	**1**	**X**
		HOrg02G.003A	**Large Group Only - PPO**	**0**	**X**
		HOrg02G.003B	**Large Group Only - POS**	**2**	**X**
		HOrg02G.003C	**Large Group Only - HMO**	**0**	**X**
		HOrg02G.003D	**Large Group Only - Other**	**0**	**X**
		HOrg02G.004A	**Small Group Only - PPO Basic**	**0**	**X**
		HOrg02G.004B	**Small Group Only - PPO Standard**	**0**	**X**
		HOrg02G.004C	**Small Group Only - POS Basic**	**0**	**X**
		HOrg02G.004D	**Small Group Only - POS Standard**	**0**	**X**
		HOrg02G.004E	**Small Group Only - Other**	**0**	**X**
		HOrg02G.004F	**Small Group Only - HMO**	**0**	**X**
HOrg02I	**Individual Health Organizations - HMO**	**HOrg02I.005A**	**Individual - PPO**	**0**	**X**
		HOrg02I.005B	**Individual - POS**	**1**	**X**
		HOrg02I.005C	**Individual - Other**	**0**	**X**
		HOrg02I.005D	**Individual - HMO**	**4**	**X**
HOrg03	**Health - Other**	**HOrg03.000**	**Health - Other**	**0**	**X**

Appendix B-1 Mapping of Catamount Rating Components

Catamount Rate Filing – mapping and categorization of rating components

Data/Assumptions/Calculations that appear to be supported by data available in VHCURES

- Contracts
- Members
- Medical Claims
- Drug Claims
- Member Age
- Member Gender
- Member Relationship
- Actual Claims over $100,000
- IBNR (VHCURES modification suggested to not consolidate retroactive claim adjustments, a process that in some cases changes the paid month of the adjustment)
- Medical Completion Factor (suggest modification as described for IBNR)
- Drug Completion Factor (suggest modification as described for IBNR)
- Impact of Benefit Changes (Medical)
- Impact of Benefit Changes (Drug)
- Under/Over Factor (expected over $100,000)
- Medical Trend Factor
- Drug Trend Factor
- Mental Health and Substance Abuse PMPM
- Dental Exclusion Adjustment
- Impact of Health Care Reform
- Paid loss ratio
- Incurred loss ratio
- Premium PMPM
- Medical PMPM
- Drug PMPM
- Number lapsed (special logic may be required)
- Percent lapsed (special logic may be required)
- Average Age
- % Adult Male
- % Adult Female
- % Dependents
- Completed Medical Claims Adjustment for Benefit Changes
- Completed Drug Claims Adjustment for Benefit Changes
- Actual Claims under $100,000
- Expected Claims over $100,000
- Adjusted Combined Medical/Rx Completed Claims

- Combined Medical/Rx Trend Factor
- Rating Period Blended Trend Factor
- Rating Period Medical/Rx PMPM Adjusted Claims
- Trended Medical/Rx PMPM Adjusted Claims
- Weights (type of service)
- Total Trend
- 24 month regression utilization trend

Data not currently available in VHCURES but recommend adding

- Blueprint Capitation
- Magellan PMPM
- Blueprint PMPM
- Incurred PMPM
- PMPM Premium at Q1 2010 Rates

Data not currently available in VHCURES but do not recommend adding

- Age/Gender Factor
- Credit for ESI discount
- Credit for ESI rebates
- Administrative Expense PMPM
- Net Contribution to Reserve PMPM
- Net Reinsurance Cost PMPM
- State surcharges
- Months
- Total Other Expenses PMPM
- Required Rate PMPM
- Required Annual Increase

Appendix B-2 Mapping of VEHI Rating Components

VEHI Rate Filing – mapping and categorization of rating components

Data/Assumptions/Calculations that appear to be supported by data available in VHCURES

- Contracts
- Members
- Indemnity Claims
- Vermont Health Partnership Claims
- Drug Claims
- Actual Claims over $500,000
- Combined Medical and Drug Completion Factor (suggest modification as described for IBNR)
- Indemnity Trend
- VHP Trend
- Prescription Drug Trend
- Projected Claims Under ISL (Carveout)
- Projected Claims Under ISL (Non-Carveout)
- PPACA Children to age 26
- Colonoscopy
- Indemnity PMPM
- VHP PMPM
- Drug PMPM
- Experience Period Incurred & Paid Claims excluding amounts over $500K
- Completed Medical and Drug Claims
- Experience Period Claims Net of Program Changes
- Weighted Average Annual Trend
- Regression and 95% Confidence Interval PMPMs

Data not currently available in VHCURES but recommend adding

- Capitations
- Current Rates
- Experience Period Incurred Loss Ratio
- Benefit Plan ID and Description (see detail below)
- Benefit Plan Medical Only Deductible
- Benefit Plan Primary Care OV Copay
- Benefit Plan Specialist OV Copay
- Benefit Plan Rx Copay (Generic/Preferred Brand/Other Brand)
- Benefit Plan Rx Deductible

Data not currently available in VHCURES but do not recommend adding

- Standard Product & Program Changes
- Experience Period Expected Incurred Claims at Current Rate Level
- Expected Incurred Claims based on Jun-10 contracts
- Expected Loss Ratio
- Credibility Weights
- Q3 2011 Approved Charge for $500K ISL
- Approved Charge for 120% ASL
- Administration/Reserve Contribution
- One-Time Required Adjustment
- Broker Commission
- Adminstrative Expense Charge Development
- Restat Access Fees & Expected ESI Discounts and Rebates
- State Surcharges
- Renewal Rates
- VEHI Contribution (Current)
- VEHI Contribution (Renewal)
- Participant Contribution (Renewal)
- Participant Contribution (Current)
- Exp Period Incurred Loss Ratio Adj for Credibility
- Renewal Period Proj Inc Claims before Trend Adj.
- Renewal Period Proj Inc Claims after Trend Adj.
- Stoploss Charges (ISL: $500,000 ASL: 120%)
- Total Renewal Premium Equivalent
- Rate Change
- Change in Participant Contribution

Appendix C Recommended Additional Fields

Recommended Additional Data Fields

- Employer Group/Individual Renewal Month
- Employer Group Name (or IND for individual)
- Product ID
- Product PPACA Compliance (Y or N)
- Product Enrollment Start Date
- Product Enrollment End Date
- Benefit Plan ID and Description (see detail below)
- Benefit Plan Medical Only Deductible
- Benefit Plan Medical & Rx Deductible
- Benefit Plan Medical Only Coinsurance %
- Benefit Plan Medical & Rx Coinsurance %
- Benefit Plan Medical Only Coinsurance Limit
- Benefit Plan Medical & Rx Coinsurance Limit
- Benefit Plan Medical Only Out-of-Pocket Limit
- Benefit Plan Medical & Rx Out-of-Pocket Limit
- Benefit Plan Primary Care OV Copay
- Benefit Plan Specialist OV Copay
- Benefit Plan Lifetime Limit on Benefits
- Benefit Plan Rx Copay (Generic/Preferred Brand/Other Brand)
- Benefit Plan Rx Deductible
- Retail versus Mail Order Indicator (Rx)
- Drug Tier (1 = Generic, 2 = Preferred Brand, 3 = non-Preferred Brand, 4 = Other?)
- Payment Arrangement Type (cap, ffs, drg, % off charge, global cap, pfp)
- Behavioral Health Benefit Flag
- Disease Management Enrollee Flag
- Marital Status
- Student Status
- Benefit Status (Active, COBRA, TEFRA, Surviving Insured)
- Member SIC Code
- Employer Group SIC Code
- Employer Group Zip Code
- Subscriber Zip Code
- Health Care Home (Y/N)
- Health Care Home ID
- Is Service Preventive Care (Y/N)
- Rate Filing Company
- Primary SERFF TOI

- Primary SERFF Sub-TOI
- Primary Rate Filing Market/Product/Special Group Segment
- Additional Filing(s)

Appendix D-1 Data Pull #1 Claims and Enrollment

Purpose:

- Validate historical enrollment, claims, and PMPMs (allowed and benefits paid)
- Create lag triangles to validate completion factors
- Independent trend analysis (by service categories)

Flexible criteria input:

- payer ID (BC/BS, MVP, United, etc.)
- identify subpopulation (i.e. Catamount, VEHI, etc.)
- coverage type (underwritten, self-funded, etc.)
- market category code (non-group, small group, etc.)
- incurred/eligibility year/month start
- incurred/eligibility year/month end
- paid year/month start
- paid year/month end

Output (columns):

- product code (HMO, PPO, POS, Indem, Med Supp, etc.)
- claim type (IP, OP, Prof, Pharmacy, etc.)
- split out MH/SA (may need special logic)
- split out Blueprint (may need special logic)
- incurred/eligibility year/month (yyyymm)
- paid year/month (yyyymm)
- coverage level (EE, EE & SP, EE & CH, etc.)
- medical member months
- medical contract months
- drug member months
- drug contract months
- paid amount
- prepaid amount (may use to calc allowed)
- copay amount (use to calc allowed)
- coinsurance amount (use to calc allowed)
- deductible amount (use to calc allowed)
- utilization units (may need special logic)
    - inpatient - days and admissions
    - outpatient - visits and services
    - professional - visits and services
    - pharmacy - number of prescriptions and days supply

Appendix D-2 Data Pull #2 Enrollment and Demographics

Purpose:

- Age/gender analysis
- Lapse rate analysis
- Geography analysis

Flexible criteria input:

- payer ID (BC/BS, MVP, United, etc.)
- identify subpopulation (i.e. Catamount, VEHI, etc.)
- coverage type (underwritten, self-funded, etc.)
- market category code (non-group, small group, etc.)
- eligibility year/month start
- eligibility year/month end

Output (columns):

- product code (HMO, PPO, POS, Indem, Med Supp, etc.)
- eligibility year/month (yyyymm)
- issue year/month (yyyymm) (may need special logic)
- coverage level (EE, EE & SP, EE & CH, etc.)
- relationship to subscriber
- member gender
- member age (may need to calculate using birth date)
- member zip code ID
- medical member months
- pharmacy member months
- medical paid amount
- pharmacy paid amount

Appendix D-3 Data Pull #3 High Dollar Claims

Purpose:

- Stoploss or pooling analysis
- Allow for smoothing in trend analysis

Flexible criteria input:

- payer ID (BC/BS, MVP, United, etc.)
- identify subpopulation (i.e. Catamount, VEHI, etc.)
- coverage type (underwritten, self-funded, etc.)
- market category code (non-group, small group, etc.)
- incurred/eligibility year/month start
- incurred/eligibility year/month end
- paid year/month start
- paid year/month end
- threshold paid amount (at member level)

Output (columns):

- product code (HMO, PPO, POS, Indem, Med Supp, etc.)
- claim type (IP, OP, Prof, Pharmacy, etc.)
- incurred/eligibility year/month (yyyymm)
- paid year/month (yyyymm)
- number of members exceeding threshold
- paid amount for members exceeding threshold