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State of Vermont Health Care Financing Plan Beginning Calendar Year 2017 Analysis

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Et al.

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Analysis

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Executive Summary

Act 48 of the 2011 Vermont legislative session set Vermont on a path to design a universal and unified system of health insurance coverage for all Vermonters. Act 48 enacted a range of reforms aimed at improving health care services and insurance coverage and reducing the rate of growth in health care costs in the state. The State established the Green Mountain Care (GMC) plan to carry out the initiatives set forth by Act 48.

To assist the State's efforts in developing this system, the State of Vermont contracted with the University of Massachusetts Medical School (UMMS) and Wakely Consulting Group, Inc. (Wakely) to develop a model for the single payer health reform plan and a number of alternative scenarios that meets the requirements of Act 48. The model builds on a foundation of likely coverage and cost estimates in 2014 resulting from implementation of the Affordable Care Act (ACA). From this foundation, the model:

- Estimates changes in types of coverage (called "population migration") and costs of coverage from 2014 to 2017.
- Estimates changes in types of coverage and costs under a single payer system in 2017, including:
  - The number of individuals who would be covered under the Green Mountain Care (GMC) single payer system beginning in 2017, for either primary or secondary (wrap) ;
  - Increases in the value of coverage from current levels to the levels required under GMC;
  - Changes in provider payment to assure uniformity and adequacy under GMC;
  - Changes in the use of care as a result of broader availability of coverage under GMC.
  - Estimates administrative savings resulting from single payer health reform.
- Assesses potential sources of federal revenue under single payer health reform.
- Examines the current distribution of cost burden of coverage on Vermonters and Vermont employers.
- Assesses potential revenue sources to fund GMC in 2017.

Health Reform Model Assumptions

The base coverage model assumes that:

- All Vermont residents will be enrolled automatically in the health reform plan, called Green Mountain Care or GMC, beginning in 2017.
- If individuals have other coverage, such as employer-sponsored insurance (ESI) or Medicare, the other coverage would pay first and GMC would supplement as needed. We refer to this coverage as "ESI Primary" or "Medicare Primary" with "GMC Secondary," in contrast to individuals who rely on GMC as their primary source of coverage.
- GMC will provide comprehensive health care benefits, including comprehensive mental health and substance abuse services, pharmaceuticals, pediatric dental and vision care, and care coordination for individuals with chronic or complex care needs.
- GMC enrollees who meet Medicaid eligibility criteria will also be eligible for certain federally mandated services such as pediatric Early Periodic Screening, Diagnosis, and Treatment (EPSDT), non-emergency transportation, and long-term services and supports.

- Adult dental, adult vision, and comprehensive long-term services and supports are not GMC covered benefits in the base model; we estimate separately the incremental cost of including these benefits.
- The GMC plan has an actuarial value of 87 percent; that is, GMC covers 87 percent of the average cost of essential health benefits for a standard population. In aggregate, individual enrollees will be responsible for paying 13 percent of costs through cost-sharing requirements such as copayments and deductibles. Low-income individuals who are eligible for cost-sharing subsidies under the federal Affordable Care Act (ACA) also receive those subsidies in GMC. We estimate separately the lower GMC plan cost of a benefit with an 80 percent actuarial value, and the higher cost of a benefit with a 100 percent actuarial value (that is, a plan where individuals make no cost-sharing payments).
- For Medicare beneficiaries, GMC will cover supplemental medical and pharmacy costs up to an 87 percent actuarial value. Medicare beneficiaries will continue to pay their own Part B premium. GMC will pay the Part B premium and full supplemental medical and pharmacy costs for Medicare beneficiaries who also meet Medicaid eligibility requirements, called Dual Eligibles.
- GMC pays health care providers 105 percent of Medicare rates. We also estimate separately the lower GMC plan cost of provider payment rates at 100 percent of Medicare rates and the higher GMC plan cost of provider payment rates at 110 percent of Medicare rates. Medicare establishes rates to cover expected costs of an average provider, adjusted for factors such as severity of the patient's illness geographic region of the provider, and graduate teaching costs.
- GMC will provide the administrative functions currently performed separately by each private and public health plan through a unified system.

In order to estimate costs and coverage under this model, the UMMS/Wakely team developed a number of assumptions relating to the benefits covered under each type of plan, utilization of these benefits, provider payment rates, the share of costs that are covered under various government programs, and other factors. To the extent that actual outcomes differ from these assumptions, and to the extent that there are changes in federal or state law between now and 2017, these differences could produce small or large differences in the results, depending on the order of magnitude of the variance.

Results

Our analysis finds that the administrative savings that would result from moving to a single-payer structure would more than offset the additional costs of covering more Vermonters and increasing benefits for many others.

GMC Base Costs in 2017

We estimate that the total cost of health care services in GMC in 2017 under our base single payer model would be $3.5 billion. This figure does not include administrative costs. Table 1 below breaks out this base cost by population:

- *GMC Primary (not eligible for Medicaid-match)*: individuals who rely on GMC as their primary source of coverage and do not meet Medicaid eligibility requirements;
- *GMC Primary – Medicaid-Match Eligible*: individuals who rely on GMC as their primary source of coverage and meet Medicaid eligibility requirements; the State can request federal matching funds for these expenditures;

- *GMC Secondary – Medicaid-Match Eligible:* individuals who rely on GMC for secondary or wrap coverage and meet Medicaid eligibility requirements, these costs include individuals who are Dually Eligible for Medicare and Medicaid; the State can request federal matching funds for these expenditures;
- *GMC Secondary – Medicare Primary:* Medicare beneficiaries who rely on GMC for secondary or wrap coverage;
- *GMC Secondary – ESI or Other Primary*: individuals who are enrolled in employer-sponsored insurance, or receive coverage through the Veteran's Administration or another source of coverage, and rely on GMC for secondary or wrap coverage.

Table 1. Estimated GMC Base Costs in 2017 (in millions)

GMC Primary (not eligible for Medicaid-match)	$1,519
GMC Primary - Medicaid-Match Eligible	$1,230
GMC Secondary – Medicaid-Match Eligible	$645
GMC Secondary - Medicare Primary	$83
GMC Secondary – ESI or Other Primary	$21
Total GMC Base Costs	**$3,498**

Table 2 shows the estimated incremental savings or costs of each of the alternative scenarios we analyzed. Note that the various options listed in this table interact with each other; they cannot simply be added together. The cost of increasing the payment rate, the actuarial value, and the covered benefits all together would be higher than the sum of each of these options separately.

Table 2. Additional GMC Options: Incremental Cost Relative to the Base Scenario (in millions)

Provider payment rates: 100% Medicare	($113)
Provider payment rates: 110% Medicare	$113
Actuarial value 80%	($225)
Actuarial value 100% (no individual cost sharing)	$631
Adult Dental: Tier 1 Preventive (100%) & Tier 2 Restorative (80%)	$218
Adult Dental: Tier 1 Preventive (100%), Tier 2 Restorative (80%) & Tier 3 Major Services (50%)	$294
Adult Vision	$46
Comprehensive Long-Term Services & Supports	**$917**

Significant Benefits of GMC in 2017

In the GMC single payer model, no Vermont resident would be uninsured, and many Vermonters would have access to more robust health care benefits than they would have without reform, as shown in Table 3. 12,128 individuals who were previously uninsured, even after the implementation of the Exchange, will have health insurance. Well over 100,000 Vermonters will have access to more comprehensive benefits than they had previously. And health care providers will receive the same standard and adequate rates for all of their patients, calculated at 105 percent of Medicare payments. Medicare rates are in between Medicaid rates, which pay providers significantly less than costs, and private insurers, which pay providers significantly more than costs. Health care providers often negotiate higher rates from private insurers to compensate for lower rates from other payers (this process is referred to as "cost shifting").

Table 3. Additional value provided by GMC in 2017

New benefit	Provided to	Number of individuals	Cost (millions)
Full health insurance coverage	Previously uninsured individuals	12,128	$77
Additional medical, pharmaceutical and dental benefits	Previously under-uninsured individuals	127,747	$127
Wrap coverage	Individuals who have ESI or other primary coverage	19,019	$21
Dental care	Children who were uninsured for dental	21,736	$7
Vision care	Children who were uninsured for vision	26,753	$1
Eliminate Medicaid cost-shifting (increase Medicaid rates to 105% Medicare rates)	Health care providers	NA	$314
Total			**$547**

Total system costs with and without reform

Vermonters could get more value at a lower cost by implementing GMC. We estimate that total statewide health care costs will be $35 million lower in the first year of a unified, single payer system than the amount that would be spent without the GMC reform. A $122 million reduction in administrative costs statewide helps to pay for that additional coverage. This calculation of administrative savings includes only the reduction in costs that are currently incurred by the many different payers that currently operate in Vermont to the average cost level incurred by an efficient provider of administrative claims services. A single payer system will support state efforts to gain additional savings, for example through providing clinical services more efficiently and through reducing fraud and abuse; we did not include potential savings from these efforts in our administrative savings estimate.

Tables 4 and 5 present the results of our analysis, comparing the coverage and resulting costs of a Vermont health care system in 2017, first without, and then with the single payer health reform.

Table 4. Total estimated health care costs without reform by type of coverage, 2017 (in millions)

2017 Coverage without GMC Reform	Number of Individuals	Total Paid Claims Per Year	Administrative cost as a % of Total Cost	Administrative Cost	Total Cost without Reform
Uninsured	12,128	$0	-	$0	$0
Individual	72,449	$474	12%	$64	$538
Small Group	51,483	$318	12%	$43	$361
Large Group	219,153	$1,346	10%	$156	$1,502
Other (VA, federal employees, etc.)	30,499	$184	12%	$25	$209
Medicaid Primary	121,794	$935	9%	$92	$1,027
Medicaid Secondary	*	$552	9%	$55	$607
Medicare Primary	128,739	$1,536	5%	$77	$1,613
Medicare – Secondary & Part D premium	*	$83	12%	$11	$94
Total Statewide	**636,244**	**$5,428**		**$523**	**$5,952**

* Number of individuals is not included in totals to avoid double counting.

We expect that under health reform in 2017, approximately 70,000 people will continue to enroll in employer-sponsored health insurance or receive insurance primarily from another source or receive care from another source, such as the VA. Although these individuals are not integrated into GMC, GMC will provide wrap coverage for those individuals, up to an 87 percent actuarial value. We expect that Medicare will continue to be the primary coverage for Medicare beneficiaries; because GMC will supplement Medicare for most Medicare beneficiaries, however, we count them as integrated into GMC.

Table 5. Total estimated health care costs with reform by type of coverage, 2017 (in millions)

2017 Coverage with GMC Reform	Number of Individuals	Total Paid Claims Per Year	Administrative cost as a % of Total Cost	Administrative Cost	Total Cost with Reform
Not Integrated into GMC					
Uninsured	-	-	-	-	-
Individual	-	-	-	-	-
Small Group - Primary	7,722	$54	12%	$7	$61
Large Group - Primary	31,777	$243	10%	$28	$271
Other (VA, federal employees, etc.) – Primary	30,499	$184	12%	$25	$209
Medicare Primary	*	$1,536	5%	$77	$1,613
Total Not Integrated	**69,998**	**$2,017**		**$138**	**$2,155**
GMC Primary					
GMC Primary (not eligible for Medicaid-match)	306,584	$1,519	7%	$114	$1,633

2017 Coverage with GMC Reform	Number of Individuals	Total Paid Claims Per Year	Administrative cost as a % of Total Cost	Administrative Cost	Total Cost with Reform
GMC Primary - Medicaid-Match Eligible	130,922	$1,230	7%	$93	$1,323
		GMC Secondary			
GMC Secondary – Medicaid-Match Eligible	*	$645	7%	$49	$694
GMC Secondary - Medicare Primary	128,739	$83	7%	$6	$89
GMC Secondary – ESI or Other Primary	*	$21	7%	$2	$23
Total GMC	**566,246**	**$3,498**		**$263**	**$3,762**
Total Statewide with GMC	**636,244**	**$5,515**		**$401**	**$5,916**
Total Statewide without GMC (from Table 3)	**636,244**	**$5,428**		**$523**	**$5,952**
Difference		**$87**		**($122)**	**($35)**

* Number of individuals is not included in totals to avoid double counting.

Single payer reform is likely to produce increased savings over time for the State as a result of lower administrative costs and through constraining the overall rate of growth in health care costs. We estimate that the State will save $281 million in the first three years of a single payer health care system, as presented in Table 6.

Table 6. Total estimated statewide health care costs, 2017-2019 (in Millions)

	2017	2018	2019	3 year total
Without reform	$5,952	$6,262	$6,606	$18,819
With reform	$5,916	$6,175	$6,448	$18,539
Savings with reform	**$36**	**$86**	**$158**	**$281**

Funding sources

Vermont will continue to receive substantial revenues from a number of sources, including the federal government, to defray the cost of health care under single payer health reform. Estimated sources of funding are summarized in Table 7 and include the following in 2017 with reform:

- Individuals and employers will pay $332 million for individuals who continue to enroll in employer-sponsored insurance under the single payer system in 2017.
- The federal Medicare program will continue to cover approximately $1.6 billion in costs incurred by Medicare beneficiaries.
- The State will receive $1.2 billion in federal financial participation on $2.0 billion in qualified state Medicaid expenditures. We estimate federal matching dollars for the Medicaid program would be $249 million higher under the single payer system than without reform, assuming the federal government agrees to extend the terms of the current state Medicaid 1115 waiver.

- The State will receive $267 million through an ACA waiver, assuming the federal government agrees to provide the net amount it would otherwise have spent in Vermont.
- Other sources of coverage, such as the federal employees' health insurance program and the Veteran's Administration, will spend $209 million.
- We assume that the State will continue to contribute the same amount of funding for the Medicaid program with or without reform, $637 million; the state legislature will ultimately determine this amount. The incremental state share of Medicaid funding under health reform is included in Amount to be Financed.

Table 7. Sources of funds with and without reform, 2017 (Millions of Dollars)

	Without reform	With reform	Difference
Individuals and Employers *	$2,228	$332	($1,896)
Federal: Medicare	$1,613	$1,613	$0
Federal: Medicaid Match	$998	$1,247	$249
Federal: ACA	$267	$267	$0
Federal: Other	$209	$209	$0
State Medicaid Funding	$637	$637	$0
Total Sources of Funds	**$5,952**	**$4,305**	**($1,647)**
Total System Costs	**($5,952)**	**($5,916)**	**$35**
Amount to be Financed		**($1,611)**	**($1,611)**

* Individuals and Employers: includes individuals, small group and large group. Without reform also includes Medicare Secondary & Part D premiums. Without reform is net of ACA premium and cost sharing subsidies.

The remaining $1.6 billion of reform to be financed are a portion of the costs that have been covered by employers and individuals through their contributions to health care premium costs. We expect that employers and individuals will continue to make significant contributions to health care costs under a single payer system. Employers' and individuals' spending on health care would be far higher without reform, however. Both employers and employees will benefit from the significantly lower costs required to administer a single payer health care system, improved coordination of care and benefits, and lower rates of growth in health care premiums.

Financing Mechanisms

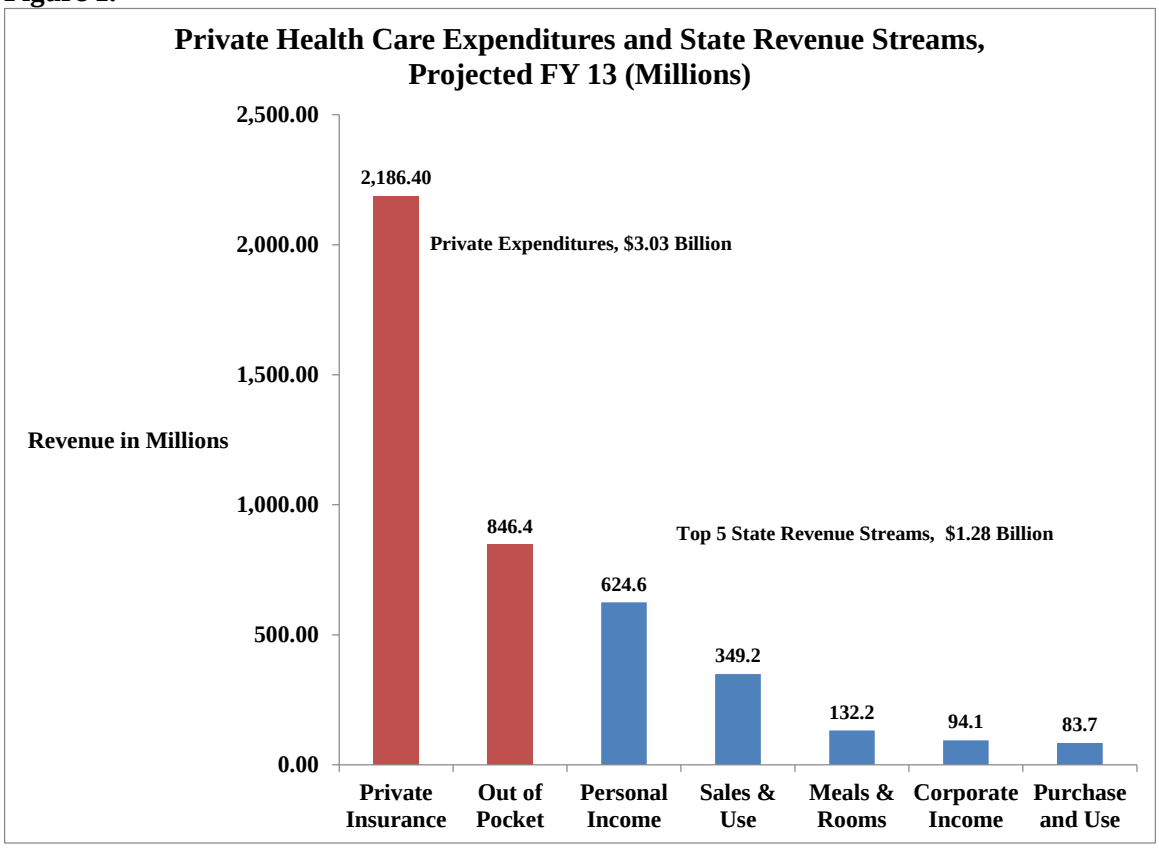
Green Mountain Care requires a dedicated public revenue source or sources. The mechanism for collecting these revenues will be new to Vermonters; however, the publicly financed system will draw upon dollars already used to pay for health care by businesses and individuals. Currently, Vermonters spend nearly $6 billion annually to finance the present health care system, including federal contributions. Table 8 depicts total health care spending by contributor.

Table 8: 2013 Resident Expenditures by Contributor (Projected)

Contributing Group	Amount Spent on Health Care (Millions)
Out of Pocket	$846.4
Private Insurance	$2,186.4
Medicare & Medicaid	$2,659.2
Other Government	$238.9
Total	**$5,930.8**

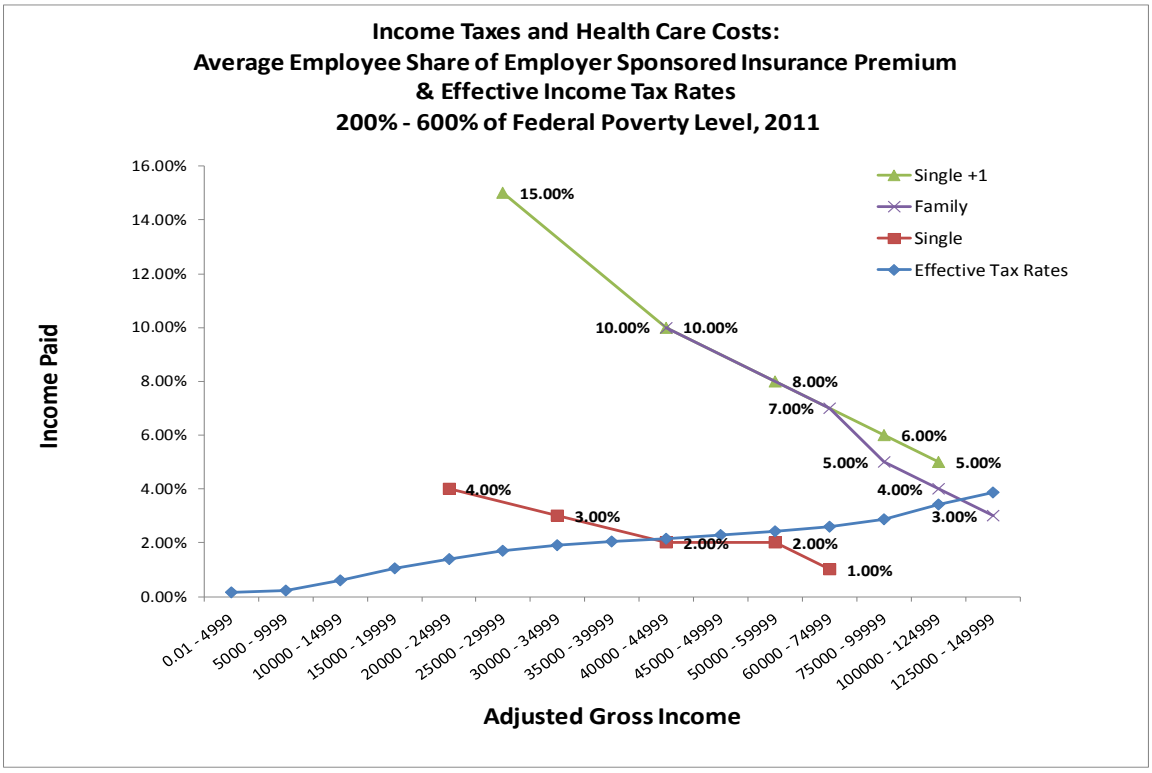
Even setting aside governmental contributions to health care, contributions made by individuals and businesses dwarf Vermont's major revenue sources.

Figure 1.



The cost to an individual for a health insurance premium, even for individuals who are enrolled in employer-sponsored health insurance, varies widely depending on the plan design, the share of the cost covered by the employer, and whether the employee purchases coverage for a single individual, for two people, or for a family. The amount that an individual is required to contribute toward the premium cost is much higher as a percent of income for low-income individuals and families than for those at the higher end of the income spectrum. This distribution is markedly different from the distribution of state effective tax rates, as demonstrated in Figure 2.

Figure 2.



A new system may be able to address inequities in the current financing of health care, such as the regressive nature of health care spending.

While the publicly-financed system will be new, the State may draw upon revenue models utilized in Vermont and other jurisdictions, including the many countries that finance universal health systems. Vermont's current revenue system provides an important touchstone in reviewing funding mechanisms, as current law revenue streams may be easier for the state to administer and for payers to understand compared to new revenue sources. Table 9 lists each current law revenue source, total annual revenue generation under current law, and how much could be raised incrementally.

Table 9. Current Law Revenue Sources Greater Than $10 million

Revenue Source	FY 2013 Revenue (Forecast)	Tax Rate	Unit of Tax	New Revenue (Millions)
Payroll Tax	N/A	N/A	1%	$119
Personal Income Tax	$624.6	Various	1%	$109
Sales and Use Tax	$349.2	6%	1% Sales	$58.2
Meals & Rooms (and Alcohol)	$132.2	9% & 10%	1% Sales	$14.6
Corporate Income Tax	$94.1	Various	1% Surcharge	$0.9
Purchase and Use	$83.7	6%	1% Sales	$14.0
Cigarettes & Tobacco	$74.3	2.62 per pack	1 Penny	$0.3
Gasoline	$59.1	0.19	1 Penny per Gallon	$3.2
Insurance Premium	$59.3	Various	1% Value	$29.2
Property Transfer Tax	$28.3	Various	1% surcharge	$0.3
Liquor	$16.8	25%	1%	$0.7
Diesel	$15.6	0.25	1 Penny per Gallon	$0.6
Bank Franchise	$10.4	0.0096%	.0001% increase	$0.1

Beyond current revenue sources, Vermont should consider other revenue sources and systems used by the federal government and other states. Other jurisdictions use gross receipts taxes, the taxation of a broader range of services, business enterprise taxes or other types of corporate taxation, and payroll taxes to raise revenue. Each new revenue mechanism would need to be defined and estimated prior to being analyzed and considered by policymakers.

When considering revenue sources, it is important to note that policy choices embedded in current law reduce the tax base of each revenue mechanism and reduce their potential as a financing source for government generally and Green Mountain Care specifically. Tax expenditures, more commonly known as tax credits and deductions, reduce the amount of revenue that would otherwise be collected in order to encourage particular activity. They are another form of government spending, and, if reevaluated and removed from the tax code, they can represent substantial revenue. For example, the amount of revenue raised by a 1% tax on income would rise from $109 million to $138 million if tax expenditures were removed from the income tax code. Policymakers may consider evaluating and comparing the importance, value, and effectiveness of each tax expenditure compared to the importance and value of implementing and sustaining GMC. Table 10 sets forth Vermont's tax expenditures by tax type and revenue value.

Table 10: Tax Expenditures

Tax Type	Revenue Impact (2014 Estimated, Millions)
Sales and Use Tax	$595.4
Income Tax (Federal Pass-Through)	$289.9
Property Taxes	$277.1
Personal Income Tax (State Level)	$50.2
Purchase and Use	$30.4
Insurance Premium	$19.5
Gasoline & Diesel	$13.2
Meals and Rooms	$11.0
Corporate Income Tax	$4.39
Bank Franchise Tax	$3.7
Total	**$1,290.4**

Overall, the new system provides an opportunity to re-evaluate Vermont's revenue system to determine the most efficient and important policy and revenue choices. Moreover, a fundamental restructuring of Vermont's revenue system should be considered strategically given the potentially important interplay between funding Green Mountain Care and possible reforms to Vermont's tax code.

Repositioning Vermont's revenue structure contemplates a deliberate and ongoing dialogue with many Vermonters. The federal delay in action that requires Vermont to wait until at least 2017 to implement Green Mountain Care provides a potential window of opportunity over the next several years for policymakers and the public to engage in an open and transparent dialogue about how to finance health care and government. This conversation provides an opportunity to inform and craft a finance plan that comports with the principles espoused in Act 48 and make Vermont more healthy, equitable, and competitive.

Recommendations for further study

As noted throughout the report, it is very difficult to project costs and revenues several years into the future, and it is particularly difficult to project the effects of untested reforms. We made many assumptions and estimates in order to develop these projections. To the extent that actual outcomes differ from these assumptions, these differences could produce small or large differences in the results, depending on the order of magnitude of the variance. The State should continue to refine the estimates included in this report as it develops plans for implementing a reformed and unified health system. In particular, after Vermont implements its Exchange in 2014 and individuals enroll in coverage through the Exchange in 2014, the State should refine its estimates for:

- Base health care costs in 2017,
- Premium tax credits, cost-sharing reductions, insurer fees, and individual penalties under the ACA,
- Employer and individual health care costs, and
- Estimated administrative costs for operating GMC.

I. Introduction

Act 48 of the 2011 Vermont legislative session set Vermont on a path to design a universal and unified system of health insurance coverage for all Vermonters. Act 48 enacted a range of reforms aimed at improving health care services and insurance coverage and reducing the rate of growth in health care costs in the State. The State established Green Mountain Care (GMC) to carry out the initiatives set forth by Act 48.

To assist the State's efforts in developing this system, the State of Vermont contracted with the University of Massachusetts Medical School (UMMS) and Wakely Consulting Group, Inc. (Wakely) to develop initial estimates of key system components. UMMS developed a model and alternative scenarios in accordance with the requirements of Act 48. Wakely's role was to develop the enrollment and claim cost estimates under the various scenarios. UMMS then estimated potential administrative savings, expected federal funding contributions, as well as overall funding alternatives. This report presents the UMMS/Wakely team's analysis.

We begin by examining health care coverage under current State and Federal laws and programs and the total spending for that coverage. Next we develop a health reform model under the unified system of Act 48, determine how many people would be covered under that model, and estimate the cost of the coverage. To develop these estimates we first must project the numbers of individuals who will change their source of health care coverage in 2014, when the federal Affordable Care Act (ACA) will be implemented, the numbers that will change coverage between 2014 and 2017, and the numbers that would be covered primarily by a single payer plan beginning in 2017. We also develop a number of assumptions relating to the benefits covered under each type of plan, utilization of these benefits, provider payment rates, the share of costs that are covered under various government programs, and other factors.

Our model assumes that all Vermont residents will automatically be enrolled in the health reform plan, called Green Mountain Care or GMC[1]; if individuals have other coverage, such as employer-sponsored insurance (ESI) or Medicare, the other coverage would pay first and GMC would supplement. We also assume that GMC will provide comprehensive health care benefits.

Our model assumes that, under GMC, the administrative functions currently performed separately by each private and public health plan will be merged into a single unified system. We develop estimates of the savings that will be realized by the system as a whole, as well as by individual health care providers.

The State of Vermont will continue to receive significant funding from the federal government under a reformed health care system. We estimate the net revenues the State might expect to receive under a waiver from the requirements of the ACA, as well as continued federal financial participation (FFP) from the Medicaid program and Medicare support for elders and people with disabilities. Finally, we discuss potential mechanisms for financing the remaining costs of a reformed health care system, and considerations for transition to a new system.

[1] For the purposes of this report, the term "Green Mountain Care" (or GMC) refers to the proposed single-payer model planned for 2017 implementation.

II. Definitions of Key Terms

Actuarial Value (AV): The relative benefit richness of a benefit plan design as determined using actuarial methods. The AV is the average paid claim costs divided by the total cost of care (paid claim costs plus member cost sharing) for a standard population. For example, a person with a plan that has an actuarial value of 80% would, on average, pay 20% of the cost of their care.

Cost Sharing Subsidy: A fixed amount of money that is provided to help people pay for insurance cost-sharing, such as deductibles and co-insurance.

Lines of Business / Markets:

Association: Insurance coverage purchased by groups of businesses. Associations are considered part of the small group market, although some businesses in Associations may have more than fifty employees.

Commercial: Coverage provided by private health insurers, often provided through employers

Individual: Coverage for members who are unable to obtain coverage through and employer and do not qualify for Medicare, Medicaid or Catamount

Large Group: Employer sponsored coverage for group sizes above fifty through 2016 and above ninety-nine thereafter and includes employers that self-insure

Medicaid: A joint federal and state program that provides low-cost or free coverage for low-income children, young adults under age 21, parents, pregnant women, caretaker relatives, people who are blind or disabled and those age 65 or older. Medicaid was adopted in 1965 as Title XIX of the Social Security Act.

Medicare: A federal health insurance program for people who are 65 or older, certain younger people with disabilities, and people with End-Stage Renal Disease. Medicare was adopted in 1965 as Title XVIII of the Social Security Act. Medicare includes different coverage types:

Part A:	Provides coverage for hospital inpatient care, and some coverage for home health, hospice, and skilled nursing care.
Part B:	Provides coverage for physician services, outpatient care, and some additional ancillary services, such as restorative therapy.
Medicare Advantage (Part C):	A Medicare health plan offered by a private company that contracts with Medicare to provide Part A and Part B benefits.
Part D:	Provides coverage for prescription drugs. Part D is provided by private insurance companies under contract with Medicare.

Small Group: Employer sponsored coverage for group sizes up to fifty through 2016 and up to ninety-nine thereafter

Long-Term Services and Supports: Services provided to individuals with chronic illness or functional limitations to assist them in performing activities of daily living. Examples of these services include home health care, nursing facility care, and personal care attendants.

Migration: The change in member enrollment across different insurance coverage types

Paid Claim Costs: The cost of health care services as defined by the contractual terms of the benefit plan less any member cost sharing and excluding any costs associated with the administration of the plan

Premium Subsidy: A fixed amount of money or a designated percentage of the premium cost that is provided to help people purchase health insurance coverage.

Primary Coverage: An insurance plan that pays before all other policies. Primary coverage may require policyholders to pay deductibles and co-insurance

Secondary Coverage: An insurance plan that supplements primary coverage, such as paying for deductibles or co-insurances

III. Analysis

This section describes in detail the analytic model that yields the estimates of the aggregate cost of single payer health reform in 2017 and how that cost differs, in total and by source, from a Vermont health care system without single payer health reform. The model is built with these components:

- Estimates of the population covered by various sources, in scenarios with and without single payer;
- The cost of delivering health care to this population;
- The potential administrative savings from transforming to a single-payer system; and
- The contributions of federal programs to financing Vermont's reforms.

A. Base Health Reform Model

This analysis evaluates a single payer health reform model to be implemented in Vermont beginning in 2017. Key components of the model are listed below. The assumptions and analysis in this report were developed to estimate the effects of implementing this model in Vermont. We also develop estimates for some alternatives to this base model.

- All Vermont residents will be enrolled automatically in the health reform plan, called Green Mountain Care or GMC, beginning in 2017.
- If individuals have other coverage, such as employer-sponsored insurance (ESI) or Medicare, the other coverage would pay first and GMC would supplement as needed. We refer to this coverage as "ESI Primary" or "Medicare Primary" with "GMC secondary," in contrast to individuals who rely on GMC as their primary source of coverage.
- GMC will provide comprehensive health care benefits, including comprehensive mental health and substance abuse services, pharmaceuticals, pediatric dental and vision care, and care coordination for individuals with chronic or complex care needs.
- GMC enrollees who meet Medicaid eligibility criteria will also be eligible for certain federally mandated services such as pediatric Early Periodic Screening, Diagnosis, and Treatment (EPSDT), non-emergency transportation, and long-term services and supports.
- Adult dental, adult vision, and comprehensive long-term services and supports are not GMC covered benefits in the base model; we estimate separately the incremental cost of including these benefits.
- The GMC plan has an actuarial value of 87 percent; that is, GMC covers 87 percent of the average cost of essential health benefits for a standard population. In aggregate, individual enrollees will be responsible for paying 13 percent of costs through cost-sharing requirements such as copayments and deductibles. Low-income individuals who are eligible for cost-sharing subsidies under the federal Affordable Care Act (ACA) also receive those subsidies in GMC. We estimate separately the lower GMC plan cost of a benefit with an 80 percent actuarial value, and the higher cost of a benefit with a 100 percent actuarial value (that is, a plan where individuals make no cost-sharing payments).
- For Medicare beneficiaries, GMC will cover supplemental medical and pharmacy costs up to an 87 percent actuarial value. Medicare beneficiaries will continue to pay their own Part B premium. GMC will pay the Part B premium and full supplemental medical and pharmacy costs for Medicare beneficiaries who also meet Medicaid eligibility requirements, called Dual Eligibles.

- GMC pays health care providers 105 percent of Medicare rates. We also estimate separately the lower GMC plan cost of provider payment rates at 100 percent of Medicare rates and the higher GMC plan cost of provider payment rates at 110 percent of Medicare rates. Medicare establishes rates to cover expected costs of an average provider, adjusted for factors such as severity of the patient's illness geographic region of the provider, and graduate teaching costs.
- GMC will provide the administrative functions currently performed separately by each private and public health plan through a unified system.

B. Health Care Spending by Employers and Employees

In developing a plan to finance GMC, the State should consider the amounts that employers and employees currently spend for employer-sponsored insurance (ESI). This section provides information about Vermont's current health care financing system to provide contrast to the model being developed for 2017.

ESI costs include the premium as well as any additional member cost sharing through copayments, coinsurance and deductibles. Health care premiums vary depending on a number of factors, including:

- the insured family size (single, single plus one, or family),
- the actuarial value of the health plan (the share of medical costs covered, on average), and
- the employer size (1-49 employees vs. 50 or more employees).

Because of these factors, actual spending per employee varies widely across employers and individual employees. These tables present estimates of average spending by firm size, compiled from survey data, to illustrate the relative magnitude of this spending. (Note: All of the following tables present dollar amounts rounded to the nearest $100.)

Table 1: Estimated average annual *employer* contribution to ESI premiums[2]

Class	Firm Size	Number of Firms	Number of Employees	Number of Employees enrolled in Employer Health Plan	Average 2011 Spending per Employee	Average 2011 Spending per Enrolled Employee	Estimated 2011 HC Premium Spending as a percent of total payroll
1	1-9	14,950	44,268	13,108	$1,700	$5,700	5%
2	10-19	2,113	28,483	10,308	$1,800	$5,100	6%
3	20-49	1,331	39,514	16,991	$2,200	$5,200	7%
4	50-249	623	60,531	30,847	$3,500	$6,900	9%
5	250+	102	61,186	28,146	$3,900	$8,500	7%
	TOTAL	19,119	233,982	99,399			
	Average				**$2,900**	**$6,700**	**7%**

[2] Insurance enrollment from Vermont Department of Labor, 2011 Fringe Benefit Survey, April 2012; premiums from Hickox & Boardman Group Benefits, 2011 Vermont Employee Benefits Survey; wage data from Vermont Department of Labor, 2011; inflated to 2017 using the projected increase in national health expenditures per capita, Centers for Medicare and Medicaid Services, Office of the Actuary, January, 2012.

Table 2: Estimated average annual *employee* contribution to ESI premiums[3]

Class	Firm Size	Number of Firms	Number of Employees	Number of Employees enrolled in Employer Health Plan	Average 2011 Spending per Employee	Average 2011 Spending per Enrolled Employee	Estimated 2011 HC Premium Spending as a percent of total wages
1	1-9	14,950	44,268	13,108	$700	$2,400	2%
2	10-19	2,113	28,483	10,308	$1,000	$2,700	3%
3	20-49	1,331	39,514	16,991	$1,100	$2,600	3%
4	50-249	623	60,531	30,847	$1,100	$2,100	3%
5	250+	102	61,186	28,146	$1,100	$2,400	2%
	TOTAL	19,119	233,982	99,399			
	Average				**$1,000**	**$2,400**	**2%**

Employee cost-sharing includes additional amounts that individual employees and their families pay for health care through copayments, coinsurance, and deductibles. Individual cost-sharing varies considerably depending on the health plan actuarial value and plan design, as well as the type, cost, and amount of health care services used. Table 3 below illustrates the average experience by employer size.

For purposes of developing these estimates, we assume that the actuarial value of small group plans (1-49 employees) is 75 percent, while the actuarial value of large group plans (50 employees or more) is 87 percent. Further, we assume that in small firms (1-49 employees) that offer a high deductible plan, 80 percent of enrolled employees enroll in the high deductible plan and 20 percent in traditional plans. In large firms (50 or more employees), we assume the reverse: 20 percent enroll in high deductible plans and 80% in traditional plans.

Table 3: Estimated average annual employee cost-sharing[4]

Class	Firm Size	Number of Firms	Number of Employees	Number of Employees enrolled in Employer Health Plan	Average 2011 Spending per Employee	Average 2011 Spending per Enrolled Employee	Estimated 2011 HC Cost Sharing as a percent of total wages
1	1-9	14,950	44,268	13,108	$600	$2,100	2%
2	10-19	2,113	28,483	10,308	$800	$2,300	3%
3	20-49	1,331	39,514	16,991	$900	$2,200	3%
4	50-249	623	60,531	30,847	$600	$1,300	2%

[3] Insurance enrollment from Vermont Department of Labor, 2011 Fringe Benefit Survey, April 2012; premiums from Hickox & Boardman Group Benefits, 2011 Vermont Employee Benefits Survey; wage data from Vermont Department of Labor, 2011 , taken from www.vtlmi.info/public/qcew_size_firm_2011q1.xls, 1/4/13; inflated to 2017 using the projected increase in national health expenditures per capita, Centers for Medicare and Medicaid Services, Office of the Actuary, January, 2012.

[4] *Ibid*

5	250+	102	61,186	28,146	$600	$1,400	1%
	TOTAL	19,119	233,982	99,399			
	Average				**$700**	**$1,700**	**2%**

The following table illustrates the share of income required to purchase ESI for a range of income levels and family sizes. Under the ACA, individuals whose income is less than 400 percent of the federal poverty level (FPL) and for whom the required ESI premium contribution is unaffordable will be eligible for federal premium subsidies to purchase insurance through the Exchange.[5] In addition, if the health plan offered by an employer has an actuarial value less than 60%; employees with income under 400 percent FPL may also purchase subsidized insurance through the Exchange.

Because health care premium costs are generally assessed as a flat dollar amount per person, average premium contribution represents a much larger share of income for low income individuals and families than for higher income individuals and families. This private sector health care financing system is markedly different from the Vermont and United States tax systems, where lower income taxpayers pay a smaller percent of income and higher income tax payers pay a higher percent of income.

Table 4: Estimated average employee premium cost as a percent of income by family size and percent of federal poverty level (FPL)[6]

2011 %FPL	1 person family (single coverage)		2 person family (single+1 coverage)		4 person family (family coverage)	
	Income	Average Premium Contribution as % of income	Income	Average Premium Contribution as % of income	Income	Average Premium Contribution as % of income
200%	$21,780	4%	$29,420	*15%**	$44,700	*10%**
300%	$32,670	3%	$44,130	*10%**	$67,050	7%
400%	$43,560	2%	$58,840	8%	$89,400	5%
500%	$54,450	2%	$73,550	6%	$111,750	4%
600%	$65,340	1%	$88,260	5%	$134,100	3%

* May be eligible for subsidies to purchase insurance through the Exchange

This system of financing health care is regressive, as it requires low-income individuals to pay a higher share of their income than higher-income individuals, and leaves a number of individuals uninsured and under-insured. We undertook the remainder of the analysis in this report in an effort to develop a model that provides better value for Vermont: provides comprehensive benefits to everyone at a lower cost and with a more progressive financing system. Act 48 addresses these issues in a number of ways. Universal coverage under GMC

[5] The IRS recently issued a draft rule that defines ESI coverage as unaffordable "if the employee's required contribution…for self-only coverage does not exceed 9.5 percent of the employee's household income for the taxable year." [IRS REG-138006-12]

[6] Insurance enrollment from Vermont Department of Labor, 2011 Fringe Benefit Survey, April 2012; premiums from Hickox & Boardman Group Benefits, 2011 Vermont Employee Benefits Survey; 2011 FPL from *Federal Register*, Vol. 76, No. 13, January 20, 2011, pp. 3637-3638.

will cover all residents regardless of employment. This will naturally decouple insurance from employment. In addition, because individual premiums will be eliminated, and cost-sharing will be subsidized with the lowest income beneficiaries paying the least amount of copayments, the cost of care will result in a more level percent of income across all residents. This report evaluates them significant shifts in coverage and the resulting cost of coverage under this new system in order to help Vermont in their preparations.

Table 5: Estimated average employee total out of pocket cost (premium and cost sharing) as a percent of income by family size and percent of federal poverty level (FPL)[7]

2011 %FPL	1 person family (single coverage)		2 person family (single+1 coverage)		4 person family (family coverage)	
	Income	Average total out of pocket health care cost as a % of income	Income	Average total out of pocket health care cost as a % of income	Income	Average total out of pocket health care cost as a % of income
200%	$21,780	9%	$29,420	24%	$44,700	16%
300%	$32,670	6%	$44,130	*16%*	$67,050	11%
400%	$43,560	5%	$58,840	12%	$89,400	8%
500%	$54,450	4%	$73,550	10%	$111,750	6%
600%	$65,340	3%	$88,260	8%	$134,100	5%

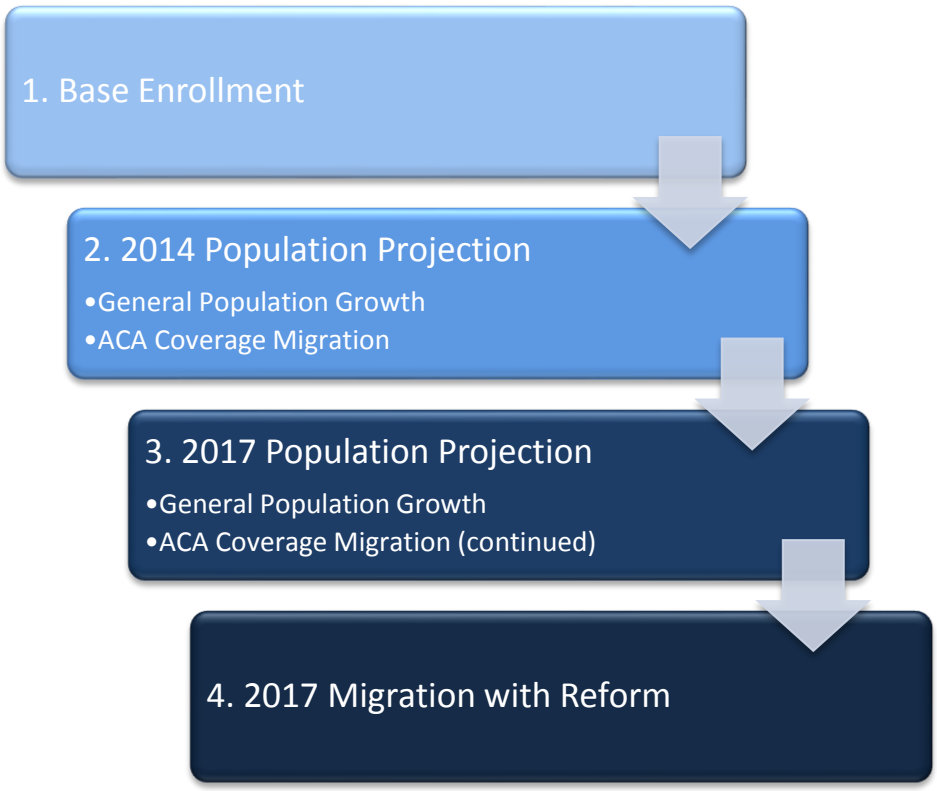
[7] Insurance enrollment from Vermont Department of Labor, 2011 Fringe Benefit Survey, April 2012; premiums from Hickox & Boardman Group Benefits, 2011 Vermont Employee Benefits Survey; 2011 FPL from *Federal Register*, Vol. 76, No. 13, January 20, 2011, pp. 3637-3638.

C. Population Estimates

To estimate the total and incremental cost of single payer in 2017, it is necessary first to understand the health care coverage of the population today and how that coverage will change by 2017. Two key components in estimating the population in 2017 are:

- Who will have GMC as primary coverage?
- Will that person be eligible for full or partial federal funding for their coverage?

The diagram below shows how the covered population is estimated to change by 2017. More details are included in the following sections.



1. Base Enrollment

The starting point for the population projection is 2012 enrollment, displayed in Table 6. These consensus figures were developed previously by a Vermont workgroup.

Table 6: 2012 Baseline Enrollment

		2012 Enrollment	
Line of Business	**Market**	**Line of Business**	**Market**
Commercial		361,926	
	Individual		4,014
	Catamount		14,069
	Small Group		40,829
	Association		20,716
	VEHI / VADA		44,062
	Large Group[1]		206,963
	Other[2]		31,273
Medicaid[3]	Medicaid[3]	113,891	113,891
Medicare	Medicare	108,395	108,395
Uninsured	Uninsured	44,568	44,568
Total	**Total**	**628,780**	**628,780**

[1] Large Group includes self-insured employers
[2] Other includes federal employees, including military
[3] Medicaid reflects members with Medicaid primary coverage only

Table 6 displays Medicaid primary members only, and excludes Medicare/Medicaid Dual Eligibles (shown in the Medicare totals), Global Pharmacy, Optional Expenditure and Other Medicaid-covered members with private coverage. We assumed the remaining secondary beneficiaries were enrolled in General Child, General Adult or Global Expenditure (Vermont Health Access Program, or VHAP).

2. 2014 Population Projection

The 2014 enrollment projections incorporate several assumptions. Two key assumptions include general population growth and enrollment migration due to the ACA. More details are provided in the following sections.

a. General Population Growth

Based on the most recent Census Bureau numbers, the overall population growth in Vermont has slowed, averaging 0.1 percent annual growth in recent years. Therefore, we assume only a modest overall annual growth rate of around 0.2 percent, apart from ACA and GMC changes. Recent information[8] indicates a significant growth in Medicare eligible enrollment, and we assume a 3.5 percent

[8] Woolf, Art. "How We're Doing: The pace of aging in Vermont is starting to accelerate." *Burlington Free Press* December 12, 2012. http://www.burlingtonfreepress.com/apps/pbcs.dll/article?AID=2012312130010 ,accessed January 3, 2013

annual growth rate for Vermont Medicare eligibles. In order to maintain the modest overall growth rate of 0.2 percent, we assume a negative growth rate of 0.5 percent for all other populations.

b. ACA Coverage Migration

The impact of the ACA will have an effect on individuals moving to different coverage sources (e.g. from commercial to Medicaid or from small group to individual) in 2014 and beyond. Appendix 1 shows the migration in 2014 from a pre-ACA to post-ACA state. The key assumptions in the analysis include:

- Catamount members will migrate to the current individual and Medicaid markets, with the majority migrating to the individual market.
- VHAP members will migrate to the current individual and Medicaid markets, with the majority migrating to the Medicaid market.
- Roughly 15 percent of the current individual members will be eligible for and migrate to Medicaid.
- Small groups that are currently in associations will migrate to the small group market. The exceptions are groups in Vermont Education Health Initiative (VEHI) or Vermont Auto Dealers Association (VADA). These groups may maintain "grandfathered" status under federal law. There is also a small portion of members in these small groups who will move to Medicaid.
- Roughly 30 percent of the current small group members will migrate to the individual market in 2014. A very small percent of current large group members will also migrate to the individual market. There is a small portion of these members who will move to Medicaid. After 2014, small group members will continue to migrate to the individual market but in smaller percentages.
- The uninsured rate will drop from approximately 7 percent to 4 percent in 2014. The majority will enroll in the individual market but a significant portion will also enroll in Medicaid.
- Medicaid enrollment projections through calendar year 2014 were provided by the Department of Vermont Health Access (DVHA). We assumed that these include ACA migration impacts.
- After estimating Medicaid primary enrollment, applying the negative 0.5 percent population trend plus the impact of ACA migration, secondary Medicaid enrollment was adjusted to tie total Medicaid enrollment by program to Vermont estimates.

3. 2017 Population Projection

The 2017 GMC enrollment projections incorporate several assumptions. The first set of assumptions relate to general population growth from 2014, the second set relate to continued enrollment migration due to the ACA, and the third relate to migration with the inception of GMC.

a. General Population Growth

We assumed the same annual population growth rates from 2014 to 2017 as from 2012 to 2014: an overall rate of 0.2 percent annually, based on a 3.5 percent annual rate for the Medicare population and -0.5 percent for all other populations.

b. ACA Coverage Migration

The ACA will continue to have an effect on coverage migration in 2014 and beyond. The 2014 changes were detailed in the prior section. Appendix 2 shows the continued effect of the ACA coverage migration for 2015 through 2017:

- The uninsured rate will continue to decline from 2014 to 2017, to an uninsured rate of 2 percent in 2017. This rate is consistent with the uninsured rate in Massachusetts several years after health care reform was implemented.[9]
- In 2016, groups with 51 to 100 employees will migrate to the small group market.
- Prior to 2017, small groups in VEHI and VADA will migrate to the small group market. Small groups (including group size 51-100) represent approximately 18 percent of the VEHI/VADA enrollment. The remaining enrollment will ultimately be part of the large group market.

4. Green Mountain Care Coverage Migration

There will be additional migration in 2017 under the single payer system managed by GMC. If an individual continues to have coverage through an employer, employer coverage will be primary. If an individual does not have coverage through an employer, GMC coverage will be primary. For Medicaid-eligible individuals, GMC will be primary but will still be eligible for the federal Medicaid match. Appendix 3 shows the coverage migration in 2017 from a without reform to with reform. The following are the key migration assumptions under reform:

- 100 percent of the individual and Medicaid markets would have GMC as primary.
- All currently uninsured would become insured and have GMC primary. Based on the current distribution of income, roughly 30 percent would have GMC primary and be eligible for Medicaid, making federal match available to the State. The remaining 70 percent would have GMC as primary but would not be eligible for Medicaid.
- It is less certain how the current group market will migrate into GMC. Three scenarios are shown in the table below to illustrate the various group migration assumptions. The High Estimate reflects fewer employees who continue employer coverage as primary and a higher number of individuals with GMC as primary. The following assumptions inform the scenario enrollment estimates:

[9] Massachusetts Division of Health Care Finance and Policy, "Health Insurance Coverage in Massachusetts: Results from the 2008-2010 Massachusetts Health Insurance Surveys." December 2012. http://www.mass.gov/chia/docs/r/pubs/10/mhis-report-12-2010.pdf; accessed January 12, 2013.

- 0 to 30 percent of small group members would continue to have their employer coverage as primary. The remainder would have GMC as primary either because their employers dropped coverage or the employees declined their employer coverage.
- Based on a high level review of 2012 large group enrollment an estimated split of membership was made by group type. 10% of membership is estimated to be from health system employers (e.g. hospitals) and 30% from each of State Government, national accounts (e.g. IBM) and other large groups.
- 100 percent of Vermont state employees would have GMC as primary.
- Most Vermont health system employers, such as hospitals, would drop coverage; from 0 to 20 percent of members from these employers would continue to have employer coverage as primary.
- From 10 to 50 percent of national group members (defined as Vermont residents whose employers are based outside of Vermont) would continue to have employer coverage as primary.
- From 0 to 30 percent of members from other local employers would continue employer coverage as primary.
- Federal programs (Federal Employee Health Benefits Program, Tri-Care, etc.) would continue to have employer coverage for 100 percent of members.
- Based on current income and 2014 migration assumptions, we estimate that approximately 3 percent of large group members in 2017 would be eligible for Medicaid. Thus, we assume that 3 percent of large group members who will have GMC as primary will be eligible for the federal match under Medicaid.

Table 7: 2017 Group Enrollment Scenarios - GMC Primary

Group Market	2017 Group Members without Reform	Green Mountain Care as Primary		
		High Estimate	Midpoint Estimate	Low Estimate
Small Group	51,483	51,483	43,760	36,038
Large Group	219,153	212,579	187,376	162,173
State Government	65,746	65,746	65,746	65,746
Health System (e.g. hospitals)	21,915	21,915	19,724	17,532
National Accounts (e.g. IBM)	65,746	59,171	46,022	32,873
Other Large Group	65,746	65,746	55,884	46,022
Total GMC Primary	**N/A**	**264,061**	**231,136**	**198,211**
Total GMC Secondary	N/A	37,073	69,998	102,923
Other (FEHBP/Military/VA)	30,499	0	0	0
Total Group	**301,135**	**301,135**	**301,135**	**301,135**
Percent with GMC as Primary		**88%**	**77%**	**66%**

Table 8: Below shows the overall resulting membership by scenario. As stated above, Appendices 2 and 3 provide more detailed member migration in 2014 under ACA and 2017 under GMC.

Table 8: 2017 Total Enrollment Scenarios - GMC Primary

		High Estimate		Midpoint Estimate		Low Estimate	
2017 Coverage Prior to Reform	**2017 Members without Reform**	**GMC Primary**	**GMC Not Primary**	**GMC Primary**	**GMC Not Primary**	**GMC Primary**	**GMC Not Primary**
Commercial	373,583	336,510	37,073	303,585	69,998	270,660	102,923
Individual	72,449	72,449	0	72,449	0	72,449	0
Group	301,135	264,061	37,073	231,136	69,998	198,211	102,923
Medicaid Primary	121,794	121,794	0	121,794	0	121,794	0
Uninsured	12,128	12,128	-	12,128	-	12,128	-
Total 2017	**507,505**	**470,431**	**37,073**	**437,506**	**69,998**	**404,581**	**102,923**
Percent with GMC as Primary		93%	7%	86%	14%	80%	20%
Medicare	128,739						
Total 2017	**636,244**						

As noted in both tables above, the number of individuals for which GMC will be primary varies significantly by scenario. The High Estimate has approximately 66,000 more GMC Primary individuals than the Low Estimate. This margin of uncertainty, which represents over 10 percent of Vermont's population, affects the GMC cost estimates contained in this report. This uncertainty is discussed further below.

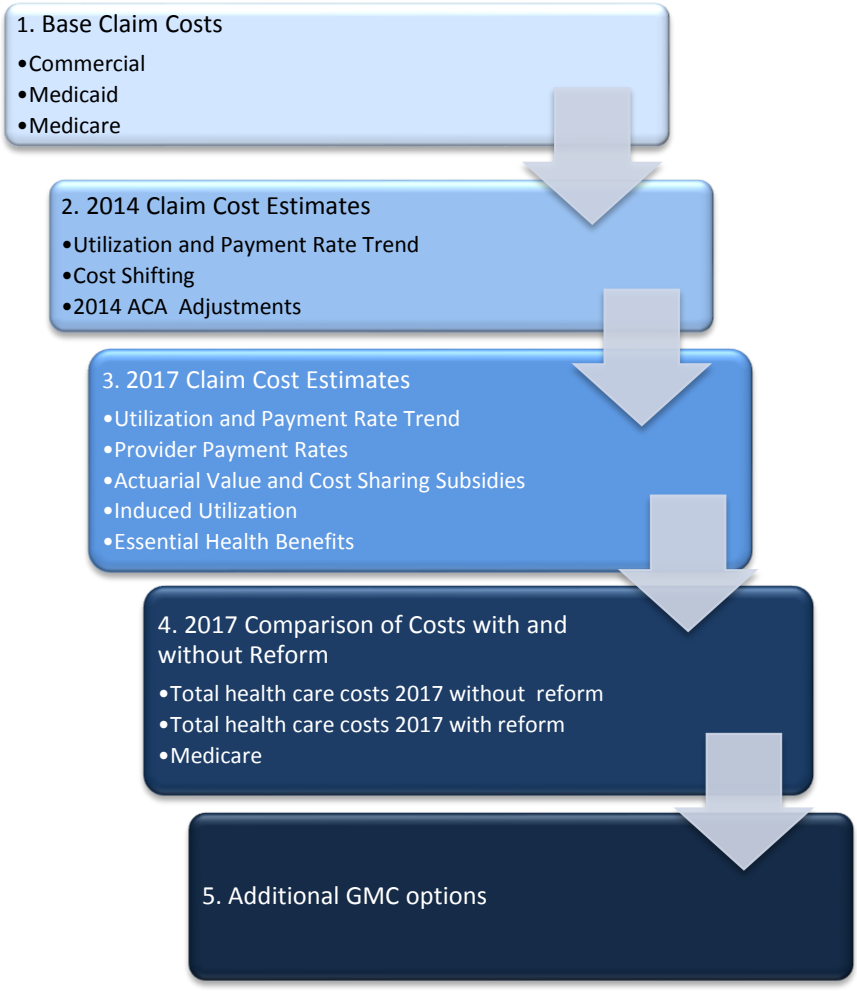
D. Claim Cost Projections

This section develops paid claim cost projections, using the population estimates from the previous section and estimates of per member per month (PMPM) claims for each population segment.

Future claim cost estimates are based on actual paid claim costs by population adjusted for:

- Trend (utilization and payment rate increases)
- Cost shifting between commercial and Medicaid
- 2014 cost changes due to the ACA and
- 2017 cost changes due to establishment of GMC

The diagram below shows how the paid claim costs are projected to 2017. More details are included in the following sections. Medicare claim costs projections are described separately.



1. Base Claims Costs

Wakely received detailed claim cost data by population. The data sources, time periods, base period reconciliation and adjustment methods differed by program. A detailed description of the base period development by program follows.

a. Commercial Insurance Claims Costs

We received calendar year 2010 and 2011 data on member paid and plan paid claims by service category for all commercial members, including the Catamount program, from the Vermont Healthcare Claims Uniform Reporting and Evaluation System (VHCURES), the State's multi-payer claims database. Because this source is not comprehensive for all commercial medical expenses, Wakely adjusted total claim costs to Vermont's annual "Expenditure Analysis"[10] report provided by the State.

The claims data were segmented by the following commercial markets:

- Individual Market
- Small Group
- Association
- Large Group
- Catamount

Wakely further refined the PMPM claim cost values for the Individual and Catamount markets relative to the other group markets based on reports provided by Vermont commercial payers.

Our modeling included two markets not separately identified in the data provided: (1) VEHI/VADA and (2) Other, which includes federal and military employees. We assumed that VEHI/VADA claim costs PMPM were equal to the Association costs and Other costs were equal to Large Group.

Historical prescription drug claims were not available at the detailed commercial market level. Therefore, aggregate drug claims were allocated to each market as a percent of total (medical plus pharmacy) claim cost expenditures. We assumed that approximately 16 percent of claim costs for each commercial market are drug claims.

We also estimated current dental and vision claims. These amounts were based on an assumption of the number of employees and dependents with coverage as well as an estimate of average claim costs PMPM. Estimated enrollment figures were based on Vermont Department of Labor statistics[11] on the percent of employers by size that offer coverage.

[10] Vermont provided work papers for its annual Expenditure Analysis, http://www.dfr.vermont.gov/health-care/research-data-reports/health-care-expenditure-analysis-reports

[11] Vermont Department of Labor, "2011 Fringe Benefit Study." April 2012. http://www.vtlmi.info/fringebene.pdf.

Table 9: Percent of Employers Offering Dental and Vision Coverage

Group Size	Offer Dental	Offer Vision
Small Group	31%	22%
51-100	65%	45%
Large Group	90%	64%

Table 9 shows the percent of employers that offer coverage. Since this coverage typically has a higher employee contribution share, we further assumed that 50 percent of individuals will accept dental and vision coverage when offered. Estimated PMPM costs were based on Wakely proprietary data. The resulting dental costs were compared to the Expenditure Analysis to validate the reasonability of the assumptions.

b. Medicaid Claim Costs

The development of the Medicaid base period claim costs required multiple data sources and significant judgment. Vermont reports these costs separately for multiple cost centers: the DVHA, for which detailed spending data are available, and other departments, for which far less detail is available. Not all Vermont Medicaid eligibility categories are included in the base period data (for example, those that are only premium assistance programs are not included).

Wakely used the following steps to incorporate all Medicaid costs into the base period:

1. The starting point was SFY2011 DVHA expenses by service category and Vermont Medicaid eligibility category.
2. The following adjustments were made:
   a. Disproportionate Share Hospital (DSH) costs were allocated based on total inpatient hospital costs by eligibility category.
   b. Premium assistance expenses were removed, including Parts A&B premiums for Dual Eligibles and Catamount premium assistance.
   c. Other non-claim expenses were removed, including Medicaid surplus amounts re-invested in Vermont (MCO Investments) and claw-back amounts.
3. Using a report the State provided, Wakely applied factors to each eligibility category to gross up the DVHA only experience to include non-DVHA claim costs.
4. The estimated total Medicaid costs were next adjusted to match the FFY 2011 CMS-64 report.
5. Claim costs PMPM for Medicaid members whose primary coverage is Medicaid were assumed to be five times that of members, other than Dual Eligibles and Global Pharmacy members, who used Medicaid as secondary or wrap coverage.

c. Medicare Claims

We developed cost models for dual and non-dual Medicare beneficiaries. Cost models include utilization per thousand and unit costs by service category and can be used to model and determine the cost for various benefit plans.
The cost modeling for the Medicare population used separate data sources for the medical and the pharmacy components. For the medical costs, Wakely used the 2010 5 percent

Limited Data Set[12] to establish utilization, unit cost and PMPM estimates. We used the buy-in indicator to separate dual eligibles from the non-dual population, assuming beneficiaries with buy-in equal to "yes" are dual eligibles. We adjusted the 2010 data to estimate costs in 2017 as follows:

The overall costs from the 5 percent Limited Data Set were relatively consistent with the Vermont Expenditure Analysis. Based on this comparison, we assumed the 5 percent sample was a reasonable approximation of total costs and made no adjustment.

For pharmacy, we used Wakely's proprietary Part D benchmark database calibrated to the overall cost for 2013 Vermont Part D basic bids. Based on the 2013 bids, regional Vermont costs indicate basic bid costs were within 0.5 percent of national averages. We therefore calibrated the benchmark database so that the basic bid approximated the national average of $79.14 per member per month (PMPM). The resulting allowed pharmacy amount for 2013 is approximately $150 PMPM. To trend the pharmacy costs, we used industry trends from benchmark data of one percent utilization and two percent unit cost.

A summary of the dual, non-dual and total allowed costs for 2017 are in the table below. More detailed cost models are included in Appendices 6 and 7.

Table 10: Summary of 2017 Medicare Allowed PMPM Cost

	Dual	Non-Dual
Pharmacy	$280.75	$145.98
Medical	$1,033.17	$813.41
Total	$1,313.92	$959.39

2. 2014 Claim Cost Estimates

The 2014 claim cost projections build on the base claims costs and incorporate several assumptions. Three key assumptions include general utilization and charge trend, cost shifting, and claim cost changes due to the ACA. More details are provided in the following sections.

a. Utilization and Payment Rate Trend

Trend is an estimate of the rate of change in the unit cost of a service (medical inflation, technology changes, mix of services) and utilization (frequency of services) over time. With minor exceptions, we based 2012 through 2014 trend assumptions on the expected growth per enrollee factors published in the *National Health Expenditures Projections 2011 – 2021* (NHE) report for annual trend assumptions.

Wakely replaced NHE Medicaid trend estimates with the projected annual change in expected costs by Medicaid population that Vermont provided to estimate 2012

[12] Data available at http://www.resdac.org/cms-data/file-family/Medicare-Claims (accessed January 23, 2013).

through 2014 claim costs. We adjusted the Vermont Medicaid trend estimates to include the 2013 primary care physician (PCP) fee increase and the anticipated provider fee schedule increase in October 2013.

We used total cost trends for Medicare medical costs from the 2012 Trustees Report to trend the base data to 2014. The average annual trend rate was 2.4 percent. For Medicare pharmacy costs, we used industry trends from benchmark data of 1 percent utilization and 2 percent unit cost.

b. Cost Shifting

Cost shifting is a term used to describe a scenario where providers seek additional payment for one line of business to offset losses that occur in a different line of business. Typically, providers seek payment rates higher than actual costs for commercial lines of business to offset Medicaid rates (and sometimes Medicare rates) that do not cover full costs. Cost shifting may grow each year if Medicaid payment rates do not increase.

In Vermont, Medicaid provider payment rates are not expected to increase until October 2013. Cost shifting could occur in 2012 and most of 2013 in response to this delay in increasing Medicaid provider payment rates. However, ACA related migration between Commercial and Medicaid (e.g. Catamount members moving to Commercial and higher provider payment rate) in 2014 could offset the cost shifting from prior years. Additionally, empirical evidence does not suggest that cost shifting between lines of business is dollar for dollar. Therefore, we assumed no additional cost shifting in the commercial market in our projections.

c. 2014 ACA Adjustments

The ACA is expected to significantly affect enrollment, premium and out of pocket costs in the Commercial and Medicaid markets.

ACA-related coverage changes include:

- Elimination of the Catamount program: Current members are expected to migrate into Medicaid or Commercial products. Provider payment rates for these members are expected to increase from roughly 105 percent of Medicare to 155 percent of Medicare. As described above, we assumed that this would not affect overall provider payment rates.
- Decline in uninsured Vermonters: A portion of the uninsured are expected to migrate into Medicaid and Commercial products.
    - The risk, or morbidity, of this population is expected to be lower than current individual and Catamount members. This will lower the average cost for the new overall population.
    - Because the ACA will increase the number of insured people, hospitals and physicians will be less likely to shift costs from individuals who cannot pay (‘uncompensated care’) to the privately insured. The ACA also reduces federal payments available to hospitals for the Disproportionate Share Hospital (DSH) program. Therefore, the DSH program reductions provide a somewhat offsetting impact to the increase in insured individuals and groups. There may also be increased demand for provider services with more of the

population insured. Given the uncertainty of the amount and timing of this impact, no adjustment to provider payment has been included.

- Medicaid Expansion: The ACA expands Medicaid to include adults without children and income up to 133 percent of FPL.[13] Currently, VHAP covers this population. Changes in this program as the result of expansion will affect Medicaid claim costs as the benefits will expand to full Medicaid benefits. Wakely relied on Vermont's estimate of the 2014 claim cost PMPM for this population. We adjusted this estimate for the PCP and provider fee increases described previously.

The primary changes under the ACA that are expected to affect 2014 commercial claim costs include essential health benefits (EHB), minimum actuarial value (AV) and cost sharing subsidies. We do not expect that there will be a significant number of grandfathered plans under the ACA. Therefore, we have assumed the ACA will impact all current individual and small group members.

Essential Health Benefits. The ACA requires that all individual and small group benefit plans cover services for EHBs. While these markets currently cover most of the EHB, few small group and no individual plans cover pediatric dental and vision. EHB also includes coverage for a habilitative services benefit. While Vermont insurers have not yet defined this benefit, it is only expected to have a small impact on premiums in these markets.

EHB regulations require that pediatric dental is offered but it is not mandated that pediatric dental be purchased by the individual. It is therefore possible that some individuals would not have pediatric dental coverage. For purposes of this analysis it has been assumed that all individuals in the individual and small group markets will purchase pediatric dental coverage under the ACA.

The overall increase to 2014 costs for EHB is expected to be approximately three percent for the individual market and two percent for the small group market. The impact could be much higher or lower for any given plan or product however.

Actuarial Value. Beginning in 2014 there will be four primary levels of plan designs that may be offered to individuals and small groups, varying by their actuarial value (AV). Actuarial Value is defined as the percent of essential health benefit costs the insurer covers, on average for a standard population.[14] For example, for a plan design with an 80% AV, the insurer will cover 80% of the costs of EHB coverage with the remaining 20% of costs paid for by the individual. A 60% AV (with a 2% *de minimis*) is the minimum allowed under the ACA.

The four levels of plan designs are: Bronze at 60% AV, Silver at 70%, Gold at 80% and Platinum at 90%. There is also a catastrophic plan design for younger or low income individuals but this plan design has not been considered as part of the

[13] The ACA also implements a 5% income set-aside, so the threshold is effectively 138% of FPL. Throughout this report, we reference the 133% benchmark.

[14] HHS has issued a Federal AV calculator. Issuers are required to enter each cost sharing package into the AV calculator and it calculates the AV for that plan. Actuaries can adjust the calculated AV for plan design elements that are not appropriately reflected in the AV model.

analysis since it is not expected to have significant enrollment in Vermont. The following table shows the 2012 distribution of plans and members by various AV ranges. The actuarial value of each plan design was developed by running 2012 plan designs through the Wakely actuarial value model which uses a standard population. The resulting AVs were then weighted by the portion of members in each plan design as of January 2012. These AVs have been adjusted to include any essential benefits that may not currently be covered in 2012.

Table 11: 2012 Distribution of Members by Plan Design Actuarial Value

Actuarial Value Ranges (2012)	Catamount	Individual	Small Group (includes Associations)	Combined
<45.0%	0%	27%	0%	1%
45.0%-55.9%	0%	22%	0%	1%
55.0%-64.9%	0%	45%	25%	21%
65.0%-74.9%	0%	0%	50%	38%
75.0%-84.9%	0%	5%	23%	17%
85.0%-94.9%	100%	0%	2%	20%
95.0% or higher	0%	0%	0%	0%
Total	**100%**	**100%**	**100%**	**100%**
Average	87%	51%	71%	73%

The above table shows that while the members in the Catamount and small group markets are all near or above the minimum AV level of 60%, the individual market has a significant number of members below the minimum level. To satisfy the minimum AV requirement, individuals will purchase plans with more comprehensive coverage and richer benefits. On average, the benefit richness for plans in the individual market will increase by 20%. The estimated claim costs for the individual market reflect an adjustment to reflect this change.

Cost Sharing Subsidies. In addition to the minimum actuarial value, the ACA also provides for cost sharing subsidies for members enrolled in the individual market and whose income is below a stated threshold. If an individual is eligible for a cost sharing subsidy, the individual will purchase a silver plan design (70% AV) but will receive cost sharing subsidies that will increase the value of the AV. Therefore, the individual will get a higher AV (lower cost sharing) for the same premium as a 70% AV plan. The subsidy varies by the member's income expressed as a percent of the Federal Poverty Level (FPL). In addition to the cost sharing subsidies provided under the ACA, the State of Vermont is proposing to further subsidize the cost sharing for low income members. The following table shows, by FPL, the resulting federal and Vermont AVs after cost sharing subsidies are considered.

Table 12: Comparison of Federal and Vermont subsidized Actuarial Values

Federal Poverty Level	Federal ACA Subsidized AV	VT Proposed Subsidized AV
133-150% of FPL	94%	94%
150-200% of FPL	87%	87%
200-250% of FPL	73%	83%
250-300% of FPL	70%	77%
300-350% of FPL	70%	73%
350-400% of FPL	70%	70%
400% + of FPL	70%	70%

In 2014, the individual market will be comprised of the current individual market, most of the current Catamount members, newly insured members and other members migrating from current group markets or Medicaid. A majority of these individuals will be eligible for cost sharing subsidies. These subsidies will increase the benefit richness beyond the 60% minimum AV required by the ACA. The average benefit set is expected to increase in AV by approximately 30% as a result of these subsidies. The 2014 estimated claim costs for the individual market reflect this change.

In addition to the ACA regulatory changes, we applied population adjustments to the future estimated individual and small group market claim costs to reflect the expected change in morbidity due to ACA member migration. We estimate that the Catamount, Medicaid and Small Group members expected to migrate into the Individual market will lower claim costs by approximately 20% compared to the current Individual market. The claims costs for small group and association members were also blended since small groups currently in associations are expected to migrate to the small group market.

The ACA also includes a temporary reinsurance program that will subsidize costs in the individual market from 2014 to 2016 (it is funded through an assessment on the entire commercial market, including self-funded employer group plans). Since this program is temporary and will no longer be in effect in 2017, the impact of the reinsurance program is not considered for purposes of this report.

3. 2017 Claim Cost Estimates

The 2014 claim cost estimates provide the foundation for the 2017 claim costs, which were estimated for alternate scenarios with and without reform. The 2017 claim costs *without* reform use only utilization and payment rates trends applied to the 2014 cost estimates.

The 2017 claim costs estimates *with* reform use the trended 2017 claim costs without single payer and make further adjustments for provider payment rates, actuarial values and cost sharing, induced utilization and essential health benefits. These adjustments make the following assumptions for the base GMC scenario:

- Midpoint of the enrollment projections shown in Table 8.
- Provider payment for medical claims will be 105 percent of Medicare for the current Commercial and Medicaid members who will have GMC as primary.
- An actuarial value of 87 percent for current commercial members. Medicaid cost sharing will not change.
- No adult dental or vision coverage through GMC.

The following section discusses the assumptions and methodology for estimating the cost of the base single payer GMC scenario.

a. Utilization and Payment Rate Trends

Trend is an estimate of the rate of change in the unit cost of a service (medical inflation, technology changes, mix of services) and utilization (frequency of services) over time. We based 2015 through 2017 trend assumptions on the expected growth per enrollee factors published in the *National Health Expenditures Projections 2011 – 2021* (NHE) report for annual trend assumptions. We assume the NHE trends include a provision for provider rate increases.

We used total cost trends for Medicare medical costs from the 2012 Trustees Report to trend the base data to 2017. The average annual trend rate was 2.4 percent. For Medicare pharmacy costs, we used industry trends from benchmark data of 1 percent utilization and 2 percent unit cost.

Wakely considered the need to have two sets of trends for 2017, one without reform and one with reform. Specifically, we considered if moving from a competitive, insurer driven commercial marketplace to a single payer market would impact claims costs. Under the current competitive market, the nature of accepting risk has caused insurers to create efficiencies and cost controls to keep overall costs as low as possible. Currently in Vermont, there are only two primary insurers in the individual and small group commercial markets. A third insurer has significant enrollment in the large group and self-funded markets. The State is involved in hospital budgets, statewide savings initiatives, and medical management programs and works with the insurers on these efforts. Thus, Vermont's current marketplace is closer to a single payer system than most states and many of the programs needed to maintain these efficiencies are in already in place.

Because of its market size and limited number of insurers, and the State's already heavy involvement in the payment and delivery of services, except where we have specifically identified additional savings (e.g. provider payment levels), the claims cost estimates included in our report assume that the state will achieve savings levels consistent with the current Vermont insurers. To the extent that the loss of a competitive marketplace and less administrative overhead adversely impact claims costs, the results in this analysis could vary significantly.

b. Provider Payment Rates

A consideration under GMC is to create consistent provider payment rates for all GMC markets (current Commercial and Medicaid). Only medical services provided

through GMC would be directly affected. It is possible that other payment rates (e.g. non-GMC Commercial) would be indirectly affected; however, we did not address this possibility in the claim costs projections due to the uncertainty of the impacts. The current proposal is for the GMC payment schedule to be a percent of Medicare payment. The baseline scenario assumes current Commercial and Medicaid services would be paid at 105% of Medicare payment rates for the respective year (i.e. 105% of 2017 Medicare payment in 2017, 105% of 2018 Medicare payment in 2018, etc.). This assumption would mean a reduction to the current commercial provider reimbursement and an increase to the Medicaid provider reimbursement.

In order to understand the impact of this change, we reviewed current payment levels by payer type. We based our assumptions primarily on a report from Burns & Associates, Inc. and Onpoint Health Data from January 30, 2012.[15] We also reviewed, at a high level, Vermont's 2011 allowed-amount-to-charge data. Table 13 shows the overall medical payment levels assumed by current market both as of 2011 and post ACA (2014 to 2017), as well as the baseline assumption under GMC.

Table 13: Medical Payment Rates as a Percent of Medicare

	Compared to Medicare		
Current Market	**2011**	**2014 – 2017**	**2017 GMC**
Commercial	155%	155%	105%
Catamount	105%	N/A	N/A
Medicaid	82%	82%	105%

It could be expected that payment rates for Commercial and Medicaid enrollees will change between 2011 and post ACA. Multiple factors could affect the current payment rates relative to Medicare, including:

- Medicaid payment rates are not expected to increase notably until October 2013 while the baseline Medicare payment schedule is expected to increase each year. Therefore, Medicaid rates would decrease as a percent of Medicare payment and Commercial rates will likely increase as a percent of Medicare rates to at least somewhat offset the lack of Medicaid increases.
- The migration of Catamount and VHAP enrollment in 2014 may have the reverse impact. In particular, Catamount payment rates are significantly lower than Commercial rates but the majority of Catamount members will likely migrate to the Commercial market. Since more members will be insured under a higher payment level, it is expected that insurers will leverage this information and payment increases to providers in 2014 will be lower than otherwise. As stated previously, this offset may or may not occur depending on provider demand and other market dynamics.
- The impact of the uninsured entering the insured markets may change the mix of business between Commercial and Medicaid markets.

[15] Burns & Associates, Inc. and Onpoint Health Data, "Comparison of Medicare, Medicaid and Commercial Payments for Hospital and Professional Services Reported in the VHCURES Database for Dates of Service in Calendar Year 2010." January 30, 2012.

Results are most sensitive to provider payment rates and there is significant uncertainty regarding what could happen versus what will actually happen with contracting on the commercial side. We assumed that current payment levels relative to Medicare will persist until 2017. This is consistent with our assumption not to adjust Commercial trends for future cost shifting.

To estimate the impact of moving to a consistent payment schedule under GMC, it was necessary to understand the portion of current costs that would be affected. The commercial provider payment changes are assumed to only apply to the medical component of the costs and thus, no changes have been assumed for prescription drug, dental or vision costs. We anticipate that should GMC employ a single Pharmacy Benefit Manager (PBM), this change would likely affect prescription drug costs; however, the magnitude of any potential savings is currently unknown and is therefore not incorporated. Additionally, we assume that Vermont will be able to negotiate consistent payment rates as a percent of the Medicare payment schedule for approximately 90% of the current commercial medical claims. This assumption is based on the expectation that the following percentages of medical claim costs will be able to be negotiated: 100% of Vermont costs, 75% of costs from neighboring states, and 0% of costs from all other states.

The Medicaid provider payment rate changes are assumed to only apply to the medical component of the costs. Therefore, no changes have been assumed for long-term care support services (LTSS),[16] prescription drug, dental or vision costs. Consistent with commercial markets, the magnitude of any potential PBM savings is not currently known and is thus not currently incorporated. It is expected that Vermont will be able to negotiate consistent payment rates for 100% of the current Medicaid medical claims.

c. Actuarial Value and Cost Sharing Subsidies

The GMC coverage will have a minimum actuarial value threshold; the estimates assume a minimum AV of 87% for the baseline scenario. For members where GMC coverage is primary, the costs have been adjusted to an 87% AV. Based on income, there will be some individuals for whom GMC is primary and who are eligible for cost sharing subsidies. Some of these members may be currently eligible for cost sharing subsidies in the individual exchange market while others may be newly eligible for cost sharing subsidies if they were previously in group coverage or uninsured. For members eligible for cost sharing subsidies that are higher than 87%, the higher AV will apply. Since only members with an income 133-150% of the Federal Poverty Limit (FPL) are eligible for a higher AV of 94%, the portion of members with an AV greater than 87% is minimal. The 87% becomes 87.2% once cost sharing subsidies are taken into account. We estimate that members who have GMC as primary coverage would otherwise have an AV of approximately 84%, resulting in a 4% increase in costs.

The following table shows the federal, Vermont, and GMC AV scenarios by FPL as required by Act 48. As noted, the base scenario assumes the higher of the Vermont

[16] LTSS costs as a percent of Total Medicaid costs based on the FFY 2011 CMS-64 report as provided by Vermont state staff.

proposed subsidized AVs and 87%. We also analyze two alternative scenarios: (1) the higher of Vermont proposed subsidized AVs and 80%, and (2) everyone at 100% AV (that is, no out of pocket cost sharing).

Table 14: Comparison of Actuarial Value after Subsidies by Scenario

Federal Poverty Level	Federal ACA	VT Proposed ACA	GMC - Base Scenario	GMC - Alt Scenario 1	GMC - Alt Scenario 2
133-150% of FPL	94%	94%	94%	94%	100%
150-200% of FPL	87%	87%	87%	87%	100%
200-250% of FPL	73%	83%	87%	83%	100%
250-300% of FPL	70%	77%	87%	80%	100%
300-350% of FPL	70%	73%	87%	80%	100%
350-400% of FPL	70%	70%	87%	80%	100%
400% + of FPL	70%	70%	87%	80%	100%

For members who have another source of coverage as their primary coverage, GMC will be secondary and will cover any costs up to an 87% AV. We estimate AVs by market for 2017 without reform to be roughly 75% for small group and 87% for large group and other. While the average AV for large group and other average is the same as the GMC minimum, there are some members in those groups that have a lower AV. Therefore, for both small and large group, an estimate was developed for any costs that GMC would cover for members where employer coverage is primary but for which GMC would cover costs between the employer coverage and 87%.

d. Induced Utilization

Consumer behavior changes based on the amount of cost sharing an individual is required to provide for health care services. This change in behavior is commonly called induced utilization. As part of the ACA, HHS has released proposed induced utilization factors.[17] Table 15 shows these factors by the various actuarial value levels (60-90%) in the ACA. Since one GMC alternative scenario is an AV of 100%, we developed an induced utilization assumption for this AV level.

[17] *Federal Register*, "Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment Parameters for 2014; Proposed Rule." December 7, 2012. http://www.gpo.gov/fdsys/pkg/FR-2012-12-07/pdf/2012-29184.pdf

Table 15: Induced Utilization Assumptions

Actuarial Value	Federal Induced Utilization	Assumed Induced Utilization
60%	1.00	1.00
70%	1.03	1.03
80%	1.08	1.08
90%	1.15	1.15
100%		1.25

The HHS factors have been used as the basis for our assumption. The induced utilization factor applied was based on the ratio of factors for the current and projected actuarial values. For AVs not listed in the table, the value of induced utilization was linearly interpolated. It could be argued that induced utilization should not be incorporated for members who will have a higher AV due to receiving a cost sharing subsidy since the cost sharing for these members is still expected to be financially significant. A conservative approach was taken and induced utilization was applied to the AV increases of all members, including those due to cost sharing subsidies.

e. Essential Health Benefits

Essential Health Benefit (EHB) adjustments were made both for 2014 and 2017 under GMC. In 2014, adjustments were added to individual and small group to account for the addition of pediatric dental, pediatric vision, and habilitative services. As stated, approximately 3% was added to the individual market and 2% was added to the small group market. The impact will vary, potentially significantly, by product and plan.

Under the ACA waiver provisions, coverage must be at least as good under the waiver as under the ACA. Thus, for members who were in large group and previously did not have coverage for pediatric dental or vision, the cost of the benefits is added due to the fact that this coverage is required for individuals and small groups.

For dental, it is assumed that roughly 55% of current employees will not have coverage for pediatric dental now. Since only 21% of members are estimated to be of pediatric age, this computes to approximately 12% of the large group population that needs to have the cost of pediatric dental added at a PMPM of $28, for a 2017 total cost of $7.4 million.

For vision, it is assumed that roughly 68% of current employees will not have coverage for pediatric vision now. Using the same estimate that 21% of members are estimated to be of pediatric age, this results in approximately 14% of the large group population that needs to have the cost of pediatric vision added at a PMPM of $4 for a 2017 cost of $1.3 million.

f. National and contiguous State anti-selection

We discussed whether there will be anti-selection to the GMC costs as a result of sick individuals moving to the State in search of free coverage. It is not clear if this will have any material impact, and we have not made any adjustments to our projected costs in this regard, assuming a consistent risk profile of the residents of Vermont.

4. 2017 Comparison of Costs with and without Reform

The following sections present the cost estimates developed using the assumptions and methodologies previously discussed in this report. The first section shows the overall estimated 2017 costs, by market, without reform and the second section shows the estimated 2017 costs with reform in costs between these two scenarios is then shown by the various components of the change.

Lastly, additional GMC options and their related costs or savings relative to the baseline are discussed. These include adding addition benefits such as adult dental, adult vision and long term services and supports (LTSS) as required by Act 48. Scenarios are also considered for different provider payment levels and different actuarial value minimums.

a. Total health care costs 2017 without reform

Tables 16 and 17 below show the paid costs (cost of care less any member cost sharing) in 2017 for the commercial and Medicaid markets without single payer reform. The costs account for underlying trend and ACA changes, since ACA changes will be occurring in 2014 and form the baseline for a change to a single payer system. No administrative costs are included in the forecasted amounts shown. A discussion on administrative costs with and without reform follows.

In the scenario without GMC reform, the medical and prescription drug costs assume the AVs estimated for each market, including any cost sharing subsidies in the individual market. Long term services and support coverage includes only the current coverage provided by Medicaid. The dental and vision costs include the pediatric dental and vision costs included as part of individual, small group and Medicaid EHBs as well as any dental and vision covered by group plans or Medicaid.

Only projected paid claim costs are included in the exhibits. Exclusions include any premium subsidies for Commercial beneficiaries obtained in the Exchange, Medicare Parts A & B premium subsidies for beneficiaries dually enrolled in Medicaid and Medicare and Medicaid claw-back amounts.

Table 16: 2017 coverage without reform, total paid claims per member per month (PMPM)

2017 Coverage without GMC Reform	Number of Individuals	Medical	LTSS	Rx	Dental	Vision	Total
Individual	72,449	$453.72	$0.00	$86.42	$4.66	$0.80	$545.60
Small Group	51,483	$420.24	$0.00	$80.05	$12.22	$1.65	$514.16
Large Group	219,153	$411.14	$0.00	$78.31	$20.25	$2.19	$511.89
Other (VA, federal employees)	30,499	$403.37	$0.00	$76.83	$20.25	$2.19	$502.64
Medicaid Primary	121,794	$517.87	$45.59	$58.45	$17.10	$1.01	$640.03
Medicaid Secondary	44,500	$618.15	$397.35	$12.24	$5.95	$0.37	$1,034.05
Total Cost	**495,377**	**$499.60**	**$46.90**	**$75.80**	**$16.89**	**$1.67**	**$640.88**
Uninsured	12,128						
Medicare	128,739						
Total	**636,244**						

* Because "Medicaid Secondary" individuals are also included in other rows, the number of "Medicaid Secondary" individuals is not included in the total.

Table 17: 2017 coverage without reform, total paid claims per year (in millions)

2017 Coverage without GMC Reform	Number of Individuals	Medical	LTSS	Rx	Dental	Vision	Total
Individual	72,449	$394	$0	$75	$4	$1	$474
Small Group	51,483	$260	$0	$49	$8	$1	$318
Large Group	219,153	$1,081	$0	$206	$53	$6	$1,346
Other (VA, federal employees)	30,499	$148	$0	$28	$7	$1	$184
Medicaid Primary	121,794	$757	$67	$85	$25	$1	$935
Medicaid Secondary	44,500	$330	$212	$7	$3	$0	$552
Total Cost	**495,377**	**$2,970**	**$279**	**$451**	**$100**	**$10**	**$3,810**
Uninsured	12,128						
Medicare	128,739						
Total	**636,244**						

* Because "Medicaid Secondary" individuals are also included in other rows, the number of "Medicaid Secondary" individuals is not included in the total.

Excluding any costs for Medicare and the uninsured, the total paid claim costs without reform are $3,810 million with an average cost per covered individual of $640.88.

b. Total health care costs 2017 with reform

Tables 18 and 19 below show the paid costs (cost of care less any member cost sharing) in 2017 for the Commercial and Medicaid markets with reform. The baseline assumptions for the reform projections include the following:

- Midpoint of the enrollment projections shown in Table 8 in a previous section
- An actuarial value of 87% for current commercial members. Medicaid cost sharing will not change.
- Provider payment for medical claims will be 105% of Medicare for the current Commercial and Medicaid members who will have GMC as primary.
- No adult dental or vision coverage through GMC.

In this scenario, the medical and prescription drug costs assume a minimum 87% AV for those for whom GMC is primary and higher if the individual is eligible for a higher cost sharing subsidy. For those for whom employer coverage is primary, their AV is based on their current estimated level. If that level is below 87%, GMC (as secondary payer) is assumed to supplement the difference up to the minimum 87%. Similar to the without reform scenario, long term care coverage includes only the current coverage provided by Medicaid. Compared to the without reform scenario, the dental and vision costs add in the cost of pediatric dental and vision for members for whom GMC is primary and did not previously have coverage.

In tables 18 and 19, the costs in the GMC Primary rows represent the costs for members for whom GMC is primary, but do not necessarily represent the costs for which GMC will be responsible. Table 8 in a previous section of this report displays the costs for GMC Primary members split between GMC and non-GMC responsibility. One example of the difference between the tables is for GMC Primary – Not Medicaid. It is possible that an individual would drop employer coverage for medical but would continue employer coverage for dental and vision if these benefits are not offered under GMC. Thus, the medical component of the individual's costs would be the responsibility of GMC while the adult portion of the Dental and Vision costs would be the responsibility of the employer. A second example would be for an individual who continues to have large group coverage as primary. If the large group coverage has an AV of 80%, GMC will cover the costs between 80% and 87% AV. The majority of medical costs would be the responsibility of the employer but a portion would also be the responsibility of GMC.

Similar to Table 16, no administrative costs are included in the forecasted amounts shown.

Table 18: 2017 coverage with reform, paid claims per member per month (PMPM)

	Number of Individuals	Medical	LTSS	Rx	Dental	Vision	Total
Individual	0	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Small Group	7,722	$493.93	$0.00	$94.08	$14.36	$1.94	$604.32
Large Group	31,777	$425.25	$0.00	$81.00	$20.94	$2.26	$529.46
Other (VA, federal employees)	30,499	$417.22	$0.00	$79.47	$20.94	$2.26	$519.90
GMC Primary (not eligible for Medicaid match)	306,584	$320.84	$0.00	$86.15	$18.23	$2.26	$427.48
GMC Primary - Medicaid Match Eligible	130,922	$661.55	$44.09	$59.68	$16.42	$1.00	$782.73
GMC Secondary – Medicare Primary Costs	44,500 *	$791.53	$397.35	$12.24	$5.95	$0.37	$1,207.44
Total Costs	**507,505**	**$493.10**	**$46.21**	**$79.79**	**$18.56**	**$1.96**	**$639.63**
Medicare	128,739						
Total	**636,244**						

* Because "Medicaid Secondary" individuals are also included in other rows, the number of "Medicaid Secondary" individuals is not included in the total.

Table 19: 2017 coverage with reform, total paid claims per year (in millions)

	Number of Individuals	Medical	LTSS	Rx	Dental	Vision	Total
Individual	0	$0	$0	$0	$0	$0	$0
Small Group	7,722	$46	$0	$9	$1	$0	$56
Large Group	31,777	$162	$0	$31	$8	$1	$202
Other (VA, federal employees)	30,499	$153	$0	$29	$8	$1	$190
GMC Primary (not eligible for Medicaid match)	306,584	$1,180	$0	$317	$67	$8	$1,573
GMC Primary - Medicaid Match Eligible	130,922	$1,039	$69	$94	$26	$2	$1,230
GMC Secondary – Medicare Primary Costs	44,500 *	$423	$212	$7	$3	$0	$645
Total Costs	**507,505**	**$3,003**	**$281**	**$486**	**$113**	**$12**	**$3,895**
Medicare	128,739						
Total	**636,244**						

* Because "Medicaid Secondary" individuals are also included in other rows, the number of "Medicaid Secondary" individuals is not included in the total.

Excluding any costs for Medicare, the total paid claim costs with reform are $3,895 million with an average cost of $639.63 PMPM. Comparing with- and without-GMC estimates, the overall costs increase under reform by approximately $86 million ($3,895 - $3,810). Because the number of insured individuals increases, though, the average cost per covered individual remains relatively constant without and with GMC, decreasing from $640.88 to $639.63 PMPM.

The drivers of the additional total costs under reform are shown in the table below. This table shows that the additional coverage of pediatric dental and vision benefits and a higher actuarial value increase costs under reform. Adding the cost of migrating members (for example, members currently under employer coverage may migrate to the Medicaid market) and the uninsured also increases 2017 with reform costs. There are significant savings from increasing the Medicaid reimbursement rate and reducing commercial rates to reflect the reduction shifting costs, which partially offsets the additional costs.

Table 20: 2017 Drivers of Incremental Cost/(Savings) ($ Millions)

2017 Reform Cost Drivers	Commercial	Medicaid	Total
Member Migration	($35)	$41	$6
Essential Health Benefits (Pediatric)	$9	$0	$9
Actuarial Value = 87%	$148	$0	$148
Provider Payment Rate Changes	($469)	$314	($155)
Uninsured	$46	$32	$77
Total Cost	($301)	$387	$86

In Table 8 in a previous section, additional enrollment scenarios are provided to account for the uncertainty in group enrollment under reform. The following table

shows the difference in additional costs/ (savings) under reform for the various enrollment scenarios. The high scenario assumes a higher percent of group enrollment will drop coverage and will have GMC as primary coverage. The low scenario assumes more group enrollment will keep employer coverage. Similar to the previous tables, the costs in these scenarios only include the current commercial, Medicaid, and uninsured enrollment.

Table 21: 2017 Incremental Claims Cost/(Savings) under Various Enrollment Scenarios ($ Millions)

2017 Reform Drivers of Cost/(Savings)	High	Midpoint	Low
Member Migration	$7	$6	$5
Essential Health Benefits (Pediatric)	$10	$9	$8
Actuarial Value = 87%	$146	$148	$151
Provider Payment Rate Changes	($202)	($155)	($107)
Uninsured	$77	$77	$77
Total Cost	$37	$86	$134

The above table shows that most of the drivers of costs and savings are not overly sensitive to whether GMC is primary. Provider payment rates are the exception with the estimated savings varying significantly by enrollment scenario. This is because we have assumed that provider payment rates will decrease in the Commercial market only if the services are provided under GMC. Therefore, the more individuals who have GMC for their primary coverage, the higher the overall system savings.

c. 2017 GMC Costs with Reform

The prior section includes tables that display the total Commercial and Medicaid health care costs by coverage type, comparing system costs with and without reform. Table 22 below shows how the base scenario paid claim costs are split between GMC and non-GMC responsibility for the system under GMC reform. All Medicaid costs are assumed to be the responsibility of GMC. Any Commercial costs not the responsibility of GMC are expected to be covered by ESI. Under reform, it is expected that the GMC responsibility will be approximately 88% under reform (excluding Medicare costs). Note that the percentage for dental and vision is expected to be much less, 50% and 41% respectively, as GMC non-Medicaid adults are anticipated to continue to receive these benefits through their employer.

Table 22: GMC Paid Claim Costs ($ Millions)

Service Category	GMC Primary		GMC Secondary		Total		
	GMC Costs	ESI Costs	GMC Costs	ESI Costs	GMC Costs	ESI Costs	Total Costs
Medical	$2,642		$17	$343	$2,660	$343	$3,003
LTSS	$281				$281	0	$281
Prescription Drugs	$417		$3	$65	$421	$65	$486
Dental	$47.33	$49	$0	$17	$47	$66	$113
Vision	$5	$5	$0	$2	$5	$7	$12
Total*	**$3,393**	**$54**	**$21**	**$428**	**$3,414**	**$482**	**$3,895**

d. Medicare

We evaluated three GMC coverage options for the Medicare population. The options are generally defined as follows:

1. Option A: GMC Medicare Advantage Plan buy-in

In this option, Medicare beneficiaries may choose to purchase GMC coverage as a Medicare Advantage Plan. The GMC supplemental coverage would simply be an additional option of coverage alongside the Medigap and Medicare Advantage plans currently available in the market place. In this option there would be no premium assistance for purchasing the GMC option or any other Medicare supplemental option, similar to today's market, but the premium may be lower than commercial premiums. Because the member would continue to pay for the supplemental coverage, there would be no cost to GMC. Note that this option would require an amendment to Act 48 and likely require the participation of a third-party insurer to contract with GMC and CMS.

2. Option B: GMC narrow wrap coverage

In this option, Medicare beneficiaries are automatically enrolled in the GMC supplemental coverage, but members could opt out of the GMC coverage to continue buying other private insurance supplements. The GMC supplemental coverage would not include a member premium. Individuals would be required to continue to pay their Part B premium, but would not be required to pay a Part D premium. If a member chooses to purchase a private supplemental or Part D plan, that plan would pay first, before GMC.

3. Option C: GMC broad wrap coverage

This option is similar to Option B in regards to coverage, but if the member chooses to stay inside the GMC plan, GMC pays the Part B premium and covers prescription drugs. Therefore, we believe that the participation in the GMC plan would be greater than in option B.

More details about Options A, B and C are shown in Table 23 below.

Table 23: Comparison of options for providing wrap coverage for Medicare beneficiaries through GMC

Option	A GMC Medicare Advantage Buy-In	B GMC Narrow Wrap Coverage	C GMC Broad Wrap Coverage
1. Medicare benefits	- No change	- No change	- No change
2. Enrollment of Medicare beneficiaries in GMC	- Can choose GMC Medicare Advantage and prescription drug plan	- Automatically enrolled in GMC for supplemental coverage and prescription drugs	- Automatically enrolled in GMC for supplemental coverage and prescription drugs
3. Medicare Part B premium is paid by	- Individual	- Individual	- GMC
4. Medicare supplemental and Part D coverage	- Medicare beneficiaries may choose to purchase a *GMC* Medicare Advantage, supplemental or Part D plan OR a private plan	- GMC provides supplemental & pharmacy coverage for Medicare beneficiaries - Medicare beneficiaries may choose to purchase a *private* Medicare Advantage, supplemental medical or supplemental pharmacy plan	- GMC provides supplemental & pharmacy coverage for Medicare beneficiaries - Medicare beneficiaries may choose to purchase a *private* Medicare Advantage, supplemental medical or supplemental pharmacy plan
5. Medicare supplemental and Part D coordination rules	- GMC does not wrap private coverage	- Private Medicare Advantage, supplemental or Part D plan pays *before* GMC	- Private Medicare Advantage, supplemental medical or supplemental pharmacy plan pays *before* GMC
6. Financing: Medicare beneficiaries pay	- Lower GMC contribution than general population (e.g. deduct cost of Medicare Part B premium and/or Advantage/supplemental /Part D premiums) - If beneficiaries choose to enroll in GMC Medicare Advantage, supplemental or Part D plan, they pay a GMC premium. - If beneficiaries choose to enroll in a *private* Advantage, supplemental or Part D plan, they pay a *private* premium.	- Same GMC contribution requirements as general population - If beneficiaries choose to enroll in a *private* Medicare Advantage, supplemental or Part D plan, they pay a *private* premium.	- Same GMC contribution requirements as general population - If beneficiaries choose to enroll in a *private* Medicare Advantage, supplemental medical or supplemental pharmacy plan, they pay a *private* premium.

A summary of GMC costs related to Options A, B, and C is provided in Table 24; details are provided in Appendix 6 and 7. For each option, we assumed various participation levels approved by CMS for Medicaid funding of Medicare only beneficiaries, full benefit dual eligibles, and partial dual eligibles.

Table 24: Cost of options for including Medicare beneficiaries in GMC (in Millions)

	Option A GMC Advantage Plan Buy-In	Option B GMC Narrow Wrap Coverage	Option C MC Broad Wrap Coverage
Supplementary Medical Care	Paid by individual	$26	$32
Part B Premium	Paid by individual	Paid by individual	$143
Pharmacy Care	$0	$23	$29
Part D Premium	Paid by individual	$34	$42
TOTAL GMC COST	**$0**	**$83**	**$246**

The amount of coverage over and above Medicare is shown in Appendix 6 as well as additional scenarios of covering the Part B and Part D premiums for Medicare only beneficiaries. Note that we have not shown any non-Medicaid funded GMC costs for Part B or Part D premiums for full benefit dual eligibles or partial dual eligibles because we assumed that Medicaid and/or the Low Income Premium Subsidies would continue to cover the premiums for these members as they do today.

e. Additional GMC options

The following are additional options that Vermont could consider including in the GMC design as provided for in Act 48. We use the cost projections for 2017 with reform presented in Section 3.b) above as the baseline for these options. The figures presented in this section represent the additional savings (in parentheses) or additional costs that GMC would incur relative to that baseline estimate if GMC adopted each option.

1. Provider payment rates

Additional options for the provider payment rates include provider payments for GMC services at 100 or 110 percent of Medicare rates, compared to 105 percent in the base scenario. The following table shows the annual impact of the additional provider payment scenarios. The methodology and assumptions are the same as discussed previously in this section.

Table 25: Additional Cost/(Savings) of Alternative Provider Payment Rate Scenarios ($ millions)

	Provider Payment	
Current Market	**100% Medicare**	**110% Medicare**
Commercial	($51)	$51
Medicaid	($63)	$63
Total	**($113)**	**$113**

2. Actuarial Value

We considered the effect of changing the plan design from the Actuarial Value (AV) of 87% included in the base estimates to an AV of 80% or 100%. We assume that individuals who are eligible for a higher AV due to cost-sharing subsidies under the ACA will continue to be eligible for that higher AV under GMC. Under the ACA, individuals whose income is below 250% FPL are eligible for cost-sharing subsidies that bring the effective AV of their coverage to between 83% and 94%. Including the higher AV subsidies with the 80% AV plan design results in an average AV of 81% for all GMC individuals. Both the 80% and 100% AV scenarios consider the impact of GMC costs for members for whom GMC is not primary. A plan design with 100% AV (that is, $0 member cost sharing) would result in a particularly large increase in projected GMC costs. The higher induced utilization in the 100% AV scenario would also increase GMC costs significantly.

Table 26. Annual impact of additional AV scenarios.

	Cost Sharing - Impact in $ Millions	
Current Market	**80% AV[1]**	**100% AV**
Commercial	($215)	$513
Medicaid	$0	$0
Medicare	($10)	$117
Total	($225)	$631

[1] This scenario assumes 100% AV for Medicaid-match eligible enrollees, 83-94% AV for individuals eligible for a cost sharing subsidy under the ACA, and 85% AV for Medicare beneficiaries.

3. Adult dental

Two scenarios were considered for adult dental coverage. In the first option, GMC only covers Dental Tiers one and two (preventive and restorative services) at 100% and 80% coverage respectively. In the second option, GMC covers Dental Tiers one, two and three (preventive, restorative and major services) at 100%, 80% and 50% coverage respectively.

No adult dental coverage is provided by GMC in the base scenario. However, some members may already have dental coverage through their employer and the costs for these individuals are included in the base scenario estimates.
If GMC covers adult dental, it is likely that most employers or employees would drop dental coverage and thus GMC would be primary. Thus the total cost of adding adult dental coverage includes the following:

- The cost of adding adult dental for individuals currently without coverage. The estimate of these costs is detailed below.

- For individuals currently covered under large group and with no dental coverage, the cost of pediatric dental also needs to be considered although the amount is relatively small.
- The cost of dental for members for which ESI is currently covering the costs. For simplicity purposes we assumed that all ESI dental coverage would be dropped and GMC would be primary for all dental costs under this scenario. Also for simplicity purposes, we have assumed current dental benefits under ESI are comprehensive and would cover all three tiers of coverage. Total costs were reduced for the GMC scenario where only tiers 1 and 2 are covered.

Medicaid currently covers adult dental up to an annual benefit maximum of $495. Thus, the Medicaid costs represent only the additional benefit above $495. Also, consistent with other Medicaid benefits, it is assumed that Medicaid dental coverage would have 100% coverage with no member cost sharing.

The following tables show the total annual cost by scenario. Each table shows the additional PMPM cost of the benefit, the percent of individuals for whom the benefit will be added, the resulting cost PMPM and the total annual cost in millions. The tables then add the cost of adding pediatric dental and the cost of dental currently being covered under ESI. The total reflects all dental costs which will be the responsibility of GMC.

Table 27: Additional Cost of Alternative Adult Dental Scenarios ($ Millions)

	Adult Dental - Tiers 1 & 2 (100%/80% Coverage)				
Current Market	**Individuals**	**Claim Cost PMPM**	**% of Individuals without Coverage**	**Average Impact Per Individual**	**Total Annual Cost (Savings) in $ Millions**
Commercial	376,582	$40.48	55%	$22.06	$100
Medicaid	130,922	$22.88	55%	$12.47	$20
Medicare	128,739	$27.67	100%	$27.67	$43
Total	**636,244**				**$162**
Pediatric Coverage for GMC Primary Members (previously Large Group)					$2
Base Scenario Dental Costs (Currently ESI)					$54
Total Cost of Adult Dental Benefit					**$218**

Table 28: Additional Cost of Alternative Adult Dental Scenarios ($ Millions)

Current Market	Adult Dental - Tiers 1, 2 & 3 (100%/80%/50% Coverage)				
	Individuals	Claim Cost PMPM	% of Individuals without Coverage	Average Impact Per Individual	Total Annual Cost (Savings) in $ Millions
Commercial	376,582	$49.23	55%	$26.83	$121
Medicaid	130,922	$40.38	55%	$22.01	$35
Medicare	128,739	$45.17	100%	$45.17	$70
Total	**636,244**				**$226**
Pediatric Coverage for GMC Primary Members (previously Large Group)					$2
Base Scenario Dental Costs (Currently ESI)					$66
Total Cost of Adult Dental Benefit					**$294**

As noted above, a large portion of the pediatric population will have dental coverage under the base scenario. A smaller portion of the adult population will have dental coverage. The costs for any individual with ESI coverage under the base scenario are approximately $66 million for full coverage and an estimated $54 million for coverage of only tiers one and two. Adding the cost of the above scenarios, including the $2 million for additional pediatric coverage would bring the total dental costs to $218 million and $294 million, respectively. These cost estimates are approximations. Further analysis would be needed on current benefits to refine these estimates.

4. Adult vision

Adding coverage for adult vision is also an option for GMC. This benefit would cover exams and hardware once a year, which is consistent with the federal employee benefits.

Similar to dental, no adult vision coverage is provided by GMC in the baseline scenario. However, some members may already have vision coverage through their employer and the costs for these individuals are included in the base scenario estimates.
If GMC covers adult vision, it is likely that most employers or employees would drop vision coverage and thus GMC would be primary. Thus the total cost of adding adult vision coverage includes the following:

- The cost of adding adult vision for individuals currently without coverage. The estimate of these costs is detailed below.
- For individuals currently covered under large group and with no vision coverage, the cost of pediatric vision also needs to be considered although the amount is relatively small.
- The cost of vision for members for which ESI is currently covering the costs. For simplicity purposes we assumed that all ESI vision coverage would be dropped and GMC would be primary for all vision costs under

this scenario. Also for simplicity purposes, we have assumed current vision benefits under ESI are comprehensive and would cover all three tiers of coverage. Total costs were reduced for the GMC scenario where only tiers 1 and 2 are covered.

Medicaid currently covers adult vision exams but does not cover hardware. Thus, the Medicaid costs represent only the additional hardware benefit.

The following table shows the total annual cost to cover vision. The table shows the additional cost of the benefit, the percent of individuals for whom the benefit will be added, the resulting cost PMPM and the total annual savings in millions. The tables then add the cost of adding pediatric vision and the cost of vision currently being covered under ESI. The total reflects all vision costs which will be the responsibility of GMC.

Table 29: Additional Cost of Alternative Adult Vision Scenario ($ Millions)

	Adult Vision - Exam/Hardware once a Year				
Current Market	**Individuals**	**Claim Cost PMPM**	**% of Individuals without Coverage**	**Average Impact Per Individual**	**Total Annual Cost (Savings) in $ Millions**
Commercial	376,582	$7.46	62%	$4.60	$21
Medicaid	130,922	$4.57	55%	$2.49	$4
Medicare	128,739	$8.67	100%	$8.67	$13
Total	**636,244**				**$38**
Pediatric Coverage for GMC Primary Members (previously Large Group)					$0
Base Scenario Vision Costs (Currently ESI)					$7
Total Cost of Adult Vision Benefit					**$46**

As noted above, a large portion of the pediatric population will have vision coverage under the base scenario. A smaller portion of the adult population will have vision coverage. The costs for any individual with ESI coverage under the base scenario are approximately $7 million. Adding the cost of the above scenario, including $0.4 million for additional pediatric coverage would bring the total vision costs to $46.

5. Long-term services and supports

Currently, Long Term Service Support (LTSS) is provided to the Vermont Medicaid population and Medicare covers limited facility and home care services following a hospital stay. A cost estimate was developed assuming full LTSS coverage would be extended to the entire Vermont population in 2017.

The cost estimate was based on the 2010 Vermont Health Care Expenditure data. The 2010 non-Medicaid and non-Medicare costs associated with home health and nursing home care were used as a starting point for the projection.

It was assumed that the Medicare and Medicaid programs would continue to cover the LTSS services in 2017 as they currently do. There is also an additional small amount of home health and nursing home costs that are covered by other Federal coverage in 2010. We assumed these services would also continue to be covered under their respective programs, and the costs were excluded from the projection. We also assumed that any Vermont resident that currently purchases private LTSS coverage would drop this coverage and those costs would be transferred to the State.

Costs were trended from 2010 to 2017 using a 5% trend rate. This trend rate is based on National Health Expenditure data and an assumed growth in population.

Based on several LTSS studies, a significant amount of LTSS is either provided by unpaid caregivers or the need goes unmet. Cost estimates for the unpaid cost range between two and three times the current amounts paid for LTSS. We applied an induced utilization factor to account for these costs. The studies we reviewed included the following:

- A November 2010 study produced by UMass Medical School's Center for Health Law and Economics and Office of Long-Term Support Studies on behalf of the Massachusetts Long-Term Care Financing Advisory Committee. This study indicated that $8.6 billion was paid for LTSS costs in Massachusetts and that an additional $9.6 billion in cost was either unpaid or came from needs that went unmet. Applying this additional cost to the relative non-Medicaid and non-Medicare costs results in an induced utilization factor of about 5.0.[18]

- An AARP study titled "Valuing the Invaluable: 2011 Update" estimated that in 2009, $203 billion was paid for LTSS costs nationally and an additional $405 billion was provided by unpaid care givers. Applying this additional cost to the relative non-Medicaid and non-Medicare costs results in an induced utilization factor of about 8.0.[19]

- An additional AARP study from September 2011 indicated that in 2004, 72% of older people living in the community received assistance exclusively from unpaid caregivers. This study further supports the above indication that the cost of unpaid care-giving is about two to three times the amount of total paid caregiving.[20]

Using the cost expenditure data, the trend assumption discussed above, and an induced utilization factor of 6.5, we developed a mid-level estimate of total 2017 Vermont LTSS cost of $917 million. Given the uncertainty

[18] Massachusetts Long-Term Care Financing Advisory Committee, "Securing the Future: Report of the Massachusetts Long-Term Care Financing Advisory Committee." November 2010. http://www.mass.gov/eohhs/docs/eohhs/ltc/ma-ltcf-full.pdf

[19] AARP Public Policy Institute, "Valuing the Invaluable: 2011 Update: The Growing Contributions and Costs of Family Caregiving." June 2011. http://assets.aarp.org/rgcenter/ppi/ltc/i51-caregiving.pdf.

[20] AARP et al, "Raising Expectations: A State Scorecard on Long-Term Services and Supports for Older Adults, People with Physical Disabilities, and Family Caregivers." September 2011. http://www.longtermscorecard.org/~/media/Microsite/Files/Reinhard_raising_expectations_LTSS_scorecard_REPORT_WEB_v5.pdf.

involved with estimating the cost of unpaid care, we also considered a lower induced utilization factor of 5.0 and a higher factor of 8.0. This range of induced utilization factors was based on the LTSS studies referenced above. These factors produce low and high cost estimates of $706 million and $1,129 million. In addition, implementing a waiting period of 30 to 90 days could reduce the total cost estimate by 10% to 20%. The cost development is shown in the table below.

Table 30: Long Term Services and Supports Cost Projection

	Long Term Services and Supports Cost Projection (in Millions)		
	Low Estimate	**Mid-level Estimate**	**High Estimate**
2010 Vermont Home Health & Nursing Home Costs	$100	$100	$100
Annual Trend	5%	5%	5%
Total Trend	1.4071	1.4071	1.4071
Trended VT Home Health & Nursing Home Spend	$141	$141	$141
Induced Utilization Factor	5.0	6.5	8.0
Total Projected 2017 LTSS Cost	$706	$917	$1,129

6. Summary of GMC Options

Table 31 summarizes the GMC base scenario and the incremental cost for including the additional options described above. The total GMC cost for the four populations listed would be $3.5 billion. This base cost estimate assumes an actuarial value of 87%. Table 2 shows the estimated incremental savings or costs of each of the alternative scenarios we analyzed. Note that the various options listed in this table interact with each other; they cannot simply be added together. The cost of increasing the payment rate, the actuarial value, and the covered benefits all together would be higher than the sum of each of these options separately.

Table 31: Summary of GMC Options

GMC Base Costs	
GMC Primary (not eligible for Medicaid-match)	$1,519
GMC Primary - Medicaid-Match Eligible	$1,230
GMC Secondary – Medicaid-Match Eligible	$645
GMC Secondary - Medicare Primary (Option B)	$83
GMC Secondary – ESI or Other Primary	$21
Total GMC Base Costs	**$3,498**
Additional Options	
Provider payment rates: 100% Medicare	($113)
Provider payment rates: 110% Medicare	$113
Actuarial value 80%	($225)
Actuarial value 100% (no individual cost sharing)	$631
Adult Dental: Tier 1 Preventive (100%) & Tier 2 Restorative (80%)	$218
Adult Dental: Tier 1 Preventive (100%), Tier 2 Restorative (80%) & Tier 3 Major Services (50%)	$294
Adult Vision	$46
Comprehensive Long-Term Services & Supports	$917

E. Health care reform costs and savings estimates

1. Administrative savings estimates

A key benefit resulting from the implementation of GMC is the potential for administrative simplification. Under the current health care financing system, payers and providers spend a significant amount of time and money submitting and processing claims, coordinating benefits, and managing authorization processes. Under a single-payer model, the time and dollars spent on these administrative functions will decrease.

Currently, providers must operate under numerous sets of rules that vary by payer. For example, each payer has its own pharmacy formulary, which lists the drugs a payer will cover and under which circumstances. Providers must submit claims to payers using different specifications and are paid using different methods, depending on the payer. Under Green Mountain Care, providers will operate under a more uniform set of rules and spend less time on administrative tasks.
Likewise, functions that are currently performed by multiple insurers will be streamlined or eliminated. Under Green Mountain Care, claims processing and customer service functions would be consolidated under a single entity, and expenses such as marketing would be greatly reduced. GMC would also reduce the number of different pharmacy formularies used by Vermonters, easing administrative burdens on providers and streamlining purchasing decisions.

In addition, costs related to the implementation of GMC are not offset from the savings figures. Providers will also need to invest in information technology, particularly in the early years, to conform to changes required by single payer and any related payment and clinical reforms. It is difficult to assess the cost of these investments, as many resources that will be in place in 2017, such as resources used by the Exchange and the Medicaid program, may be available to GMC. At this time, it is not feasible to estimate these costs. However, the extent of these costs should be carefully considered and is noted as a recommendation for further study.

a. Modeling Methodology

It is a challenge to estimate the amounts that may be saved due to greater administrative simplification under GMC. Many administrative tasks that providers and payers complete have multiple purposes, and the extent to which they will be eliminated or reduced is unclear. Further, there is very little data collected from Vermont providers that quantifies the cost of these administrative functions. Due to this uncertainty the UMMS team developed ranges of estimates based on data and studies presented in the literature.

The core models were developed using a three step process:

1. Estimate the GMC base

Although GMC will reduce the number of payers with which providers must interact, there will still be multiple payers in the Vermont market. In modeling the administrative savings estimates, we recognized that any savings that will occur will only accrue to the portion of the market that will be transitioned to GMC.

2. Estimate cost of administrative functions

Providers will see reductions in costs for billing and insurance-related functions, which include activities needed to support the financial and benefit transactions of health insurance. To estimate these costs, we relied on ranges of estimates that have been presented in the literature. For estimates of payer administrative costs, we used data previously analyzed and published by Vermont Department of Banking, Insurance, Securities and Health Care Administration (BISHCA), now called the Department of Financial Regulation.

3. Estimate potential savings ranges

No US state has implemented a single-payer model, so there is no direct comparison point on which to base savings estimates. Therefore, to derive the estimates of savings that may be realized, we used data presented in the literature to develop assumptions of savings for both providers and payers, as described further below.

b. Modeling Assumptions

1. Payers: Administrative cost estimates

The savings attributable to reduced administrative functions of payers are expected to accrue directly to GMC in the form of reduced premiums. Current health care premiums include a component for administrative costs. Therefore, in developing premium rates for GMC, lower administrative rate assumptions can be built into the premium, thus capturing the savings upfront.

The UMMS team relied on the data from a 2009 report[21] issued by the Vermont Department of Banking, Insurance, Securities and Health Care Administration (BISHCA), which detailed the amount that the largest private and public payers spend on administrative tasks. This report presented administrative costs as a percentage of premiums or premium equivalents for various types of payers. The report used data from the Annual Statements filed with BISHCA (now the Department of Financial Regulation, or "DFR") for the privately insured business. After weighting these figures by market share, we estimated that private insurers spent 11.9% of premiums on administrative activities. Amounts for the third party administrators and administrative services were estimated at 7% of premium equivalents. Data for the Medicaid program, available from the Medicaid budget, indicated that the administrative percent for Medicaid was 9% of premium equivalents.

[21] Vermont Department of Banking, Insurance, Securities and Health Care Administration (BISHCA), "Health Plan Administrative Cost Report." December 2009. http://hcr.vermont.gov/sites/hcr/files/Health_Plan_Administrative_Cost_Report.pdf, accessed December 20, 2012.

The figures reported by BISHCA are within the range of other published studies. As a point of comparison, one study[22] estimated that administrative expenses were 9.9% of premium equivalents for commercial payers and 11.6% for Medicaid.
To estimate the dollar amounts currently spent by payers on administrative tasks, the team applied these percentages to the estimates of total health care costs without reform, presented in section II.A of this report.

2. Payers: Savings estimates

The following studies were used to determine ranges for potential savings.

- In a 2008 report,[23] McKinsey & Co. developed a model that compared health care spending in the United States with 13 other countries in the Organisation for Economic Co-operation and Development (OECD). The study indicated that the US spent 14% more than expected on health care administration, with much of it attributable to the multi-payer system in the US. We used this study as the basis of the low estimate of potential payer savings, by assuming that 14% of payer administrative costs would be eliminated.
- According to the 2009 BISHCA report on health plan administrative spending, the administrative fees for the VT state employees plan and Blue Cross of Vermont's administrative services only (ASO) plan was approximately 7% of premiums. Using this benchmark, we developed a mid-range estimate by assuming that payer administrative functions would be brought down to 7% of premiums under single payer.
- The federal Medicare program spends a significantly lower amount than most private insurers on administrative functions, with estimates as low as 2% of premium equivalents.[24] However, it is unlikely that GMC would be able to achieve this level of administrative costs, as it will lack the size and clout of the federal Medicare program. A more conservative figure, from the 2010 Vermont Health Expenditure Analysis, places the administrative cost of Medicare at 4.8% of spending. This 4.8% figure was used as our high estimate.

To estimate the administrative cost under a single payer, the team applied these revised administrative savings percentages to the estimate of total health care costs with reform, presented in section II.A of this report. The difference between the administrative spending with reform and the administrative spending without reform is the estimated savings.

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[22] J. Kahn et al., "The Cost of Health Insurance Administration In California: Estimates For Insurers, Physicians, And Hospitals," Health Affairs, 24:6 (2005): 1629-1639.
[23] McKinsey Global Institute, "Accounting for the cost of US health care: A new look at why Americans spend more." December 2008. http://www.mckinsey.com/insights/mgi/research/americas/accounting_for_the_cost_of_us_health_care, accessed December 20, 2012.
[24] Kaiser Family Foundation, "Medicare Spending and Financing: A Primer (2011)." http://www.kff.org/medicare/upload/7731-03.pdf, accessed December 22, 2012.

TABLE 32: Model Assumptions for Payer Savings

	Estimated Savings Potential (Source)
Low Estimate	14% reduction from current (McKinsey)
Mid-Range Estimate	Administration lowered to 7% of premium equivalents (ASO/State employees plan)
High Estimate	Administration lowered to 4.8% of premium equivalents (VHEA estimate of Medicare)

3. Providers: Administrative cost estimates

The UMMS team assumed that providers will see a reduction in billing and insurance related functions and the related spending on these functions. For the purpose of these analyses, it is also assumed that the savings that accrue to providers will not be immediately captured by GMC. That is, by reducing the amount of time and money spent on administrative tasks, providers would reduce their operating expenses, but payments from payers such as GMC would not immediately be reduced to reflect potential savings. In the long-run, however, a reduction in provider operating expenses will reduce the growth rate of health care costs in Vermont, which will reduce expenses to GMC and other payers over time.

Provider base administrative spending: GMC Base
In constructing our estimates, we assumed that any administrative savings opportunities would be confined only to the portion of the market that is integrated into GMC. To determine this amount, we obtained spending amounts attributable to various populations and service types from the 2010 Vermont Health Expenditure Analysis. Our analysis indicated that 49% of the current spending at hospitals and 51% of the spending at physician offices and other ancillary providers will be transitioned to GMC. These figures were derived from the following assumptions:

- All Medicaid enrollees and 88% of the privately-insured market will be transitioned to GMC;
- Worker's compensation, federal and military employees are not included in GMC;
- All Medicare enrollees will maintain Medicare at least initially, with GMC as secondary;
- Approximately 18%[25] of the current spending is attributable to out-of-state residents, and therefore will not be under GMC;
- Long-term care, dental, and vision are excluded.
- Savings will be achieved by streamlining the formularies and using fewer pharmacy benefit management programs.

[25] This amount was estimated from the 2010 Vermont Hospital Discharge Dataset.

These are conservative estimates, particularly for the long-term care and Medicare populations. To the extent that these populations are more fully integrated into GMC, the opportunity for savings will be greater.

Physician and other providers

The literature indicates a range of estimates for the amount of time and money that physician practices currently spend on billing and insurance related activities. There are very few studies completed on similar activities of other health providers (e.g. physical therapists, community health centers, etc.). We therefore applied the same assumptions from physician studies to these market segments. For this analysis, we relied on the following studies:

- Julie Sakowski and colleagues completed a study[26] of a large multispecialty group in California that employed more than 500 physicians in three distinct locations. Based on this study, the authors estimated the cost to medical groups for billing and insurance related functions was 10% of revenue. This figure was used as the basis of the low estimate of provider administrative spending.
- James Kahn and colleagues[27] surveyed 94 physician practices in the western United States, including a mix of primary, specialty, and multispecialty practices. Their analysis estimated that billing and insurance related expenses ranged from 12.45% to 14.5% of revenue. Multispecialty practices spent 13.9% of revenue on these functions, which we used as the basis of the mid-range estimate of billing and insurance related spending.
- Lawrence Casalino and colleagues[28] surveyed physicians and practice administrators from a national sample. Using results from the survey, the authors estimated that practices spent $68,274 per physician per year on billing and insurance related activities. After adjusting this figure for inflation and Vermont physician wage differentials, the UMMS team estimated that billing and insurance related expenses were 17.7% of physician revenues in Vermont, which we used as the high estimate.

Hospitals

To estimate the amounts that hospitals currently spend on billing and insurance related activities, we relied on data from the annual budget filings submitted to the Department of Financial Regulation to determine total hospital costs and revenues. With this figures, we then used the following studies to determine the amount of costs attributable to hospital billing and insurance related activities.

[26] J. Sakowski et al., "Peering Into The Black Box: Billing And Insurance Activities In A Medical Group," Health Affairs, 28:4 (2009): w544-w554.
[27] Kahn *et al*, loc.cit.
[28] Casalino et al., "What Does It Cost Physician Practices To Interact With Health Insurance Plans?" Health Affairs, 28:4 (2009): w533-w543

- For a prior study[29] completed by the Vermont Legislative Joint Fiscal Office (JFO) and the Department of Banking, Insurance, Securities and Health Care Administration (BISHCA), Fletcher Allen Health Care provided an estimate of 4% of total costs for the amount they spent on billing and insurance related activities. This percentage was used as our low estimate.

- James Kahn and colleagues[30] completed an analysis of 1999 hospital financial data for California hospitals, categorizing cost centers into various administrative functions. This analysis yielded a range of 6.6% to 10.8% of total hospital revenue, which we used as the mid-range and high estimates of hospital billing and insurance related costs respectively.

4. Providers: Savings estimates

To estimate the amount of savings that are expected to occur under a single-payer model, we relied on various studies to develop a potential range. These savings percentages were applied to the estimated GMC base figures, as described above.

Physician and other providers

- The Sakowski study delineated among type of administrative functions. Specifically, tasks were identified as "billing and insurance related only", that is existing solely for third-party billing/insurance reasons (e.g. contracting, billing), "dual-use", which serve a purpose in addition to third-party activities (e.g. coding, prior authorization), and "dual-purpose", which are functions needed regardless of third-party activities (e.g. patient registration). This study was used as the low estimate of savings. We assumed that 50% of billing and insurance related only costs would be eliminated, 25% of dual-use costs would be eliminated, and that dual-purpose functions would not change. This resulted in a weighted average reduction of 38%.

- The Casalino study also delineated among certain functions. This study was used as the mid-range savings estimate. We assumed that claims management, billing, and contracting functions would decrease by 66%, formulary management would be reduced by 50%, and authorizations, credentialing and quality reporting would be cut by 25%. This resulted in a weighted average reduction of 47%.
- Dante Morra and colleagues[31] surveyed Ontario physicians and physician practice managers to determine the amount of time spent interacting with payers, including billing, formulary management, and other administrative tasks. The results were then compared to the

[29] Vermont Legislative Joint Fiscal Office (JFO) and the Department of Banking, Insurance, Securities and Health Care Administration (BISHCA), "Costs of Vermont's Health Care System: Comparison of Baseline and Reformed System." November 1, 2011. http://www.leg.state.vt.us/jfo/healthcare/November%20Report%20-%20Final.pdf, accessed December 20, 2012.
[30] Kahn *et al*, loc.cit.

[31] D. Morra et al., "US Physician Practices Versus Canadians: Spending Nearly Four Times As Much Money Interacting With Payers," *Health Affairs*, 30:8 (2011): 1443-1450.

Casalino study. The results indicated that Ontario physicians, who operate under a single-payer system, spent 27% of the cost that US practices spent on payer interaction. For the purposes of our analysis, this study was used as the high benchmark, as we assumed that 73% of billing and insurance related costs would be eliminated under GMC.

TABLE 33: Model Assumptions for Physicians and Other Providers

	Estimated Spending on Billing and Insurance Related activities (Source)	Estimated Savings Potential, of GMC-related spending
Low Estimate	10% of revenue (Sakowski)	38% reduction in billing and insurance related costs
Mid-Range Estimate	13.9% of revenue (Kahn)	47% reduction in billing and insurance related costs
High Estimate	17.7% of revenue (Casalino)	73% reduction in billing and insurance related costs

Hospitals

- The Lewin Group completed a study [32]of a proposed single-payer plan for Minnesota. As part of their analysis, they estimated that billing and insurance related expenses at hospitals would be reduced by approximately 33%. This study was used as our low estimate of savings.
- The Vermont JFO analysis assumed that 50% of billing and insurance related functions would be eliminated. This estimate was used as the mid-range estimate in our model.
- As previously described, the Morra study indicated that Ontario physicians, who operate under a single-payer system, spent 27% of the cost that US practices spent on payer interaction. While this model was based on physician data, for the purposes of our high estimate, we assumed that hospitals would be able to achieve the same level of savings by reducing administrative costs by 73%.

TABLE 34: Model Assumptions for Hospitals

	Estimated Spending on Billing and Insurance Related activities (Source)	Estimated Savings Potential, of GMC-related spending (Source)
Low Estimate	4% of total costs (JFO)	33% reduction (Lewin Group)
Mid-Range Estimate	6.6% of revenue (Kahn)	50% reduction (JFO)
High Estimate	10.8% of revenue (Kahn)	73% reduction (Morra)

[32] The Lewin Group, "Cost and Economic Impact Analysis of a Single-Payer Plan in Minnesota: Final Report." March 27, 2012. (http://growthandjustice.org/sites/2d9abd3a-10a9-47bf-ba1a-fe315d55be04/uploads/LEWIN.Final_Report_FINAL_DRAFT.pdf, accessed December 20, 2012).

5. Administrative Savings Estimates

Our modeling indicates that the combined mid-range estimate for administrative savings under GMC for payers, hospitals, physicians, and other providers is $279.2 milion. Table 35 provides a summary of the estimate ranges by sector.

TABLE 35: Summary of Administrative Savings Estimates, at full implementation. ***In millions***

	Payers	Physicians and other providers	Hospitals
Low Estimate	$39.1	$53.4	$23.7
Mid-Range Estimate	$126.1	$92.6	$60.5
High Estimate	$211.3	$179.3	$144.6

Note: Assumes that physician, other provider, and hospital savings are fully achieved in 2020. Payer savings are displayed in 2017 dollars, to be consistent with overall GMC estimates.

2. Clinical Savings

An integrated payment system will provide continued support for the health care delivery system reforms that the State has been implementing for several years through a number of efforts, including the Vermont Blueprint for Health. The Blueprint aims to implement "a statewide system of care that improves the lives of individuals with and at risk for chronic conditions."[33] Through a series of delivery system reforms over many years, the State aims to:

1. Reduce the prevalence of chronic conditions;
2. Improve the health status and quality of life for Vermonters with chronic conditions; and
3. Moderate the cost of caring for Vermonters with chronic conditions; that is, slow the rise in total costs.[34]

These efforts may have already produced significant system savings. For example, early analysis of savings realized through health delivery system reform for the period 2007-2010 estimated that "annual expenditures per capita for Blueprint participants increased 22% (from $4,458 to $5,444) — a lower rate than the 25% increase for controls (from $4,136 to $5,186). Over the same period, the statewide average also increased 22% (from $3,582 to $4,387)."[35]

The clinical savings achieved by the Blueprint and other efforts cannot be attributed to the initiative to integrate the health insurance system through GMC. Therefore we do not include them in our estimates of administrative savings due to the payment system reform

[33] Vermont Department of Health, Agency of Human Services; *Vermont 2007 Blueprint for Health: Strategic Plan*, Report to the Legislature on Act 191; January 2007; p.3.
[34] *Ibid*, p.23.
[35] Onpoint Health Data, *Blueprint Evaluation: A Four-Year Overview Based on Two-Year Cohorts with Matched Controls (VHCURES Commercial Population, Ages 18-64)*; January 2012; pp.1-3; included in Department of Vermont Health Access, *Vermont Blueprint for Health 2011 Annual Report*; January, 2012.

in 2017. However, the State should consider these savings in its estimates of statewide total health care costs going forward.

F. Federal financial contribution estimates

Significant federal funding flows into the State to pay for health care, and we assume it will continue to do so under reform. In this section we estimate the amounts the State can anticipate receiving from the federal government through a waiver to the Affordable Care Act, a Medicaid waiver, and through the Medicare program.

1. Affordable Care Act Waiver

Vermont may apply to the federal government for a waiver from major coverage provisions of the ACA – including requirements relating to qualified health plans, Exchanges, cost sharing reductions, tax credits, the individual responsibility requirement, and shared responsibility for employers – beginning in 2017. The Secretary of HHS may grant the state's request for a waiver if the state's plan provides coverage that is at least as comprehensive as is defined in the ACA, will provide coverage to at least a comparable number of residents with equivalent protections against excessive out-of-pocket spending, and will not increase the federal deficit. To support a state's waiver plan, the ACA instructs HHS to pass through to the state the aggregate amount of individual premium tax credits, cost sharing reductions and small business tax credits that would have come to the state under provisions of the ACA.[36]

This section estimates the federal revenue Vermont could anticipate under an ACA waiver. Estimates of the individual premium tax credit and cost sharing reduction amounts are reduced by estimates of the penalties that would be imposed on individuals who do not obtain required coverage and on larger employers that do not make adequate coverage available to eligible employees.
Another source of revenue to the state will be the tax credit available to small businesses. Employers with 25 or fewer FTEs and average wages of less than $50,000 per employee per year will be eligible for up to 50 percent of their contribution to employees' insurance premiums (35 percent for tax-exempt businesses) if they purchase coverage through the Exchange. The credit is only available for two consecutive years beginning in 2014, however (a smaller credit is available from 2010-2013), so it is reasonable to assume that most eligible businesses will have exhausted it by 2017. We therefore do not include a pass-through of small business credits in 2017 in this analysis.

Because Vermont's plan would result in the virtual disappearance of health insurance premium transactions, we also reduce the state's pass-through amount by estimates of payments that would be lost to the federal government from Vermont insurers from the annual fee on health insurers and the excise tax on high-cost health plans.

a. Modeling Methodology

We used different methods, with different data inputs, for each of the five substantive estimates in this section.

[36] Patient Protection and Affordable Care Act, Pub. L. No. 111-148, §1332, 124 Stat. 119, 203-206 (2010).

1. Individual premium tax credit and cost sharing reductions

Tax credits and cost sharing reductions depend on an individual's coverage status and income relative to the federal poverty level (FPL). For this estimate, we used Wakely's estimates of the total number of individuals with no coverage and with non-group coverage in 2017 before migration under GMC. These are the groups who will be most likely to purchase coverage through the Exchange after coverage becomes mandatory for most people in 2014. We reduced this by the number of uninsured who Wakely estimates would be eligible for Medicaid and a smaller number who would have access to employer-sponsored insurance. We assume that the remaining individuals would be eligible for coverage subsidies, and applied a Vermont-specific income distribution from the American Community Survey (ACS) to the totals.

We calculated an average premium tax credit for each income band based on the ACA requirements, an estimate of the second lowest silver plan premium (from the 2011 Vermont Employee Benefits Survey), and the distribution of family size (from the ACS), which is relevant to the determination of FPL, within each income band. We calculated the average cost sharing reduction for individuals with income below 250% FPL using Wakely's base scenario estimate of total annual health care spending per covered individual and applying the actuarial value enhancements for each income band specified in the ACA.

2. Individual penalty

It is difficult to predict how many uninsured individuals would not obtain required insurance under the ACA in the absence of GMC, and how many of those individuals would be subject to a financial penalty. State-level estimates are elusive. Our model used the Congressional Budget Office's (CBO) national estimates of the portion of the currently uninsured who would be subject to the penalty, the income distribution of these individuals, and the average penalty by income band.[37] We applied these figures to Wakely's estimate of the number of uninsured in 2017 without GMC.

3. Employer penalty

Estimating the number of Vermont employers that would be subject to the employer penalty in 2017 requires an estimate of the number of employers with more than 50 full-time equivalent (FTE) employees that do not offer minimum essential coverage, the number of employers that offer coverage but have employees who instead get subsidized coverage through the Exchange because the employer's coverage is not affordable, and the number of employees who work at employers in either of these situations. This is a challenging task because the ultimate numbers are likely to be quite small (just 2% of Vermont employers with more than 50 FTEs did not offer insurance in the first quarter of 2011, according to the Department of Labor),

[37] Congressional Budget Office, "Payments of Penalties for Being Uninsured Under the Affordable Care Act" Sept. 2012.

and because we do not yet know how coverage patterns will change when the coverage provisions of the ACA go into full effect in 2014.
Given these uncertainties, we judged that a simple arithmetic computation based on current national estimates is equally reliable as a Vermont-specific estimate. Our model, therefore, uses the CBO's year-by-year estimates of employer penalties nationwide and applied, as a lower bound, Vermont's percentage of the U.S. population (approximately 0.2%). As an upper bound, we applied a figure 2.5 times Vermont's proportion of the population, or 0.5%.

4. Health insurer fee

The ACA imposes a fee on the net premium revenues of health insurers beginning in 2014. According to the Joint Committee on Taxation, the fee will raise $6.1 billion in 2014, increasing to $11.4 billion by 2017 and $13 billion by 2020.[38] The fee will be distributed among health insurers proportionate to their revenues. The ACA exempts insurers that derive more than 80 percent of their gross revenues from public programs, as well as insurers with less than $25 million in premium revenue. Only half of the revenues of not-for-profit insurers are subject to the fee.

Our model provides a high, medium and low estimate for the share of the fee that would be assessed on insurers doing business in Vermont. The high estimate comes directly from an analysis that Oliver Wyman did for America's Health Insurance Plans (AHIP).[39] We distributed Oliver Wyman's aggregate number for Vermont across 10 years according to the same distribution that resulted from our calculation of the medium and low estimates.

Both the medium and low estimates are computed as the ratio of Vermont premium revenue subject to the fee to premium revenue in all states subject to the fee. The numerator is the same in both cases, and uses 2011 premium revenue data by carrier from the Vermont Department of Financial Regulation's Annual Market Share Reports, inflated by the projected growth in national health expenditures and adjusting the figures for not-for-profit status. For the low estimate, the denominator is the full amount of U.S. premiums reported for 2014 and 2015 in an analysis the Marwood Group prepared for Molina and Amerigroup, inflated to subsequent years by the projected growth in national health expenditures.[40] For the medium estimate, this denominator is reduced by the ratio calculated in Vermont to determine the portion of premiums subject to the fee, to account for the revenues the law exempts from the fee.

[38] Joint Committee on Taxation, "Estimated Revenue Effects of a Proposal to Repeal Certain Tax Provisions Contained in the Affordable Care Act." Memorandum, June 15, 2012, Table #12-2 046. These figures are less than the full assessment amounts specified in the ACA for each year.
[39] Chris Carlson, "Annual Tax on Insurers Allocated by State." Oliver Wyman, November 2012.
[40] Marwood Group, "Impact of ACA Annual Health Insurance Tax on State Medicaid Programs." October 2011.

5. *Excise tax on high-cost health plans*

The ACA will impose an excise tax on insurance premiums that exceed a defined level -- $10,200 for individual plans and $27,500 for all others in 2018, inflated by the Consumer Price Index in subsequent years. Estimating the liability of Vermont insurers for this tax based on current premium levels requires extensive assumptions about future trends in premiums, changes in the market in response to the tax, and the number of people who would be enrolled in plans subject to the tax. The uncertainty inherent in these assumptions would yield unreliable estimates. As a proxy, our model uses the same method for estimating this tax as for the employer penalty (see subsection 3 above). That is, we assume Vermont insurers' liability for the excise tax will be proportionate to the state's share of the U.S. population. For a low estimate, we use Vermont's actual population proportion, about 0.2 percent. For a high estimate, we use 0.5 percent. The estimate for the amount the excise tax will yield nationally is from the Joint Committee on Taxation.[41]

b. Modeling Assumptions

All dollar amounts are inflated to 2017 using the projected growth in National Health Expenditures done by the Office of the Actuary, CMS. The exception is that we assume the projected accelerated increase in 2014, when the ACA coverage provisions take effect, will not occur in Vermont because most residents of the state will already have coverage. We assume the 2014 growth rate is the same as 2015, 5.7%, rather than the CMS projection of 7.4%.

1. *Individual premium tax credit and cost sharing reductions*

The number of uninsured people who would not be eligible for premium tax credits is estimated from the 2011 ACS. All uninsured adults with income below 139% FPL and children with income below 250% FPL are assumed to be eligible for Medicaid. All uninsured adults who are employed and have income above 250% FPL are assumed to have access to ESI.

The median individual, 2-person, and family premiums from the 2011 Vermont Employee Benefits Survey (all employers, traditional plans) are used as a proxy for the second-lowest silver premium in the calculation of the average premium tax credit. For families of two people and more, individual tax credits are calculated as a family aggregate credit divided by the family size.

2. *Individual penalty*

The model assumes that the percentage of Vermonters at various income levels who will be subject to the individual penalty is the same as the national estimates.

[41] Joint Committee on Taxation, *op. cit.*

3. Employer penalty

Vermont employer penalties for insufficient coverage are assumed to be roughly proportional to the state's proportion of the U.S. population. A more accurate estimate of employer penalties would require data the number of employees working for large employers that do not offer minimum essential coverage, and the number and income levels of employees in firms offering coverage who do not enroll and qualify for federal premium tax credits.

4. Health insurer fee

The medium and low estimates use gross figures of U.S. premium revenues as part of the calculation; in particular, the medium estimate assumes that the portion of U.S. premiums subject to the fee is the same portion as in Vermont.

5. Excise tax on high-cost health plans

The model assumes that Vermont's contribution to the projected revenue from the excise tax nationally will be roughly proportional to its proportion of the U.S. population.

c. Affordable Care Act Waiver Estimates

Our model indicates that funds associated with an ACA waiver that are passed through from the federal government to Vermont could amount to upwards of $260 million in 2017:

Table 36: Summary of Estimates of Effects of ACA Provisions on Vermont Revenues and (Costs) (in Millions of Dollars, inflated to 2017 except where indicated)

	Low	Middle	High
1. Premium Tax credits	$327.5	$327.5	$327.5
2. Cost sharing reductions	$23.8	$23.8	$23.8
3. Individual penalties	($5.0)	($5.0)	($5.0)
4. Employer penalties	($60.0)	($42.1)	($24.1)
5. Annual insurer fee	($20.2)	($15.6)	($8.2)
6. Excise tax on high-cost health plans (2018)	($54.5)	($21.9)	($21.9)
Net contribution of ACA provisions	**$ 211.6**	**$266.6**	**$292.0**

2. Medicaid Waiver

The Medicaid program is a joint federal-state partnership that provides health coverage to many low-income individuals. Under federal rules, the federal government shares the cost of operating Medicaid programs with each state. Vermont currently operates its Medicaid program under two section 1115 waiver programs, the Global Commitment to Health and Choices for Care. In addition, Vermont operates a Children's Health Insurance Program (CHIP). While both the Affordable Care Act and the implementation

of GMC will significantly change the structure of these programs, the federal government will continue to pay for its share of the costs for those individuals who meet eligibility guidelines. This continued contribution from the federal government, called "federal financial participation," will be a significant source of financing for the GMC program. Vermont cannot receive a waiver from the Affordable Care Act until 2017. As such, there is much uncertainty regarding the parameters under which a waiver would be granted and the rules that will be applied for federal financial participation. Such details will be subject to negotiation between state and federal officials. In building the estimates presented here, we relied on current federal rules. Note that these rules may change or be modified in the course of negotiations, therefore affecting the final contribution rates and amounts.

a. Modeling Methodology

To determine the amount that the federal government will pay in 2017, we projected the populations in GMC that would be eligible for a federal match. As described below, certain populations receive higher dollar matches from the federal government, so these populations were separately identified. The total federal contribution is calculated as the product of the federal match rate and the projected cost of the populations.

b. Modeling Assumptions

1. Federal Financial Participation

The federal government pays each state a certain share of its Medicaid program. The share that the federal government pays, called the Federal Matching Assistance Percentage (FMAP), is determined annually pursuant to a statutory formula based on each state's per capita income. In federal fiscal year 2013, the FMAP for Vermont is 56.04%[42].

Likewise, the federal government pays a share of the State Children's Health Insurance Program (SCHIP). This amount is higher than FMAP rate used for the Medicaid population, and is called the Enhanced FMAP rate. In federal fiscal 2013, the enhanced FMAP rate for Vermont's SCHIP program is 69.23%[43]. Under the Affordable Care Act (ACA), states will receive an increase of 23% in their enhanced FMAP rate, beginning in 2015.

The ACA significantly expands Medicaid, making individuals with income up to 133% of the federal poverty level (FPL) eligible for Medicaid. For most states, this will be a substantial expansion in their Medicaid population. The federal government will pay a higher FMAP for this expansion population, leveling off at 90% in 2019.

Vermont, under its 1115 Demonstration Waiver, had previously expanded its Medicaid eligibility to the levels required in the ACA. For states like

[42]" Federal Financial Participation in State Assistance Expenditures; Federal Matching Shares for Medicaid, the Children's Health Insurance Program, and Aid to Needy Aged, Blind, or Disabled Persons for October 1, 2012 Through September 30, 2013, Notice." *Federal Register 76 (November 30, 2011): 74061-74063.*

[43] *Ibid.*

Vermont that had previously expanded Medicaid eligibility, the federal government will phase-in a higher FMAP rate for some populations in their state. In Vermont, a higher FMAP rate will be available for childless adults with incomes under 133% of the FPL, ending at 90% in 2020.[44]

Table 37 summarizes the FMAPs used in this analysis. Note that the base and enhanced FMAP rates are subject to change annually. For the purposes of this analysis, we used the FY2013 rates.

Table 37: Federal Matching Assistance Percentage (FMAP)

Period	Base FMAP	CHIP (EFMAP)	Expansion FMAP (<133% FPL childless adults)
FFY 2013	56.04%	69.23%	N/A
CY2017	56.04%	92.23%	87.21%
CY2018	56.04%	92.23%	90.20%
CY2019	56.04%	92.23%	93.00%
CY2020	56.04%	92.23%	90.00%

2. Medicaid Disproportionate Share (DSH) Payments

In federal fiscal year 2013, the Medicaid program paid Vermont hospitals approximately $37.5 million in disproportionate share payments, with $23 million of this amount paid by the federal government;[45] these payments are intended to defray the unreimbursed costs of hospitals that treat a disproportionate share of low-income uninsured and Medicaid patients. Under the ACA, however, the federal government will be reducing the amount it pays states for Medicaid DSH, by $18.1 billion nationally between 2014 and 2020.[46] While the Centers for Medicare and Medicaid Services (CMS) has not yet released rules on how it will implement these reductions, for modeling purposes we assumed that the payments to hospitals will not be reduced, as they may come from another source. Therefore, these estimates include DSH payments.

3. Upper Payment Limit (UPL)

The upper payment limit (UPL) is a limit imposed by the federal government on the amount it will match for Medicaid payments to certain providers, notably hospitals and nursing facilities. Under the UPL, the federal government will not match payment amounts that exceed, in aggregate, the amount Medicare would have paid for similar services.

[44] Under the ACA, Vermont is also eligible for a 2.2% increase in its base FMAP rate, but this increase expires in 2015 and was therefore not included in our estimates.
[45] Department of Vermont Health Access, "Methodology for Vermont's Disproportionate Share Payments in Federal Fiscal Year 2013." October 12, 2012. (http://dvha.vermont.gov/for-providers/dsh-methodology-for-ffy-2013.pdf, accessed December 27, 2012).
[46] John Graves, "Medicaid Expansion Opt-Outs and Uncompensated Care," *New England Journal of Medicine*, 367:25 (2012): 2365-2367.

In the Global Commitment to Health waiver, Vermont obtained a waiver from the UPL.[47] Therefore, for the purposes of this analysis, we did not consider the impact of the UPL. However, if the federal government declines to extend this waiver provision, the amount the federal government will match may be limited by the UPL, particularly if aggregate Vermont Medicaid payments to hospitals were to increase at a significantly higher rate than aggregate Medicare payments.

4. Additional items not considered

Our analysis generally includes claims costs for the Medicaid-eligible population. The Medicaid program makes additional payments that are not included in our analysis, such as:

- **"Clawback" payments**. Medicare Part D provides prescription drug coverage to Medicare beneficiaries. This program is funded in part from payments that states make to the federal government for dually-eligible beneficiaries (i.e. patients eligible for Medicare and Medicaid). These amounts are separate payments the state pays to the federal government and are not reflected as claims payments. In SFY13, Vermont paid approximately $25 million in clawback payments. The State will need to continue to make these payments in 2017, assuming federal law continues to require such payments.
- **Premium subsidies**. Vermont currently provides premium assistance to individuals through the Catamount Health Premium Assistance program and the Vermont Health Access Plans. These programs will be eliminated as part of Vermont's implementation of the Affordable Care Act. Vermont officials are currently assessing the state's options to supplement federal premium subsidies under the ACA. Due to the uncertainty around these policies, we assume that the Medicaid match ends at 133% for the purposes of our calculations.
- **MCO investments**. Vermont currently re-invests any surplus resulting from the Global Commitments contract with the Centers for Medicaid and Medicare Services. These amounts are not captured in the claim costs projections.

c. Medicaid Waiver Estimates

We developed population and medical cost estimates using the methods and assumptions descripted in Section II. B., above.

Overall, we estimate that the State would receive $998 million in federal financial participation in 2017 without reform.

[47] Global Commitment to Health Section 1115 Demonstration (11-W-00194/1), Special Term and Condition # 27. http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/vt/vt-global-commitment-to-health-ca.pdf, accessed December 27, 2012.

Table 38: Medicaid Estimates without Reform, 2017 (in Millions of Dollars)

Population Eligible for Federal Match	Projected Population	Projected 2017 Cost	Federal Match rate	Federal Match $
Medicaid-match eligible	124,114	$1,228	56.04%	$688
SCHIP-match eligible	4,393	$14	92.23%	$13
Population eligible for expansion FMAP	37,786	$246	87.21%	$214
Total medical claim costs	**166,293**	**1,488**		**$915**
Administrative costs (@9%)		$147	56.04%	$82
Total	**166,293**	**1,635**		**$998**

Under a single payer system, we estimate that the State would receive $1,247 million in federal financial participation, a $249 million increase. As noted above, this estimate assumes current federal rules and provisions of Vermont's current 1115 waiver continue to apply.

Table 39: Medicaid Estimates with Reform, 2017 (in Millions of Dollars)

Population Eligible for Federal Match	Projected Population	Projected 2017 Cost	Federal Match rate	Federal Match $
Medicaid-match eligible	126,395	$1,500	56.04%	$841
SCHIP-match eligible	4,393	$17	92.23%	$16
Population eligible for expansion FMAP	44,634	$357	87.21%	$311
Total medical claim costs	175,422	$1,874		$1,168
Administrative costs (@7%)		$141	56.04%	$79
Total	**175,422**	**$2,016**		**$1,247**

d. Medicare

As discussed above in Section II.B. Population Projection and Migration, we estimate that 128,738 Vermonters will be Medicare beneficiaries in 2017. Of these, 29,337 are Dual Eligible and will incur $463 million in allowed cost. The remainder, at 99,381, are Medicare beneficiaries only, not Dual Eligible, or only partially Dual Eligible (e.g. SLMB), and will incur $1,144 million in Medicare Allowed Cost. The modeling methodology and assumptions that were used to develop these cost estimates are described in detail above in Section II.D. Base Coverage Estimates.

For purposes of this analysis, we developed an estimate of Medicare secondary costs. These are costs that would be the responsibility of a Medicare beneficiary to pay out of pocket, but would be provided by GMC under GMC Medicare Option B. These costs include the Medicare Part D premium, as well as the amount required to bring Medicare coverage up to an actuarial value of at least 87% for all Medicare

beneficiaries, higher for those eligible for low income subsidies. For simplicity, we include the Medicare Part B premium in Medicare primary, even though it is paid by the individual beneficiary.

Table 40: Estimated total Medicare Allowed Cost, 2017 (in Millions of Dollars)

	Number of Individuals	Medicare Primary*	Medicare Secondary**	Total
Dual Eligible	29,357	$463	$0	$463
Medicare Only (Non-Dual and Partial Dual)	99,381	$1,061	$83	$1,144
Total	128,738	$1,524	$83	$1,607

* Medicare Primary includes Part B premium
** Medicare Secondary includes Part D premium

G. Conclusion

Vermonters could get more value at a lower cost by implementing GMC. We estimate that total statewide health care costs will be $35 million lower in the first year of a unified, single payer system than the amount that would be spent without the GMC reform. A $122 million reduction in administrative costs statewide helps to pay for that additional coverage. This calculation of administrative savings includes only the reduction in costs that are currently incurred by the many different payers that currently operate in Vermont to the average cost level incurred by an efficient provider of administrative claims services. A single payer system will support state efforts to gain additional savings, for example through providing clinical services more efficiently and through reducing fraud and abuse; we did not include potential savings from these efforts in our administrative savings estimate.

Tables 41 and 42 present the results of our analysis, comparing the coverage and resulting costs of a Vermont health care system in 2017, first without, and then with the single payer health reform.

Table 41: Total estimated health care costs without reform by type of coverage, 2017 (in millions)

2017 Coverage without GMC Reform	Number of Individuals	Total Paid Claims Per Year	Administrative cost as a % of Total Cost	Administrative Cost	Total Cost without Reform
Uninsured	12,128	$0	-	$0	$0
Individual	72,449	$474	12%	$64	$538
Small Group	51,483	$318	12%	$43	$361
Large Group	219,153	$1,346	10%	$156	$1,502
Other (VA, federal employees, etc.)	30,499	$184	12%	$25	$209
Medicaid Primary	121,794	$935	9%	$92	$1,027
Medicaid Secondary	*	$552	9%	$55	$607
Medicare Primary	128,739	$1,536	5%	$77	$1,613
Medicare – Secondary & Part D premium	*	$83	12%	$11	$94
Total Statewide	**636,244**	**$5,428**		**$523**	**$5,952**

* Number of individuals is not included in totals to avoid double counting.

We expect that under health reform in 2017, approximately 70,000 people will continue to enroll in employer-sponsored health insurance or receive insurance primarily from another source or receive care from another source, such as the VA. Although these individuals are not integrated into GMC, GMC will provide wrap coverage for those individuals, up to an 87 percent actuarial value. We expect that Medicare will continue to be the primary coverage for Medicare beneficiaries; because GMC will supplement Medicare for most Medicare beneficiaries, however, we count them as integrated into GMC.

Table 42: Total estimated health care costs with reform by type of coverage, 2017 (in millions)

2017 Coverage with GMC Reform	Number of Individuals	Total Paid Claims Per Year	Administrative cost as % of Total Cost	Administrative Cost	Total Cost with Reform
Not Integrated into GMC					
Uninsured	-	-	-	-	-
Individual	-	-	-	-	-
Small Group - Primary	7,722	$54	12%	$7	$61
Large Group - Primary	31,777	$243	10%	$28	$271
Other (VA, federal employees, etc.) – Primary	30,499	$184	12%	$25	$209
Medicare Primary	*	$1,536	5%	$77	$1,613
Total Not Integrated	**69,998**	**$2,017**		**$138**	**$2,155**
GMC Primary					
GMC Primary (not eligible for Medicaid-match)	306,584	$1,519	7%	$114	$1,633
GMC Primary - Medicaid-Match Eligible	130,922	$1,230	7%	$93	$1,323
GMC Secondary					
GMC Secondary – Medicaid-Match Eligible	*	$645	7%	$49	$694
GMC Secondary - Medicare Primary	128,739	$83	7%	$6	$89
GMC Secondary – ESI or Other Primary	*	$21	7%	$2	$23
Total GMC	**566,246**	**$3,498**		**$263**	**$3,762**
Total Statewide with GMC	**636,244**	**$5,515**		**$401**	**$5,916**
Total Statewide without GMC (from Table 41)	**636,244**	**$5,428**		**$523**	**$5,952**
Difference		**$87**		**($122)**	**($35)**

* Number of individuals is not included in totals to avoid double counting.

Single payer reform is likely to produce increased savings over time for the State as a result of lower administrative costs and through constraining the overall rate of growth in health care costs. We estimate that the State will save $281 million in the first three years of a single payer health care system, as presented in Table 43. We estimated the trend in costs in 2018 and 2019 without reform using the trend in projected national health expenditures per capita.[48] We estimated the trend in costs in 2018 and 2019 using the trend in projected Medicare spending per enrollee.[49] We used the Medicare trend because under reform, GMC payment rates will be tied to Medicare rates and administration will be unified as Medicare's is.

[48] United State Department of Health and Human Services, Centers for Medicare and Medicaid, Office of the Actuary; National Health Expenditures Projections 2011-2021, Table 1.

[49] *Ibid*, Table 17.

Table 43: Total estimated statewide health care costs, 2017-2019 (in Millions)

	2017	2018	2019	3 year total
Without reform	$5,952	$6,262	$6,606	$18,819
With reform	$5,916	$6,175	$6,448	$18,539
Savings with reform	**$36**	**$86**	**$158**	**$281**

Funding sources

Vermont will continue to receive substantial revenues from a number of sources, including the federal government, to defray the cost of health care under single payer health reform. Estimated sources of funding are summarized in Table 44 and include the following in 2017 with reform:

- Individuals and employers will pay $332 million for individuals who continue to enroll in employer-sponsored insurance under the single payer system in 2017.
- The federal Medicare program will continue to cover approximately $1.6 billion in costs incurred by Medicare beneficiaries.
- The State will receive $1.2 billion in federal financial participation on $2.0 billion in qualified state Medicaid expenditures. We estimate federal matching dollars for the Medicaid program would be $249 million higher under the single payer system than without reform, assuming the federal government agrees to extend the terms of the current state Medicaid 1115 waiver.
- The State will receive $267 million through an ACA waiver, assuming the federal government agrees to provide the net amount it would otherwise have spent in Vermont.
- Other sources of coverage, such as the federal employees' health insurance program and the Veteran's Administration, will spend $209 million.
- We assume that the State will continue to contribute the same amount of funding for the Medicaid program with or without reform, $637 million; the state legislature will ultimately determine this amount. The incremental state share of Medicaid funding under health reform is included in Amount to be Financed.

Table 44: Sources of funds with and without reform, 2017 (Millions of Dollars)

	Without reform	With reform	Difference
Individuals and Employers *	$2,228	$332	($1,896)
Federal: Medicare	$1,613	$1,613	$0
Federal: Medicaid Match	$998	$1,247	$249
Federal: ACA	$267	$267	$0
Federal: Other	$209	$209	$0
State Medicaid Funding	$637	$637	$0
Total Sources of Funds	**$5,952**	**$4,305**	**($1,647)**
Total System Costs	**($5,952)**	**($5,916)**	**$35**
Amount to be Financed		**($1,611)**	**($1,611)**

* Individuals and Employers: includes individuals, small group and large group. Without reform also includes Medicare Secondary & Part D premiums. Without reform is net of ACA premium and cost sharing subsidies.

The remaining $1.6 billion of reform to be financed are a portion of the costs that have been covered by employers and individuals through their contributions to health care premium costs. We expect that employers and individuals will continue to make significant contributions to health care costs under a single payer system. Employers' and individuals' spending on health care would be far higher without reform, however. Both employers and employees will benefit from the significantly lower costs required to administer a single payer health care system, improved coordination of care and benefits, and lower rates of growth in health care premiums.

As noted throughout this report, it is very difficult to project costs and revenues several years into the future, and it is particularly difficult to project the effects of untested reforms. We made many assumptions and estimates in order to develop these projections. To the extent that actual outcomes differ from these assumptions, these differences could produce small or large differences in the results, depending on the order of magnitude of the variance.

Nonetheless, our analysis demonstrates that it is very likely that a single payer system would reduce total statewide health care costs in Vermont. The total amount publicly financed by individuals and employers under a single payer system would likely be lower than the total amount paid by individuals and employers without reform. The State has an historic opportunity to create a financing system that is more progressive than the current system.

IV. Financing considerations

Green Mountain Care requires a dedicated public revenue source or sources. The mechanism for collecting these revenues will be new to Vermonters; however, the publicly financed system will draw upon dollars already used to pay for health care by businesses and individuals. While the publicly-financed system will be new, the State may draw upon revenue models utilized in Vermont and other jurisdictions, including the many countries that finance universal health systems. The new system provides an opportunity to re-evaluate Vermont's revenue system to determine the most efficient and important policy and revenue choices. Also, a new system may be able to address inequities in the current financing of health care, such as the regressive nature of health care spending. Any fundamental restructuring of Vermont's revenue system should be considered strategically given the potentially important interplay between funding Green Mountain Care and possible reforms to Vermont's tax code.

1. Financing Mechanisms

Currently, Vermonters spend nearly $6 billion annually to finance the present health care system, including federal contributions. Table 45 depicts total health care spending by contributor.

Table 45: 2013 Resident Expenditures by Contributor (Projected)[50]

Contributing Group	Amount Spent on Health Care (Millions)
Out of Pocket	$846.4
Private Insurance	$2,186.4
Medicare & Medicaid	$2,659.2
Other Government	$238.9
Total	$5,930.8

The table above sets forth the different ways individuals contribute nearly $6 billion to health care in Vermont. Individuals contribute through out of pocket expenses, purchasing insurance, offering insurance through their business, foregone wages, and through paying state, local, and federal taxes. GMC will redirect the portion of this revenue currently paid by individuals through out of pocket expenses and private insurance into a publicly financed system. While this represents a major policy shift, it also demonstrates that any financing mechanism does not need to start from scratch. Rather, the primary task for policymakers will be to redirect the already considerable investment in health care to a single system that saves Vermont money compared to the present system.

It is instructive to highlight the out of pocket and private insurance contributions to health care made by individuals and businesses.

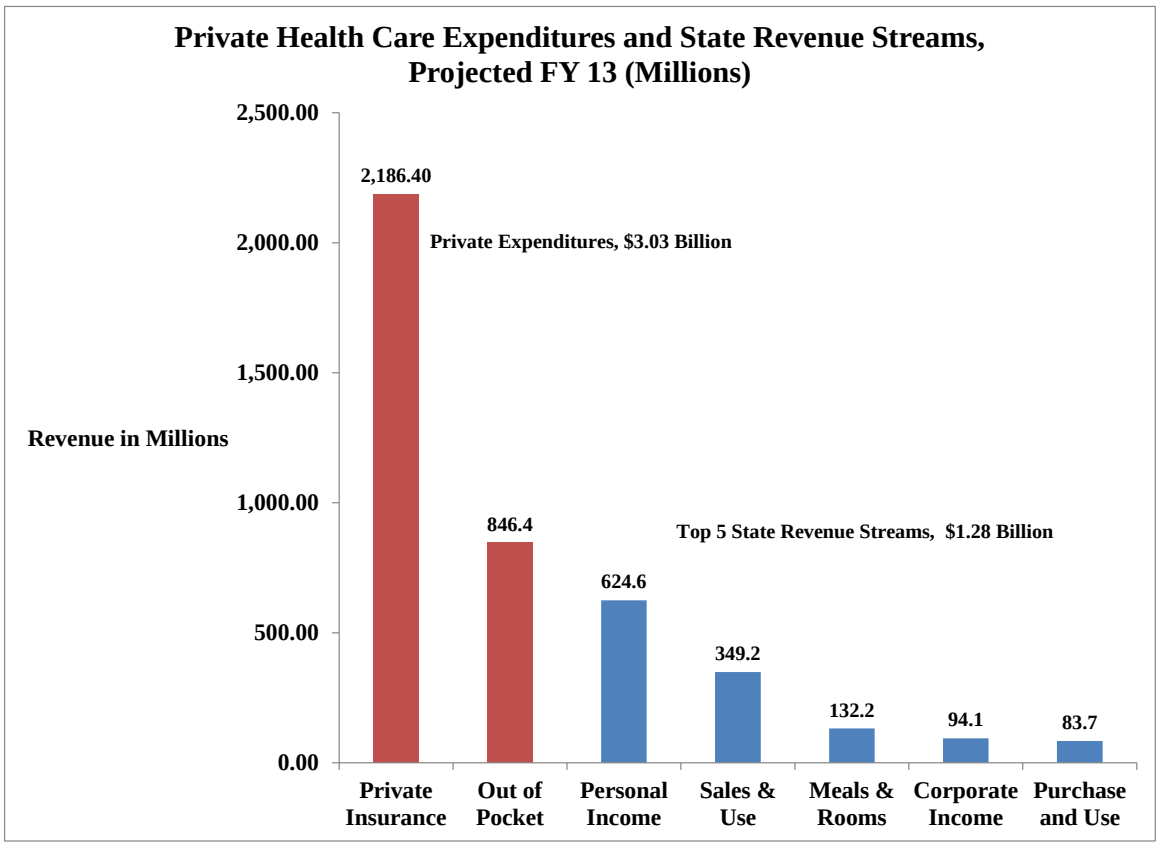
[50] 2009 Vermont Health Care Expenditure Analysis & Three Year Forecast, Department of Financial Regulation, March 2011. *See* http://www.dfr.vermont.gov/sites/default/files/2009%20EA%20REPORT.pdf.

Table 46: 2012 Vermont Health Care Expenditures for Individuals and Employers (Projected)[51]

Contributing Group	Amount Spent on Health Care (Billions)
Employers	$1,749.2
Individuals	$1,283.7

The current system requires individuals and employers to make a substantial and regular non-tax contribution to health care, contributions that exceed nearly all existing state revenue streams. Figure 1 puts this spending in context, comparing projected employer and individual contributions with the State's top five traditional revenue streams.[52]

Figure 1: Private Health Care Expenditures and State Revenue Streams, Projected FY 13 (Millions)[53]



Current spending on health care dwarfs Vermont's current income tax and is distributed differently. The cost to an individual for a health insurance premium, even for individuals who are enrolled in employer-sponsored health insurance, varies widely depending on the plan design, the share of the cost covered by the employer, and whether the employee purchases coverage for a single individual, for two people, or for a family. The amount that an individual is required to contribute toward the premium cost is much higher as a

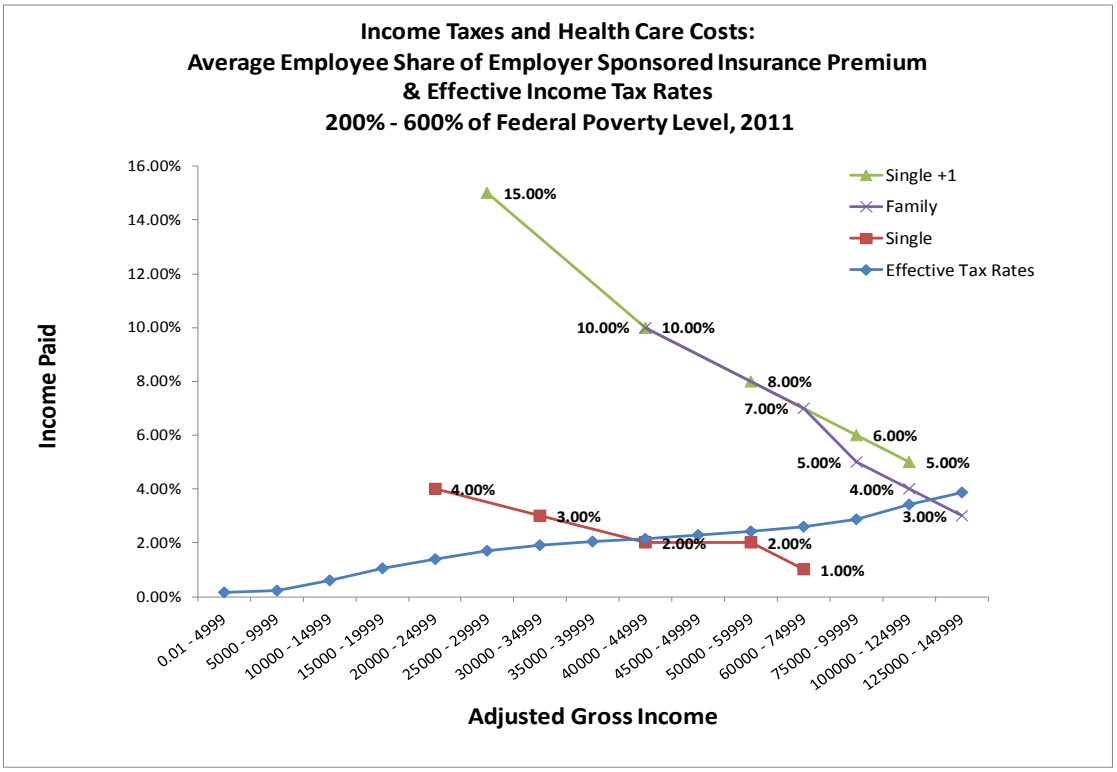
[51] 2009 Vermont Health Care Expenditure Analysis & Three Year Forecast, Department of Financial Regulation, March 2011. 2011 See 2011 Medical Expenditure Panel Survey Data. See also 2013 Basic Needs Budget and the Livable Wage study, Vermont Joint Fiscal Office, http://www.leg.state.vt.us/jfo/reports/2013%20Basic%20Needs%20Report%2001-15-2013.pdf

[52] Excludes statewide education property tax.

[53] Does not include Statewide Education Property Tax. Estimates based on 2009 Vermont Health Care Expenditure Analysis & Three Year Forecast, Department of Financial Regulation and January 2013 Revenue Forecast.

percent of income for low-income individuals and families than for those at the higher end of the income spectrum. This distribution is markedly different from the distribution of state effective personal income tax rates, as demonstrated in Figure 2.

Figure 2: Income Taxes and Health Care Spending



A future financing plan will likely feature a substantial and regular individual and employer contribution, similar to current law, albeit one paid through a public system. Policymakers may consider focusing their inquiry on how contributions to a public system can resemble the current system, both from a policy standpoint and administratively, to minimize equity issues and transition issues for individuals and employers.

While considering revenue mechanisms for Green Mountain Care, Vermont's current revenue system provides an important touchstone in reviewing funding mechanisms, as current law revenue streams may be easier for the state to administer and for payers to understand compared to new revenue sources. Table 47 lists each current law revenue source, total annual revenue generation under current law, and how much could be raised incrementally.

Table 47: Current Law Revenue Sources Greater than $10 Million[54]

Revenue Source	FY 2013 Revenue (Forecast)	Tax Rate	Unit of Tax	New Revenue (Millions)
Payroll Tax	N/A	N/A	1%	$119[55]
Personal Income Tax	$624.6	Various	1%	$109[56]
Sales and Use Tax	$349.2	6%	1% Sales	$58.2
Meals & Rooms (and Alcohol)	$132.2	9% & 10%	1% Sales	$14.6
Corporate Income Tax	$94.1	Various	1% Surcharge	$0.9
Purchase and Use	$83.7	6%	1% Sales	$14.0
Cigarettes & Tobacco	$74.3	2.62 per pack	1 Penny	$0.3
Gasoline	$59.1	0.19	1 Penny per Gallon	$3.2
Insurance Premium	$59.3	Various	1% Value	$29.2
Property Transfer Tax	$28.3	Various	1% surcharge	$0.3
Liquor	$16.8	25%	1%	$0.7
Diesel	$15.6	0.25	1 Penny per Gallon	$0.6
Bank Franchise	$10.4	0.0096%	.0001% Increase	$0.1

Calculating the revenue raising potential of each funding mechanism listed in the table above is a function of multiplying the tax base by the relevant increment. Yet, it is important to note that policy choices embedded in current law reduce the tax base of each revenue mechanism and reduce their potential as a financing source for government generally and Green Mountain Care specifically.

Tax expenditures, more commonly known as tax credits and deductions, reduce the amount of revenue that would otherwise be collected in order to encourage particular activity.[57] They are another form of government spending, and, if reevaluated and removed from the tax code, they can generate substantial revenue. For example, the amount of revenue raised by a 1% tax on personal income would rise from $109 million to $138 million if tax expenditures were removed from the income tax code.

Policymakers may consider evaluating and comparing the importance, value, and effectiveness of each tax expenditure compared to the importance and value of implementing and sustaining GMC. For example, the report demonstrates the potential savings and efficiencies created by GMC, and it may be productive to determine whether individual tax expenditures provide similar value and efficiency for Vermonters. States are applying more scrutiny to tax expenditures over time, and Vermont has joined this trend through adoption of a tax expenditure report, tax expenditure budget, and the

[54] Consensus Joint Fiscal Office and Administration Forecast of January 2013 unless otherwise noted.

[55] Estimate based on Vermont labor market information published by the Vermont Department of Labor. See http://www.vtlmi.info/indnaics.htm

[56] Estimate provided by the Vermont Department of Taxes based on Tax Year 2011 data.

[57] For more introductory information on tax expenditures see these publications by the Center for Budget and Policy priorities.

1. Reforming Tax Expenditures Can Reduce Deficits While Making the Tax Code More Efficient and Equitable , http://www.cbpp.org/cms/?fa=view&id=3472; and,
2. Promoting State Budget Accountability Through Tax Expenditure Reporting, http://www.cbpp.org/cms/index.cfm?fa=view&id=2772

recommendations of Vermont's Blue Ribbon Tax Structure Commission.[58] Table 48 sets forth Vermont's tax expenditures by tax type and revenue value.

Table 48: Tax Expenditures[59]

Tax Type	Revenue Impact (2014 Estimated, Millions)
Sales and Use Tax	$595.4
Income Tax (Federal Pass-Through)	$289.9
Property Taxes	$277.1
Personal Income Tax (State Level)	$50.2
Purchase and Use	$30.4
Insurance Premium	$19.5
Gasoline & Diesel	$13.2
Meals and Rooms	$11.0
Corporate Income Tax	$4.39
Bank Franchise Tax	$3.7
Total	**$1,290.4**

Beyond current revenue sources and tax expenditures, Vermont should consider other revenue sources and systems used by the federal government and other states. Other jurisdictions use gross receipts taxes, the taxation of a broader range of services, business enterprise taxes or other types of corporate taxation, and payroll taxes to raise revenue. Each new revenue mechanism would need to be defined and estimated prior to being analyzed and considered by policymakers.

2. Public Finance Mechanisms Used Internationally

It is important to note that publicly financed health systems have succeeded in multiple countries. These countries provide policymakers with models that, taken whole or in part, may offer a template for Vermont. Table 49 provides a general overview of how other countries fund publicly financed health systems.

[58] The Blue Ribbon Tax Structure Commission's report is available at http://www.leg.state.vt.us/jfo/blue_ribbon_tax.aspx.
[59] Vermont Tax Expenditures 2013 Biennial Report. Joint Fiscal Office and Vermont Department of Taxes. See http://www.leg.state.vt.us/reports/2013ExternalReports/285253.pdf

TABLE 49: Publicly Financed Health System Revenue Mechanisms[60]

Country	Basic Health Coverage	Funding Mechanisms	Government Funding as % of Total Health Care Spending
Australia	Australian Medicare provides free or subsidized access to most medical and some optometry services and prescription drugs.	General tax revenue; earmarked income tax of 1.5%	70%
Canada	Canadian Medicare provides universal coverage for physician and hospital services. Provincial and territorial governments provide varying levels of additional insurance for prescription drug, dental, vision, home care, and ambulance services.	Provincial/federal tax revenue	71%
Denmark	Provides coverage of all primary and hospital services based on medical assessment of need.	Earmarked income tax of 8%	85%
England	The National Health Services (NHS) provides preventive services, inpatient and outpatient hospital services, specialist care, general practitioner services, inpatient and outpatient drugs, dental care, mental health care, learning disabilities, and rehabilitation.	General tax revenue, including employment-related insurance contributions	82% (76% of total government expenditure on health care from general taxation and 18% from payroll tax)
Estonia	Provides universal health coverage and comprehensive benefits	Earmarked social payroll tax; general tax revenue; co-payments	79%
France	Universal Coverage. The public health insurance scheme covers hospital care, ambulatory care, and prescription drugs. It provides minimal coverage of outpatient eye and dental care. Preventive services (immunizations) are covered to a certain extent, usually for defined target populations.	Employer/employee earmarked income and payroll tax; general tax revenue; earmarked taxes	77% Mostly financed by: • Payroll tax: 43% • Income tax: 33% • Alcohol & Tobacco tax: 8% • State subsidies: 2% • Transfer from Soc. Sec.: 8%
Germany	Health insurance is mandatory for all citizens. Statutory Health Insurance (SHI) covers 85% of the population.	Employer payroll tax of 7.3% gross income; employee payroll tax of 8.2% of gross income; general tax revenue	58%, 77% if including long-term care insurance, statutory accident insurance, etc…
Italy	The public health system (Servizio Sanitario Nazionale, or SSN) covers all citizens and legal foreign residents.	National earmarked corporate and value-added taxes; general tax revenue and regional tax revenue	80%

[60] S. Thomson, R. Osborn, D. Squires, and M. Jun, International Profiles of Health Care Systems, 2012, The Commonwealth Fund, November 2012; Dept. of Health, R.O.C. (Taiwan), 2010 NHE Table at http://www.doh.gov.tw.

Country	Basic Health Coverage	Funding Mechanisms	Government Funding as % of Total Health Care Spending
Japan	Statutory health insurance system, noncompeting public, quasipublic , and employer-based insurers to provide universal coverage.	General tax revenue; insurance contributions-- employee contributions of 3-10% of income for those employed by large employers, 10% income for those employed by small or medium employers	81%
Netherlands	All residents and those paying income tax in the Netherlands are required to purchase health insurance coverage.	Earmarked payroll tax of 6.9% of up to $41,423of annual taxable income; community-rated insurance premiums; general tax revenue	86%
New Zealand	All residents have access to broad range of health and disability services funded primarily by the government.	General tax revenue	83%
Norway	Universal coverage	General tax revenue	86%
Sweden	Universal coverage offers a broad range of services.	General tax revenue	81%
Switzerland	Covers most GP and specialist services, a list of pharmaceuticals, and some preventive measures.	Community-rated insurance premiums ranging from $2,907-$4,973; general tax revenue	60% • General taxation direct spending makes up 19.4% of overall spending • 5.8% of overall spending goes to premium subsidies • Premiums paid for 29.3% of overall spending
Taiwan	National Health Insurance (NHI) offers comprehensive coverage of preventive, inpatient, outpatient, prescription drug and dental services.	Premiums based on payroll tax, supplemented with out-of-pocket payments and direct government funding	57%
United States	Medicare for individuals 65+ and some individuals who are disabled. Medicaid for some low-income individuals.	Medicare: payroll tax, premiums, federal tax revenue Medicaid: federal, state tax revenue	49%

Overall, the challenge of financing Green Mountain Care presents an opportunity to re-evaluate Vermont's revenue system to determine the most efficient and important policy and revenue choices. Moreover, a fundamental restructuring of Vermont's revenue system should be considered strategically given the potentially important interplay between funding Green Mountain Care and possible reforms to Vermont's tax code.

Repositioning Vermont's revenue structure contemplates a deliberate and ongoing dialogue with many Vermonters. The federal delay in action that requires Vermont to wait until at least 2017 to implement Green Mountain Care provides a potential window of opportunity over the next several years for policymakers and the public to

engage in an open and transparent dialogue about how to finance health care and government. This conversation provides an opportunity to inform and craft a finance plan that comports with the principles espoused in Act 48 and make Vermont more healthy, equitable, and competitive.

V. Recommendations for further study

A. Considerations for Transition

1. Claims run-out

As GMC is implemented, private Vermont insurers will have a certain amount of claims that have been incurred but not yet paid. This is due to the lag it takes for providers to submit claims and for insurers to receive, process, and pay claims. The period of time for insurers to catch up with this lag is referred to as "claims run-out." Insurers carry reserve amounts to cover the costs of these claims. As individuals are enrolled into GMC, there will be some amount of claims run-out for which their prior insurers will be liable. The transition plan for GMC should ensure that this claims run-out is paid, and, if necessary, clarify state laws or regulations so that the prior insurers will be liable for this amount.

2. Reserves and surpluses

In addition to the reserves for incurred but not yet paid claims, insurers hold additional reserves, such as premium reserves or reserves for future benefits. Insurers will often carry surpluses, which are amounts held over required reserve amounts. Surpluses are generally accumulated from operating profit or investment income.

As Vermont transitions to GMC, there will be two key considerations. First, state officials must consider what should be done with existing insurer reserves and surpluses. If, as expected, most Vermonters enroll in GMC for primary coverage, their prior insurers will be holding surplus funds that exceed the insurer's need. As no state has implemented a single payer as Vermont as proposed, this will be a new consideration for state regulators. This transition may be comparable to situations in which a non-profit insurer or health care provider converts to a for-profit. In these circumstances, state regulators will often require the company to contribute funds to a public foundation that will provide a community benefit.

Second, GMC will need to establish mechanism(s) to cover expected/budgeted and unexpected/unbudgeted costs. Because state programs generally operate on a cash rather than accrual basis, the State may not need to maintain a surplus at a level similar to a private insurance company. However, the State may wish to establish a rainy day fund or purchase reinsurance to cover unexpected costs. State officials should consider all sources for funding these mechanisms, including taxes, premium payments, and the excess insurer surpluses noted above.

3. Contributions transition

The financing of GMC will need to be carefully planned to ensure a smooth transition from the current employer-based financing system to a more centralized single-payer financing model. Employers and employees currently contribute amounts on a regular basis, such as biweekly, for health care premiums. As GMC begins, steps should be taken to avoid requiring individuals and employers to pay both private premiums and GMC contributions simultaneously. How best to mitigate this issue will depend on the financing arrangement selected.

4. Administrative Costs and Savings

The state will incur costs for planning and building the infrastructure needed to effectively administer GMC. This includes collecting the GMC contributions, processing claims, enrolling members, and providing customer service. The state will be able to leverage resources from other areas of the state, such as DVHA, the Exchange, and existing insurers, but it some additional costs will be needed to fully staff and run GMC. Likewise, providers will incur additional expenses, such as information technology investments, to adapt to new claims payment rules and any additional clinical reforms, including greater use of electronic medical records. While it is too early in the planning stage to determine the exact nature and amount of these costs, state officials will need to plan for these costs and explore options for funding these expenses.

It is likely that the administrative savings for both providers and GMC will be realized shortly after GMC implementation, but not all at once. For modeling purposes, we assumed that 20% of the total savings will occur in 2017, 70% in 2018, and 10% in 2019.

5. Tax considerations

As the state transitions to a new financing model for GMC, officials should consider the federal tax implications for those individuals who receive coverage through employer-sponsored insurance (ESI). Under federal tax law, premium contributions for ESI are exempt from federal taxation. This is a substantial financial benefit to employees, and any financing mechanism for GMC should seek to retain this financial benefit. If the state elects to finance GMC through an income tax, this federal tax benefit will be lost for those taxpayers who have ESI and who do not itemize deductions on their federal return.[61]

One option to consider is structuring the financing to allow contributions to GMC to be made through section 125 "cafeteria" plans, which allow employees to purchase coverage pre-tax through their employers. While the ACA has modified the use of these by precluding employees from using section 125 plans to purchase individual coverage through an exchange, there may be an opportunity for the state to structure GMC financing by making use of section 125 plans[62]. State officials should consider these federal tax implications and options when negotiating the ACA waiver with the federal government.

[61] Nationally, approximately 70% of tax filers do not itemize. See Tax Policy Center, "Who Itemizes Deductions?" January, 2011. http://www.urban.org/uploadedpdf/1001486-Who-Itemizes-Deductions.pdf, accessed January 4, 2013.

[62] See California HealthCare Foundation (P. Butler), "Employer Cafeteria Plans: States' Legal and Policy Issues." October 2008. http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/E/PDF%20EmployerCafeteriaPlans.pdf, accessed January 4, 2013.

B. Data Requirements

There are several key data points that would be useful for the state to gather to more accurately inform the development of GMC:

1. Employer-sponsored insurance (ESI) data

The transition to single-payer will be a significant departure from the current employer-based insurance system. There are several data elements that would be critical to know in order to facilitate a smooth transition. We recommend that state undertake a collection effort to gather detailed data on all employer-sponsored insurance spending and utilization; we believe that survey data is insufficient to meet this data requirement. As this data must be obtained from employers, the Vermont Department of Labor is the most logical agency to lead this collection effort. The items needed include:

- Dollar amounts paid by employers and employees on ESI premiums, by plan type (i.e. single, single+1, family), by employee income level, by firm size, and by firm type ;
- Employee enrollment by plan type (i.e. single, single+1, family), by the actuarial value of the insurance plan, by employee income level, by firm size, and by firm type;
- The incidence of eligible employees not enrolling in employer-sponsored coverage and their income levels;
- The extent to which ESI-unenrolled employees obtain coverage through the Exchange; and
- The number of employers not offering minimum essential coverage and the number of their employees.
- The distribution of insurance premium amounts (ranked highest to lowest) by quintiles or deciles, and the number of lives covered by plans in each portion of the distribution.

By collecting this information, policymakers will be better able to tailor contribution schedules to ensure progressivity and to smooth the transition from current premium contributions to the new financing system. Additionally, the data can be used to estimate the premium tax credit and employer penalty parts of the ACA waiver. Collection of firm type will be useful for economic modeling purposes to evaluate the impact on specific economic sectors. The distribution of premium amounts would support a more accurate analysis of the potential effect of the excise tax on high-cost health plans, part of the ACA waiver analysis.

2. Administrative Expenses

As noted above, the estimates for provider administrative savings were derived from prior studies that used other state data or, in some cases, data from national surveys. It is possible that Vermont providers have different administrative cost structures. It would be useful to conduct a survey of physician groups and other health care providers to assess the time and money spent on billing and insurance-related tasks. For hospitals, changes to the annual budget filing may enable the state to collect more granular data on billing and insurance-related expenses, although care should be taken to ensure uniform allocation of capital and other overhead expenses.

3. Average medical costs by FPL level

The cost sharing reduction portion of the ACA waiver estimate requires information about average medical costs. The current model uses the same average figure across all income levels. It is likely, however, that lower income people have somewhat higher average medical costs. Medical cost data stratified by income, perhaps from the Exchange or the Vermont Healthcare Claims Uniform Reporting and Evaluation System (VHCURES), would help to refine this part of the model.

C. Refined estimates

The State of Vermont should continue to refine the estimates included in this report as it continues to develop plans for implementing a reformed and unified health care system.

1. Base cost estimates

After Vermont implements its Exchange in 2014 and individuals enroll in coverage through the Exchange, the State will have much better data on the number of individuals who remain uninsured, the number enrolled in subsidized insurance, the number enrolled in unsubsidized insurance and the number covered by ESI. In addition, a future base-year will provide more accurate estimates of health care prices in 2017.

2. ACA waiver analysis

Most parts of the ACA waiver analysis can be refined through the data collection enhancements described above, as well as data from actual experience after the coverage provisions of the ACA have gone into effect. For example:

- ***Premium tax credits and cost sharing reductions.*** When the Exchange is operating, analysts can use the actual second-lowest silver plan premium in the estimate of premium tax credits for the ACA waiver.
- ***Estimate of insurer fee*** can be improved by a better accounting of the total U.S. premiums that will be subject to the fee. This requires information about the portion of premiums going to not-for-profit carriers, and the portion going to carriers with less than $25 million and $50 million in revenue.
- ***Estimate of individual penalty*** can be improved by data from the IRS on actual experience of individuals subject to the coverage requirement who do not obtain coverage for part or all of the year.

3. Employer and Individual Health Care Costs

Collecting accurate data on current employer and individual health insurance premium costs and individual cost sharing will enable the State to determine the total amounts that employers and individuals are currently spending on health care. The State can use this information to develop requirements for continued support from employers and individuals for health care costs.

4. Administrative Costs of Operating Green Mountain Care

Finally, the State should develop detailed operational and financial plans for administering the GMC plan under health reform. A detailed plan will help the State to refine its estimates of the total administrative savings that will be realized through health reform.

VI. Caveats

As noted throughout this report, it is very difficult to project costs and revenues several years into the future, and it is particularly difficult to project the effects of untested reforms. We made many assumptions and estimates in order to develop these projections. To the extent that actual results differ from these assumptions, our results could be materially affected. The issues driving the inherent uncertainties in our estimates are reviewed here:

1. Our analysis was completed with 2011 market information. Even in the absence of ACA changes, the market will change significantly over the course of seven years (2011 to 2017).

2. Statutory and regulatory changes, as well as new guidance from the federal government may affect the appropriateness of our ACA adjustments. Similarly, any changes to existing state law and regulations may significantly affect the estimates.

3. Many details regarding the structure of a single payer system in Vermont have not been determined. These details may significantly affect the assumptions underlying our models and therefore the results of our models. As further details are considered and ultimately decided upon, our estimates should be updated.

4. The 2017 cost estimates under GMC assume the same level of utilization and cost management as currently achieved by at risk, non-profit insurers. If the State manages costs more or less aggressively, actual costs could vary significantly from our estimates.

5. The behavior of individual members and employers is difficult to predict; actual behavior may not match our predictions.

6. Rate changes in the small group market under the ACA and other financial incentives may drive employers to make unanticipated decisions around coverage. If actual migration differs notably from the assumptions used in this analysis, the cost estimates would also be affected.

7. The currently uninsured population will likely represent a significant portion of the individual insurance market in 2014. Shifts in enrollment may occur differently from what has been estimated.

8. Our projections do not consider changes in costs due to revised contracting, for example in response to potential cost shifting and ACA changes. Reduced contract costs might result from eliminating the level of uncompensated care for uninsured residents; alternatively, increases in contracted costs may be necessary because of provider capacity limits. Cost shifting may also occur among the various Commercial, Medicaid and Medicare markets but is difficult to predict. The cost estimates are highly sensitive to the provider payment level assumptions. Thus, the cost estimates should be revised in the future when more current information is available.

9. Pent up demand has been shown to significantly increase costs in the first year of enrollment for those previously uninsured. Our estimates do not reflect estimates for pent up demand in 2014 and 2017, since the effect is uncertain and may be offset by reduced utilization as members may not fully understand new or increased coverage. This is an important

assumption and should be studied more fully and monitored closely once the program is up and running.

10. We received data from multiple sources. We attempted to understand and appropriately use the data provided. We performed basic reasonability checks but did not audit the data and information.

11. Some individuals may enroll in catastrophic plans, which have less restrictive cost sharing requirements under the ACA. The impact of these plans on the estimates of the ACA changes is not expected to be significant, but would lower the costs under the scenarios without reform.

12. Emerging federal and state regulations and data should be evaluated and the estimates contained in our analysis updated.

13. Estimates of funding sources (e.g. federal, state, employer, etc.) were estimated at a very high-level and are intended to be illustrative in nature. A more in-depth analysis is necessary to more accurately estimate the contribution from each source.

VII. Appendices

Appendix 1: Predicted ACA Membership Migration

			2014 ACA Coverage Migration								
2012 Coverage	2012 Members	2014 Members	Individual	Small Group	LG / SI	VEHI / VADA	Medicare	Medicaid Primary	Uninsured	Other*	Total
Individual	4,014	3,974	3,374	0	0	0	0	600	0	0	3,974
Small Group	40,829	40,422	11,940	23,964	0	0	0	4,518	0	0	40,422
Association	20,716	20,509	6,058	12,159	0	0	0	2,292	0	0	20,509
LG / SI	206,963	204,899	1,305	0	201,854	0	0	1,739	0	0	204,899
VEHI / VADA	44,062	43,622	0	0	0	43,622	0	0	0	0	43,622
Medicare	108,395	116,115	0	0	0	0	116,115	0	0	0	116,115
Catamount	14,069	13,929	12,779	0	0	0	0	1,150	0	0	13,929
Medicaid Primary	113,891	112,755	8,906					103,848			112,755
Uninsured	44,568	44,123	13,570	0	0	0	0	5,930	24,623	0	44,123
Other*	31,273	30,961	0	0	0	0	0	0	0	30,961	30,961
Total	**628,780**	**631,309**	**57,932**	**36,123**	**201,854**	**43,622**	**116,115**	**120,078**	**24,623**	**30,961**	**631,309**

* Other includes federal employees, including military

Appendix 2: Predicted Membership by Post-ACA Coverage – 2014 through 2017

2014 Post-ACA Coverage	2014 Members	2015 Members	2016 Members	2017 Members
Individual	57,932	66,337	72,813	72,449
Small Group	36,123	32,348	51,741	51,483
Association	0	0	0	0
Large Group / Self-Insured	201,854	200,845	220,255	219,153
VEHI / VADA	43,622	43,404	0	0
Medicare	116,115	120,179	124,386	128,739
Medicaid Primary	120,078	121,553	122,406	121,794
Uninsured	24,623	17,324	12,189	12,128
Other*	30,961	30,806	30,652	30,499
Total	**631,309**	**632,797**	**634,440**	**636,244**

* Other includes federal employees, including military

Appendix 3: Predicted Single-Payer Reform Migration

		2017 Reform Migration Coverage					
2017 Coverage	**2017 Members**	**GMC Primary (Commercial)**	**GMC Not Primary (Commercial)**	**GMC Primary - Medicaid Match Eligible**	**Medicare**	**Uninsured**	**Total**
Individual	72,449	72,449	0	0	0	0	72,449
Small Group	51,483	43,760	7,722	0	0	0	51,483
LG / SI	219,153	181,755	31,777	5,621	0	0	219,153
Medicare	128,739	0	0	0	128,739	0	128,739
Medicaid Primary	121,794	0	0	121,794	0	0	121,794
Uninsured	12,128	8,621	0	3,507	0	0	12,128
Other*	30,499	0	30,499	0	0	0	30,499
Total	**636,244**	**306,584**	**69,998**	**130,922**	**128,739**	**0**	**636,244**

* Other includes federal employees, including military

Appendix 4: Commercial Paid Claim Cost Development

		2014 Claim Cost Projection Assumptions						2017 Claim Cost Projection Assumptions		
				2014 ACA Changes						
Pre –ACA Coverage	2011 Paid Claim Cost PMPM	Annual Trend[1] 2012-2014	Cost Shifting Impact[2]	Essential Health Benefits	Actuarial value incl. cost sharing subsidies	Population Change[3]	2014 Paid Claim Cost PMPM[4]	Annual Trend[5] 2015-2017	Population Change[6]	2017 Paid Claim Cost PMPM[7]
Individual	$323.03	4.2%	0.00%	3.0%	56.7%	-20.0%	$471.32	5.0%	0.0%	$545.60
Small Group	$360.86	3.8%	0.00%	2.0%	0.0%	5.9%	$435.61	4.5%	1.6%	$505.43
Association	$424.44					Not Applicable				
Large Group / Self-Insured	$376.30	3.8%	0.00%	0.0%	0.0%	0.0%	$420.41	4.5%	1.9%	$489.45
VEHI / VADA	$424.44	3.8%	0.00%	0.0%	0.0%	0.0%	$474.19		Not Applicable	
Catamount	$423.53					Not Applicable				
Other*	$376.30	3.8%	0.00%	0.0%	0.0%	0.0%	$420.41	4.5%	0.0%	$480.20
Total	**$384.42**						**$436.19**			**$501.79**

Notes

* Other includes federal employees, including military

1. 2012 – 2014 Annual Trend reflects the average annual trend for that period. To calculate aggregate impact for trend on the individual market from 2012 through 2014, the calculation is (1 + 4.2%)^3 – 1 or 13.1%.
2. The claim cost projection assumes no impact from cost shifting.
3. Population change captures the estimated morbidity impact from the ACA coverage migration as shown in Appendix 1
4. 2014 Paid Claim Cost PMPM reflects the 2011 paid claim costs PMPM adjusted for the 2014 claim cost projection assumptions
5. 2015 – 2017 Annual Trend reflects the average annual trend for that period.
6. Population change captures the estimated morbidity impact from the 2017 Single-Payer Reform coverage migration as shown in Appendix 3
7. 2017 Paid Claim Cost PMPM reflects the 2014 paid claim costs PMPM adjusted for the 2017 claim cost projection assumptions

Appendix 5: Medicaid Claim Cost Development

Medicaid Eligibility Category	2011 Claim PMPM[1]	Annual Trend 2012-2014[2]	2013 PCP Adjustment[3]	October 2013 Provider Rate Increase[4]	2014 PMPM[5]	Annual Trend 2015-2017[7]	2017 PMPM[8]
ABD Adults	$924.37	3.8%	0.35%	3.0%	$1,067.19	4.7%	$1,225.91
ABD Children	$1,993.52	0.0%	0.35%	3.0%	$2,062.65	4.1%	$2,324.62
General Child	$317.10	2.3%	0.35%	3.0%	$350.67	4.1%	$395.21
General Adult	$574.71	1.8%	0.35%	3.0%	$626.72	4.7%	$719.94
Global Expenditure	$365.39			Not Applicable			
SCHIP	$206.30	4.3%	0.35%	3.0%	$241.68	4.1%	$272.37
New Adult 2014		Not Applicable			$468.98[6]	4.7%	$538.73
Duals	$1,503.01	0.9%	0.35%	3.0%	$1,597.90	4.7%	$1,835.56
Global Pharmacy	$11.90	4.2%	0.35%	3.0%	$13.94	4.7%	$16.01
Optional Expenditures	$144.60	-0.1%	0.35%	3.0%	$149.18	4.1%	$168.13
Total	**$563.75**				**$638.67**		**$744.95**

Notes

1. 2011 Claim Cost PMPM reflects total costs for eligibility category (including both primary and secondary beneficiaries)
2. 2012 – 2014 Annual Trend reflects the average annual trend for that period. To calculate aggregate impact for trend on ABD Adults from 2012 through 2014, the calculation is (1 + 3.8%)^3 – 1 or 11.8%.
3. The Primary Care Physician (PCP) adjustment reflects the impact of the ACA PCP payment rate increase
4. The October 2013 provider rate increase reflects the anticipated change in Medicaid provider payment rates
5. 2014 Paid Claim Cost PMPM reflects the 2011 paid claim costs PMPM adjusted for the 2014 claim cost projection assumptions
6. The New Adult 2014 projected claim cost PMPM is based on DHVA's estimate adjusted for the PCP adjustment and the provider rate increase
7. 2015 – 2017 Annual Trend reflects the average annual trend for that period.
8. 2017 Paid Claim Cost PMPM reflects the 2014 paid claim costs PMPM adjusted for the 2017 claim cost projection assumptions.

Appendix 6: Options for including Medicare beneficiaries in Green Mountain Care (GMC)

			Option A GMC Medicare Advantage buy-in	**Option B** GMC narrow wrap coverage	**Option C** GMC broad wrap coverage
Supplemental Medical Care					
Take up rate of Medicare Only Beneficiaries into GMC non-Medicaid plan			40%	80%	100%
Take up rate of Partial Duals into GMC non-Medicaid plan			40%	100%	100%
Take up rate of Full Benefit Duals into GMC non-Medicaid plan			0%	0%	0%
Number of Medicare beneficiaries	Total Beneficiaries	128,739	39,753	80,071	99,382
	Medicare Only-Non Dual (75%)	96,554	38,622	77,243	96,554
	Partial Dual (9%)	2,827	1,131	2,827	2,827
	Full Dual (23%)	29,357	0	0	0
GMC Supp cost-sharing above Medicare - PMPM @ 87% AV	Medicare Only (Non-Dual)		$26.78	$26.78	$26.78
	Partial Dual		$43.01	$43.01	$43.01
	Full Dual (Covered by Medicaid)		$0.00	$0.00	$0.00
GMC Cost for Medical Care[2]			$12,995,000	$26,283,000	$32,489,000
Supplemental Pharmacy Coverage					
Take up rate of Medicare Only Beneficiaries into GMC non-Medicaid plan			40%	80%	100%
Take up rate of Partial Duals into GMC non-Medicaid plan (covered by LICS)			0%	0%	0%
Take up rate of Full Benefit Duals into GMC non-Medicaid plan (covered by LICS)			0%	0%	0%
Number of Medicare beneficiaries	Total	128,739	38,622	77,243	99,382
	Medicare Only-Non Dual (75%)	96,554	38,622	77,243	96,554
	Partial Dual (9%)	2,827	0	0	0
	Full Dual (23%)	29,357	0	0	0
GMC Supp cost-sharing above Medicare - PMPM @ 87% AV	Medicare Only (Non-Dual)		$24.87	$24.87	$24.87

		Option A GMC Medicare Advantage buy-in	Option B GMC narrow wrap coverage	Option C GMC broad wrap coverage
	Partial Dual (covered by LICS)	$0.00	$0.00	$0.00
	Full Dual (covered by LICS)	$0.00	$0.00	$0.00
GMC Cost for Pharmacy Care		$11,527,000	$23,054,000	$28,817,000
TOTAL GMC cost above Medicare (supp medical and Rx)		**$0**	**$49,337,000**	**$61,306,000**

[1] Under the Option A, GMC is expected to provide the benefits listed, but will not incur the cost as beneficiaries will pay premium for the coverage provided.

		Option A GMC Medicare Advantage buy-in	Option B GMC narrow wrap coverage	Option C GMC broad wrap coverage
Additional Medicare Options				
Individual Cost-Sharing (Savings)/Additional Cost				
Actuarial Value 80%[2]		$0	($10,837,000)	($13,468,000)
Actuarial Value 100%		$0	$143,074,000	$182,642,000
Part B Premium for Medicare Only Beneficiaries	PMPM	Paid by individual	Paid by individual	$123
	Total	$0	$0	$142,820,879
Part D Premium for Medicare Only Beneficiaries	PMPM	Paid by individual	$36.56	$36.56
	Total	$0	$33,883,943	$42,354,929

[2] The 80% AV option effectively only reduces medical coverage from an 87% AV to 85% AV (the level of Medicare coverage).

Appendix 7: Detail of Actuarial Value Assumptions for Medicare

Valuing GMC coverage generally requires estimating the value of the GMC coverage over and above the Medicare benefit and Medicaid supplemental coverage (in the case of duals). The actuarial value of the Medicare coverage is approximately 85%. Therefore, any GMC benefit (or cost subsidy benefit) with an actuarial value less than 85% was assumed to not have any GMC cost. Only where the GMC benefit or cost-sharing subsidy plans were greater than 85%, did we assume that GMC would incur a cost (See Table 7-A). Below we describe the three scenarios under which GMC could incur costs for Medicare beneficiaries. Because Medicare beneficiaries are not eligible for the ACA cost-sharing subsidies, any of the subsidies over and above Medicare coverage would be completely funded by Vermont without any offsetting revenues from the federal government.

We analyzed how the GMC costs would vary between Medicare only, partially dual and full dual Medicare beneficiaries. Table 7-A describes these three types of Medicare beneficiaries.

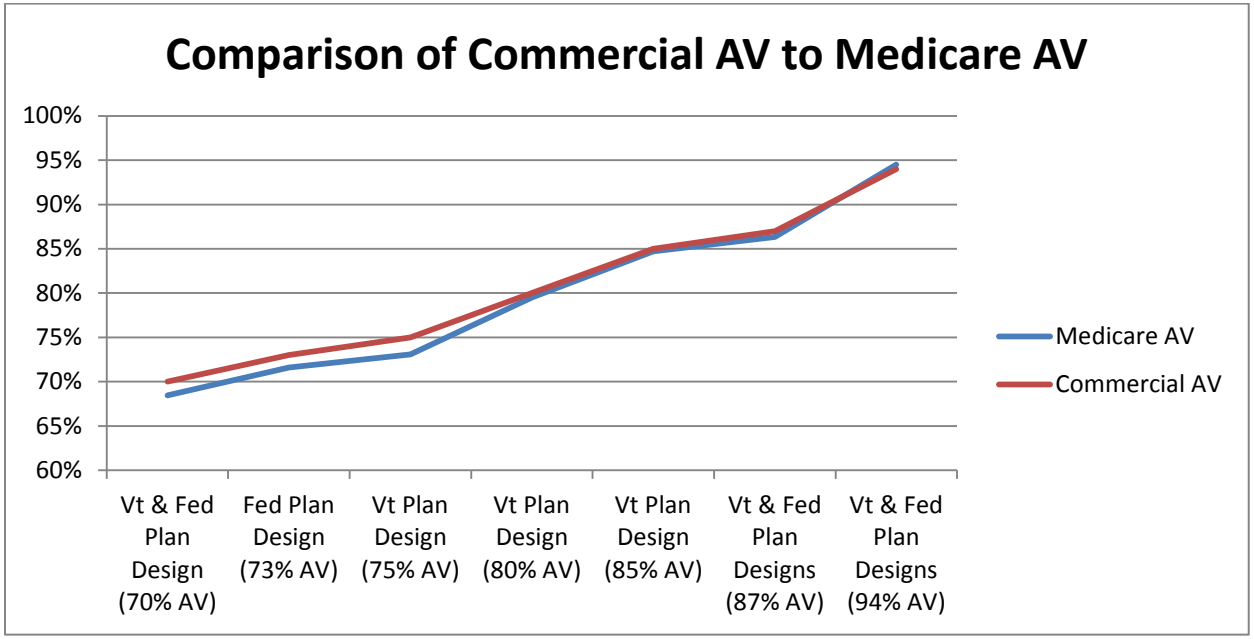
Table 7-A

			GMC Cost	
Type of Medicare Beneficiary	**Description[1]**	**Approx. Distribution**	**Under Medicaid[2]**	**Outside of Medicaid**
Partially Dual	Primarily SLMB and QMB[3]	2%	Premium Buy-in	Yes, when AV plan for GMC coverage is greater than Medicare Coverage
Full Benefit Duals	Includes all members with Medicare and full Medicaid benefits	23%	Premium buy-in, Medicare cost-sharing and other Medicaid wrap benefits not covered by Medicare	None
Medicare Only (Non-Dual)	Not eligible for any Medicaid	75%	None	Yes, when AV plan for GMC coverage is greater than Medicare Coverage, and if GMC decides to cover Part C and Part D premiums

[1] Full and Partial duals are defined here consistent with Vermont's dual demonstration application.
[2] GMC costs for dual eligible under Medicaid are assumed to be included in the Medicaid component of the report. We have not included any Part D clawback under Medicaid costs.
[3] Service Limited Medicare Beneficiary (SLMB) and Qualified Medicare Beneficiary (QMB) are programs that help low-income Medicare beneficiaries who exceed Medicaid income eligibility standards pay all or some of their Medicare cost, including premiums, co-payments, and deductibles.

Note we have assumed that full benefit duals would not qualify for any GMC subsidized coverage because the coverage already being offered by Medicare and Medicaid is greater than the subsidized benefits being offered by Vermont. We have assumed that those Medicare and Medicaid benefits would both pay primary relative to GMC.

We used the actuarial cost models to validate that the benefit plans defined for the various actuarial values (AVs) for the commercial population would result in similar AVs for the Medicare population. Our analysis indicates that the Commercial AV is very similar to the Medicare AV for the medical plan.



Based on this analysis, we estimated the medical cost of each benefit plan as simply the AV times the allowed cost.

For pharmacy, because of the Low Income Cost Subsidies (LICS) and Federal Reinsurance program funded by CMS, it is not possible to estimate the cost of the pharmacy plans using the simplified AV approach. Therefore, we used a Part D projection model (Accucast) to

estimate the components of the benefit plan (GMC liability, member cost-sharing, low income cost sharing subsidies, and federal reinsurance).

A distribution of Medicare beneficiaries by federal poverty level (FPL) was used to estimate the number of Medicare beneficiaries qualifying for GMC subsidies. This distribution was split between dual and Medicare Only eligibles. The resulting distributions of Medicare eligibles by FPL are shown in the following table.

Table 7-B. Medicare Distribution by FPL[1] & Qualifying AV Plan Subsidy

	MCR w/MCD				Qualifying AV Plan Subsidy Base Scenario of 87%			Qualifying AV Plan Subsidy Scenario 1 - 80%			Qualifying AV Plan Subsidy Scenario 2 - 100%		
FPL	MCR Only	Partial Dual	FBDE[3]	Total	MCR Only	Partial Duals	FBDE	MCR Only	Partial Duals	FBDE	MCR Only	Partial Duals	FBDE
Under 100% FPL	15.5%	0.0%	26.4%	26.4%	94.0%	94.0%	N/A[2]	94.0%	94.0%	N/A2	100.0%	100.0%	N/A[2]
100-120% of FPL	4.5%	1.2%	8.2%	9.4%	94.0%	94.0%	N/A[2]	94.0%	94.0%	N/A2	100.0%	100.0%	N/A[2]
120-122% of FPL	2.8%	0.6%	3.6%	4.2%	94.0%	94.0%	N/A[2]	94.0%	94.0%	N/A2	100.0%	100.0%	N/A[2]
122-150% of FPL	5.5%	0.8%	3.6%	6.1%	87.0%	94.0%	N/A[2]	94.0%	94.0%	N/A2	100.0%	100.0%	N/A[2]
150-200% of FPL	12.8%	2.2%	13.5%	15.7%	87.0%	87.0%	N/A[2]	87.0%	87.0%	N/A2	100.0%	100.0%	N/A[2]
200-250% of FPL	9.0%	1.2%	8.3%	9.5%	N/A[2]	N/A[2]	N/A[2]	85.0%	85.0%	N/A2	100.0%	100.0%	N/A[2]
250-200% of FPL	9.9%	0.6%	3.6%	4.2%	N/A[2]	N/A[2]	N/A[2]	N/A[2]	N/A[2]	N/A2	100.0%	100.0%	N/A[2]
200-400% of FPL	12.2%	0.8%	4.8%	5.6%	N/A[2]	N/A[2]	N/A[2]	N/A[2]	N/A[2]	N/A2	100.0%	100.0%	N/A[2]
400% + of FPL	27.9%	1.2%	7.6%	8.8%	N/A[2]	N/A[2]	N/A[2]	N/A[2]	N/A[2]	N/A2	100.0%	100.0%	N/A[2]
Total	**100%**	**9%**	**80%**	**90%**									

[1]Based on ACS Data (2009 Census)
[2]No additional benefit above existing Medicare and/or Medicaid coverage.
[3]Full-benefit dual eligibles (FDBE)

For the members qualifying for the 87% plan and the 94% plan, we modeled the costs for the pharmacy plan. For each of these plans, the pharmacy benefit is the same ($10/$20/50%) with a $100 deductible.

Other simplifying assumptions:

- Full benefit duals and partial duals were assumed to have the same medical and pharmacy costs.
- We assumed that Medicare and Medicaid would both be primary to GMC coverage.
- We assumed all duals are Low Income Subsidy eligible and qualify for the lowest copays. We also assumed that this cost-sharing is less than any subsidy plan offered by GMC.
- We assumed pharmacy rebates are 5% of total allowed pharmacy costs.
- We did not assume induced utilization for the medical or pharmacy plans.
- Even though the benefit plan does not qualify as a Part D benefit plan (copays are too high), we used the Part D benefit plan as described, assuming that any other qualifying Part D pharmacy plan would have a similar benefit value.
- We have assumed that the Part D wrap coverage reduces the member's out of pocket cost-sharing and therefore, delays the point where federal reinsurance becomes effective. An Employer Group Waiver Plan (EGWP) is a CMS approved program that employers can use to provide Part D coverage for their retirees. Under this waiver, the federal reinsurance coverage is not delayed. We recommend that Vermont pursue a similar waiver with CMS in order to take full advantage of the federal reinsurance coverage.

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