

Mathematica Reference Number:  
09908

Submitted to:  
Health Care Reform Commission  
Joint Fiscal Office  
1 Baldwin Street  
Montpelier VT 05633

Attention:  
Jim Hester  
Director

Submitted by:  
Mathematica Policy Research  
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Washington, DC 20024-2512  
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## **A Proposal for Vermont Health Care System Design and Implementation Plan**

June 21, 2010



**MATHEMATICA**  
Policy Research, Inc.

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Jim Hester, Ph.D.  
Director  
Health Care Reform Commission  
14-16 Baldwin St  
Montpelier VT 05633

Dear Dr. Hester:

Mathematica is pleased to respond to the Health Care Reform Commission's Request for Proposal, Health Care System Design and Implementation Plan, as required by Act 128.

Mathematica offers an exceptionally strong team for this work, including highly qualified and experienced experts on health care programs, financing, cost modeling, and program implementation. Deborah Chollet will lead the project, assisted by Mathematica researchers and programmers with extensive experience related directly to this work. Dr. Chollet is a national expert on state-level health coverage designs and state-customized modeling of enrollment, cost, and financing. She has led Mathematica's work in many states—supporting design development and estimating the cost, financing, and economic impacts of state single-payer systems, state-sponsored exchanges, and state subsidy programs to promote or ensure affordable coverage.

Mathematica will partner with Joshua Slen (Bailit Health Purchasing, LLC), Meryl Price (Health Policy Matters), and Steve Schramm (shrammraleigh Health Strategy, srHS), who individually and collectively bring exceptional experience with program development and implementation in Vermont and many other states. In addition, srHS brings the actuarial capacity necessary to this work. Patricia Butler, a nationally recognized expert on ERISA and other federal law and regulation related to employer-sponsored health plans, will serve as a consultant to the team. If we are awarded a contract under this solicitation, we propose also to contract with an expert consultant on implementation of health care system reform in other countries.

The Mathematica team is very familiar with Vermont's communities, health care system, administration and legislature, and other stakeholders; the state's many studies, data sources, and experience with reform initiatives that are the building blocks for this work; and the federal laws and regulations that are the context in which Vermont seeks to build a single system of health care that ensures all Vermonters have access to and coverage for affordable, quality health care. Our team offers the expertise necessary to explore practical issues in Vermont, in order to produce actionable and realistic implementation plans. In many projects for public-sector clients, each member of our team has demonstrated the ability to complete complex projects on time and within budget.

LETTER TO: Jim Hester, Ph.D.  
FROM: Margo L. Rosenbach  
DATE: June 21, 2010  
PAGE: 2

As indicated in the Request for Proposal, we are submitting information on our background and experience, project plan, project staffing, analytic models and data to be used for the project, and references; as well as our pricing and business proposal. In addition to submitting our full proposal, we are submitting a redacted copy of the proposal that removes information we believe should not be released. We consider the redacted information to be commercial information that should be withheld under Exemption 4 of the Freedom of Information Act. The redacted information is not customarily disclosed to the public and its release, we believe, would cause us substantial competitive injury. Our technical proposal includes our best judgments, strategies, and tactics to compete for Vermont's business and the disclosure of our proprietary commercial information would inappropriately provide our competitors insight into our approach to winning future business from Vermont and other clients. We request that you release only the redacted copy to the public.

We look forward to working with you on this very important project. If you have any questions or require further information, please contact Pamela L. Tapscott at (202) 484-3294 or via e-mail at [rfpcenter@mathematica-mpr.com](mailto:rfpcenter@mathematica-mpr.com).

Sincerely,

A handwritten signature in cursive script that reads "Margo L. Rosenbach". The signature is written in black ink and is positioned below the typed name "Margo L. Rosenbach".

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## I. BACKGROUND AND EXPERIENCE

Vermont's Universal Access to Health Care Act (Act 128), enacted by the Vermont legislature in May 2010, requires the Joint Legislative Commission on Health Care Reform (hereafter, "the Commission") to undertake a new study to compare the costs of at least three options for creating a single system of health care that ensures all Vermonters have access to and coverage for affordable, high-quality health services. These options include a single payer system—an idea that has been among the most persistent of the many proposals to extend coverage and produce a fairer, more efficient system of care in Vermont for more than twenty years.

Act 128 is the culmination of years of successful, nationally recognized efforts in Vermont to increase access to health care, improve quality, and reduce costs. To be successful, coverage and system reforms in Vermont must be sensitive to the state's unique history and circumstances, and crafted in ways that anticipate and resolve barriers to implementation. This requires a close understanding of Vermont's current health care system and stakeholders, an appreciation of its long history of reform initiatives, and sophisticated knowledge of the national context.

The Mathematica team, described in this Section, offers these vital qualifications, as well as expertise and experience in estimating state and regional health care reform impacts and implementing statewide reforms. We understand that, if we are selected, our work will be regarded as an extension of the Commission, building on two decades of efforts to improve access to affordable health care, the quality of care, and the efficiency of Vermont's health care system. We understand the fundamental importance of developing a report that is not only technically excellent and methodologically transparent, but also directly helps Vermont to move toward and ultimately realize the goals and principles that Act 128 articulates.

### A. Project Team Experience

To bring Vermont the most highly qualified combination of expertise necessary to make Act 128 actionable and successful, Mathematica Policy Research (Mathematica) will team with Bailit Health Purchasing, Health Policy Matters, schrammraleigh Health Strategy (srHS), and Patricia Butler for this work. The Mathematica team brings exceptional qualifications and experience related directly to this project, surpassing an academic approach. We bring the expertise necessary to explore practical issues in Vermont, in order to produce actionable and realistic implementation plans. Specifically, the Mathematica team offers:

- A strong and successful track record in working with states to design and implement major health care reforms, including new programs and benefit designs, based on strong quantitative and actuarial analysis.
- First-hand knowledge of Vermont's health care delivery system, administration, legislature, other key stakeholders, and the many studies, reports and initiatives that are the "building blocks" for further development efforts under Act 128—the context that is essential to producing actionable work products.
- Exceptional understanding and practical knowledge of federal health care regulations and federal reform legislation.
- Unique experience in developing efficient state-specific models using the state's own survey and administrative data to drive analysis of design options, costs, and financing.

- A strong working knowledge of health care delivery and payment systems, as well as state and regional health planning.
- Extensive experience in working with states and stakeholders, presenting timely and responsive results that address the concerns of, and withstand the scrutiny of, diverse stakeholder groups.
- A strong track record of providing robust, clearly written reports that address the unique health care issues confronting individual states, as well as public testimony before commissions and federal and state legislative bodies regarding health care coverage, state and federal regulations and programs, and state reforms.

The Mathematica team will develop for the commission practical, real-world options based on our extensive, working knowledge of Vermont's health care system and stakeholders, practical experience working with other states, and unparalleled modeling and actuarial capabilities. Our deep familiarity with all aspects of this project and our ability to base our report and recommendations firmly in Vermont's experience will ensure that our report will help policymakers and stakeholders move forward to achieve Vermont's own objectives, moving beyond the provisions of the federal health reform law, even as federal reform unfolds.

Our experience in each of the key areas identified in the request for proposals (RFP) is summarized below:

- **Health care system designs at the state and national level.** Mathematica's extensive experience in estimating the cost and financing implications of state health coverage options will be complemented by srHS's actuarial services and cost estimation experience. **Deborah Chollet**, the proposed project director and principal investigator, has led Mathematica's work modeling health market reform in many states, including the development of reform options and analyses of reform costs and financing. She has completed similar work developing implementation details and producing enrollment, cost, and financing estimates for Maine (for a single-payer system and for its Dirigo program offering affordable coverage to individuals and small groups); the Health Insurance Partnership Board in Washington State (a state-sponsored exchange); a committee of the Washington State legislature (comparing five proposals, including a single-payer system and multiple public options); and Minnesota (an exchange and a subsidy program to ensure affordable coverage). She serves as a senior advisor to the Robert Wood Johnson Foundation's (RWJF) State Coverage Initiatives Program and as a technical consultant to state officials on health insurance market dynamics and policy options related to health insurance coverage and insurance market competition. **Steve Schramm** has more than 20 years of experience in the design, development, and implementation of cutting edge health reforms at the state level, including 1115 waivers in Arizona, Tennessee, Massachusetts, Kentucky, Louisiana, and Rhode Island. He also has worked with state programs in Maine, Massachusetts, and Connecticut since their inception—variously helping to negotiate with Centers for Medicare & Medicaid Services (CMS) around program design and funding (Maine's Dirigo program), calculating actuarially certified capitation rates and negotiating them with bidders (Maine's Dirigo and the Massachusetts Commonwealth Care program); and serving as an expert witness in hearings on the impacts of coverage expansions and cost control initiatives. For the Kansas Health Policy Authority, he recently modeled the cost and coverage effects of five proposed reforms (including a single-payer system and a state-

sponsored exchange), as well as the impacts of the Patient Protection and Affordable Care Act (PPACA). **Meryl Price** has more than 20 years of private- and public-sector experience with developing and implementing Medicaid managed care; she has assisted in developing and implementing health care reform efforts in Massachusetts and Colorado.

- **Vermont’s current health care system and health reform initiatives.** The Mathematica team brings firsthand knowledge of the reforms that preceded enactment of Act 128. **Joshua Slen**, a former Medicaid Director in Vermont, played a leadership role in designing and implementing many of Vermont’s health care system changes since 1999, including the 1115 federal waiver that created the first statewide public managed care organization, the Catamount Health Program, and the Blueprint for Health. **Margo Rosenbach**, a Mathematica vice president and area leader for state health policy research who will serve as a quality assurance reviewer for all deliverables to the Commission, recently led a study of the implementation and effects of Vermont’s mental health and substance abuse parity law, working closely with the Department of Banking, Insurance, Securities and Health Care (BISHCA) and other state agency staff, health plans, providers, and consumer advocates in Vermont. **Meryl Price’s** experience working in Vermont includes work with the New England States Coalition on Dual Eligibles, as well as a project to redesign the eligibility system for publicly funded health care beneficiaries. **Patricia Butler** has provided informal consultation to the Vermont Legislative Council’s office for its work with the House Committee on Health Care regarding implications of the Employee Retirement Income Security Act (ERISA) for health care reform proposals under consideration in the 2005 legislative session.
- **Federal health reform legislation and federal regulations relevant to this project.** **Deborah Chollet** has led research and technical assistance teams in many states—most recently in Minnesota, New Mexico, and Washington—helping them develop health care programs and reforms that comply with federal law. She has also worked with federal policymakers and frequently consults with administration and legislative staff, helping them to understand the state implications of federal policy; for example, she testified before the U.S. Senate Finance Committee on the implications of a federal proposal to allow sale of insurance products across state lines. With colleagues at Mathematica, she recently authored a series issue briefs examining PPACA provisions related to states’ health system objectives and major strategies, as well as a paper for *Health Affairs* explaining the new federal high-risk program. **Steve Schramm** is currently working with Kansas, Connecticut, and Maine to determine the impact of the newly implemented federal health reform law and chart a strategic path to best position these states to prosper under federal health reform. **Meryl Price** has provided consultation to private firms about the impacts of federal regulation and the health reform law on state health program needs and business practices. **Patricia Butler** has consulted with many states—including Vermont and California—to design health care access initiatives and insurance reforms consistent with ERISA preemption principles.

## **B. Corporate Experience**

Corporate experience for each corporate member of the proposed Mathematica team is summarized below.

### **1. Mathematica Policy Research**

Mathematica Policy Research provides the data, research, and analysis used by decision makers in the public and private sectors to improve social policy and public well-being. The company was founded in 1968 to bring quality and rigor to the evaluation of the nation's first large experiment in social policy—the New Jersey Negative Income Tax Experiment. Subsequently, Mathematica has been an innovator in methods to test proposed social programs and, in response to client needs, it has conducted both in-depth and quick-turnaround assessments of existing social programs and proposed policy reforms.

Mathematica's more than 650 social scientists, computer systems professionals, support staff, and administrators combine strong technical skills, deep substantive knowledge of institutions and policies, an understanding of clients' needs, and an abiding commitment to providing policymakers the information necessary to build better programs. The Health Research Division is nationally acclaimed for applied research in Medicare; Medicaid and the State Children's Health Insurance Program; private health insurance programs and state reforms; health information technology; and state and federal programs to improve quality of care, promote efficient utilization, and prevent chronic illness. Mathematica's health research staff have unparalleled expertise in a variety of research methodologies, including survey analysis, the creation and analysis of merged administrative data sets, rigorous experimental program evaluations, simulation and analysis of health and disability policy alternatives, and construction of measures used to assess health system performance.

### **2. Bailit Health Purchasing, LLC**

Bailit Health Purchasing is a health care consulting firm dedicated to ensuring insurer and provider performance accountability on behalf of public agencies and private purchasers. Bailit Health Purchasing was founded in 1997 by former senior executives of the Massachusetts Executive Office of Health and Human Services. Its senior staff consists of a team of experienced professionals who have worked together for many years. Its mission is to help organizations achieve measurable improvements in the quality of care from contracted or regulated providers and health plans. Bailit is committed to the belief that comprehensive performance requirements and aggressive performance monitoring combined with attendant rewards or sanctions are necessary for ensuring quality improvement and quality outcomes.

### **3. Health Policy Matters**

Health Policy Matters is a health care consulting firm that has assisted states and private organizations to develop and implement delivery systems and data-driven programs and business strategies to serve publicly funded beneficiaries for nearly 15 years. Its principal, Meryl Price, brings to her clients a wealth of information about the Medicaid, dually eligible, and uninsured populations.

#### **4. schrammraleigh Health Strategy (srHS)**

srHS and its founding partner, Steve Schramm, have worked as strategists and consulting actuaries to statewide health reform initiatives in Maine, Massachusetts, and Connecticut since their inception. srHS has helped each design, develop, implement, and evaluate the cost-effectiveness of various program components for addressing the needs of the uninsured population. srHS also has worked with Kansas to design, develop, and price the impact of five major health reform scenarios, as well as the impact of federal health care reform on Kansas. Because each state's reform initiative is unique, srHS is experienced in developing products that are tailored to the state's particular programs, needs, and objectives.

## II. PROJECT PLAN

### A. Project Approach

Vermont's Universal Access to Health Care Act (Act 128) directs the Commission to oversee development of at least three health system designs, including a recommended option and implementation plans. Each design option will create a single system of health care that assures all Vermonters access to affordable, high-quality care—achieving the principles and goals identified in Act 128. These designs will be presented to the governor and legislature for consideration in 2011; the design options must include sufficient analysis and details for the governor and legislature to be able to assess them and select from among them.

Act 128 attempts to move Vermont beyond the recently enacted federal health care reform legislation, the Patient Protection and Affordable Care Act (PPACA), building on the substantial foundation that Vermont already has developed. PPACA requires reforms that include, among other provisions, establishing state structures and federal rules for private insurance, providing federal subsidies for the purchase of private insurance, expanding Medicaid eligibility, and reforming Medicare payment. Because PPACA will affect any future health system design Vermont may implement, we propose an analysis that assumes full implementation of PPACA in Vermont as the baseline for comparing the relative effects, costs, and financing of each design option, and identifies the implementation issues each must address based on feedback from Vermont's key stakeholders and our knowledge of what is achievable in Vermont. This approach will ensure that the Mathematica team offers Vermont actionable design options that accomplish the state's principles and goals in light of PPACA's requirements and new state options in a way that is realistic and appropriate for Vermont.

#### 1. Proposed Design Options

The Mathematica team will develop three research-based design options, described below. We will approach each of the three options in a similar manner, although the detailed policy issues may vary for each and it may be necessary also to vary some assumptions in estimating the options' costs and financing. We will use a consistent analytic process for each design option, systematically covering the five elements Act 128 requires for each. Below we provide a brief description of the two design options specified in the RFP (a single-payer system and a public plan option), as well as an additional proposed design option. The additional option is offered to illustrate the scope of the option and to support further discussion; the design option modeled, in addition to a single-payer system and public option, will be selected in consultation with the project officer and/or with guidance from the Commission.

#### **Design option 1: A government-administered and publicly financed single-payer system**

As required by Act 128 Sec. 6(a)(2)(A), we will explore policy and programmatic issues associated with a state-administered single payer plan, and model its costs and financing. This design option would decouple health insurance and employment, and allow for private coverage of only health services not included in a core benefit package. It would be financed from general revenues

and redirected funds currently used for state employee benefits, Green Mountain Care programs (GMC),<sup>1</sup> SCHIP, and Medicaid—including funding for Medicaid’s Chronic Care Management Program. Provider payments would be based on Medicare payment rates, including payment for accountable care organizations (ACOs) and medical homes.

## **Design option 2: A government-administered public plan option**

As required by Act 128 Sec. 6(a)(2)(B), we also will explore the policy and programmatic issues associated with a public plan option, and model its costs and financing. The public option might be defined in various ways—possibly the simplest for implementation and (therefore the readily actionable) being an extension of Vermont’s Catamount Health program, which was developed under an 1115 Medicaid Waiver. For Catamount Health, the state created a benefit design package, mandated payment levels (at 110 percent of Medicare), and provides subsidies for individuals below 300 percent of the federal poverty level (FPL) to purchase plans.

We will work with the project officer and others he may designate to develop a reasonable framework for the public option, but as a starting point we suggest that the public plan option might be based on the “three-committee” proposal developed in the course of the U.S. House of Representatives deliberations on federal health care reform. That proposal was stronger than the one ultimately adopted in the House bill<sup>2</sup> but abandoned in the final legislation.<sup>3</sup> If based on this proposal, Vermont’s public option would:

- Be available in Vermont’s new exchange, competing directly with private health insurance plans. The public plan option would meet the same benefit requirements and comply with the same insurance market reforms as private plans.
- Qualify for affordability credits that low-income individuals would receive, on the same basis as private plans offered through the exchange.
- Be financially self-sustaining, as private plans are. The public plan option would have to build capital development for startup and contingencies into its rates and adjust premiums annually in order to assure financial viability, as private plans do.
- Promote primary care, encourage coordinated care and shared accountability, and improve quality.

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<sup>1</sup> Green Mountain Care (GMC) refers to all State of Vermont Health Care Programs administered by the Office of Vermont Health Access (as of July 1, 2010, the Department of Vermont Health Access, or DVHA). GMC includes pharmacy-only programs, SCHIP, traditional Medicaid, Catamount Health, Dr. Dynasaur, and coverage for adults under Vermont’s 1115 Global Commitment to Health Waiver or Choices for Care Waiver (Vermont’s long-term care waiver). The Mathematica team recognizes that the Department of Mental Health and the Department of Health also operate programs that receive funding from one of the two 1115 Waivers for specialty services and populations.

<sup>2</sup> See: House Committees on Ways and Means, Energy and Commerce, and Education and Labor. Health Reform at a Glance: Public Insurance Option, July 14, 2009 [[waysandmeans.house.gov/media/pdf/111/publicoption.pdf](http://waysandmeans.house.gov/media/pdf/111/publicoption.pdf), accessed June 8, 2010].

<sup>3</sup> Public Health Insurance Option. *The New York Times*, updated March 25, 2010 [<http://www.nytimes.com/info/public-health-insurance-option/>, accessed June 8, 2010].

- Assume voluntary provider participation, but presume Medicare providers would participate unless they opt out.

In addition, the three-committee proposal specified that the public option would reimburse providers for services based on Medicare rates plus 5 percent. There is no reason to retain this feature in our analysis; indeed, absent a compelling reason to the contrary, we propose that the cost and financing analysis should assume provider reimbursement that is consistent across the design options in order to support “apples to apples” comparisons. Based on the stakeholder processes described in this proposal and in consultation with the project officer, we will develop a reasonable assumption for provider payment for this and other design options, consistent with the goals articulated in Act 128.

**Design option 3: An expanded, comprehensive, and exclusive exchange model including not only individuals and insured small groups, but also Medicaid, SCHIP, and Medicare enrollees**

PPACA calls for state-based health insurance exchanges to serve individuals, and allows states to merge their Small Business Health Options Program (SHOP) Exchange for firms with fewer than 100 employees into their exchange for individuals. The broadest implementation of PPACA, and apparently most consistent with Act 128’s ultimate goal of a single system of health care, would be to merge the individual and SHOP exchanges into a single “comprehensive” exchange. Furthermore, we believe that under the state’s current authority to license and regulate carriers, Vermont could designate this exchange as the exclusive location where carriers could offer coverage to individuals and small groups. Before beginning work on the 2014 baseline to which each of the design options will be compared, the Mathematica team will a preliminary legal review and analysis of PPACA’s provisions to confirm that an exclusive exchange would be permissible under both PPACA and ERISA, and then confirm with the project officer whether such an exchange would be consistent with how Vermont might implement PPACA.

The third, proposed design option would build on Vermont’s comprehensive and exclusive exchange (if adopted as the baseline), or establish such an exchange and build on it as follows:

- All group health insurance—including large insured employer plans—would be sold exclusively through the exchange (although only PPACA-eligible small groups would qualify for federal risk adjustment or reinsurance).
- All participating plans would be required to accept Medicaid and SCHIP beneficiaries (with the exception of individuals who are dually eligible for Medicare and Medicaid, who would continue in their current arrangements). All participating plans would accept risk-adjusted payments as specified in PPACA as full payment for all enrollees, including those eligible for Medicaid or SCHIP.
- Medicare beneficiaries—including those enrolled in the traditional fee-for-service (FFS) Medicare program, Medicare Advantage or PACE plans, and individuals who are dually eligible for Medicare and Medicaid—also would enroll in coverage through the exchange. Medicare beneficiaries would choose only among fee-for-service Medicare, Part D plans, and federally qualified Medicare Advantage plans.

- All other (non-Medicare) individuals would be entitled to a choice among all private insurance plans within the exchange. These plans would vary only with respect to their provider networks and the non-core benefits they would cover. For Medicaid or SCHIP beneficiaries, the state would finance a supplemental benefit, making their full benefit package consistent with current Medicaid and SCHIP benefits.
- All plans participating in the exchange would use a common purchasing or payment system. Payments to primary care providers would be based on the fees identified in the January 2010 Blueprint Annual Report.
- Vermonters who are eligible for Medicaid or SCHIP would be auto-enrolled when screened for other means-tested services, such as free school lunches or income assistance. Others would be screened for Medicaid or SCHIP eligibility only if they apply for premium relief or the Medicaid/SCHIP expanded benefit. The state would conduct outreach to potentially eligible low-income families based on households' state income tax filings and apparent eligibility for Medicaid or SCHIP.

Under this design option, some Vermonters would remain outside the expanded exchange's single system of health care—although far fewer than under basic PPACA implementation. Those who would remain outside the exchange would include only self-insured employers. While the self-insured state employee and retiree health plans also could remain outside the expanded exchange, these plans could align their payment and other policies with those required of carriers in the exchange.

The potential advantage of this benefit design is that much or all of it might be actionable under current law, presuming Vermont is successful in securing Medicaid and Medicare waivers. We expect that it would necessitate Vermont obtaining a Medicaid waiver authorizing the enrollment of Medicaid and SCHIP enrollees through the exchange on the same basis as other individuals, but with full premium relief and expanded benefits that would qualify for federal matching. For Medicare beneficiaries, federal participation in the exchange might be secured through a federal demonstration, negotiated agreement with CMS, or other provision in federal law. We note that the Centers for Medicare and Medicaid Services (CMS) recently released an official solicitation to states to apply to become Medicare Multi-Payer Advanced Primary Care Practice (MAPCP) demonstration sites,<sup>4</sup> offering an opportunity for Medicare fee-for-service enrollees and their providers to fully participate in the development of patient-centered health care homes across the state. As part of the demonstration project, CMS would pay health care homes a care coordination fee consistent with the multi-payer program now being put into place for Medicare fee-for-service enrollees. In Vermont, pursuing MAPCP statewide would require that the six areas in Vermont currently participating in the Physician Group Practice (PGP) Demonstration withdraw from PGP, consistent with federal rules prohibiting any one site from participating concurrently in more than one demonstration.

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<sup>4</sup> See: [[http://www.cms.gov/DemoProjectsEvalRpts/downloads/mapcpdemo\\_Solicitation.pdf](http://www.cms.gov/DemoProjectsEvalRpts/downloads/mapcpdemo_Solicitation.pdf)]. Whether and how Vermont will pursue this demonstration will be clear as we would begin this project; a letter of intent is due to CMS on June 30, 2010, and an application is due by August 17, 2010.

## 2. Key Elements of the Analysis

Vermont's many studies, reports, and data initiatives are an important foundation for building further health care payment and system reforms. In Figure 1 we offer a selection of the building blocks that are especially relevant as context to Act 128. The Mathematica team is uniquely positioned to leverage Vermont's building blocks for this project.

For each design option, our analysis will systematically address each of the key elements specified in Act 128. Our approach to these elements is described below and summarized in Table 1.

**Element 1: Establish a Payment System.** For each design option, the Mathematica team will develop alternative benefit designs as specified in Act 128, and map out major administrative processes, budget and payment systems, and cost containment strategies, as described below.

- (a) **Benefit design.** The work that Vermont has done to expand access using Medicaid waivers offers a strong basis for designing the benefit within the broad outlines offered in Act 128. To support comparison across the options, the benefit design and cost sharing options will, to the extent possible, be identical across the three design options. We propose to provide coverage and cost estimates for two benefit designs, each with two cost sharing alternatives (in total, four combinations). We will begin by reviewing the Catamount benefit design and developing a crosswalk comparing the provisions of coverage in Catamount with those in Medicaid and prevalent in private plans. We will display the recommended benefit design in the context of current benefit designs in Vermont, with attention to federal requirements for Medicare and for federal matching of state Medicaid and SCHIP expenditures.

The Mathematica team offers extensive experience in working with many states to design and implement major state reform initiatives in the context of their own health care system and programs, and federal regulations and proposals. Our familiarity with Vermont's health care system, programs, legislative and administrative processes, and stakeholders will facilitate obtaining information and sophisticated feedback about the various elements of the analysis efficiently to produce actionable information and recommendations.

- (b) **Administration.** For each design option, we will develop analyses of and recommendations for major aspects of payment system administration. We will explore options for administration of the design options that would, to the extent possible, combine or align processes for each design option.

Figure 1. Vermont Building Blocks for Act 128

Programs		Data	Information and Analysis			Tax and Policy Initiatives
Access and Cost Containment	Quality Improvement		Administrative reporting	Original and secondary research	National data and surveys with Vermont-representative sample	
Medical provider reimbursement increases	Dental Dozen initiative	Vermont Household Health Insurance Surveys	Hospital report cards	VHCA Universal access plan report	Medicare Cost Reports	Healthy lifestyle insurance discounts
Cost shift initiatives	OVHA care coordination and chronic care management programs	Consumer Health Care Price and Quality Information System	Immunization program and registry	Hogan Commission report	Medical Expenditure Panel Survey – Insurance Component	Employer Health Care Contribution Fund
Eligibility systems redesign	Integrated Services Initiative (VISI)	Health insurer required supplemental reporting	Blueprint annual report	Lewin Group analysis of a single-payer model		Insurer claims payment and prior authorization standards
ESI premium assistance	Blueprint multi-payer integrated medical home pilot	State health expenditure reports	Health resource planning and oversight	Merging the individual, small group and association markets in Vermont 2009		Catamount Health Fund
Tele-psychiatry pilot	Community wellness and healthy living plans	Vermont Healthcare Claims Uniform Reporting and Evaluation System (VHCURES)		Common Claims Workgroup, Final Report 2008		Advanced directives
Catamount Health	Coordinated Healthy Activity, Motivation, and Prevention Program (CHAMPPS)			Health Care Financing Analysis 2007		Small group market 75%-rule adjustment
VDH loan repayment program	Nutrition guidelines for competitive food and beverage sales in schools					Increased taxes on tobacco products
Efforts to simplify health care administration and reduce cost shift	Healthy choices and transfat labeling in restaurants					Mental health parity
	Never events nonpayment policy					
	Elimination of artificial transfat in prepared foods by 2011					

**Table 1: Key Elements of the Analysis, Proposed General Approach, and Selected Sources of Information**

Key Element	General Approach	Selected Sources of Information and Data
Payment System	Qualitative analysis	<ul style="list-style-type: none"> <li>• Vermont building blocks</li> <li>• National and international experience</li> <li>• Other state experience</li> <li>• Stakeholder input process</li> </ul>
Coordinated Regional Delivery Systems	Qualitative analysis	<ul style="list-style-type: none"> <li>• Vermont building blocks</li> <li>• National and international experience</li> <li>• Other state experience</li> <li>• Stakeholder input process</li> </ul>
Health System Planning, Regulation, and Public Health	Qualitative analysis	<ul style="list-style-type: none"> <li>• Vermont building blocks</li> <li>• National and international experience</li> <li>• Other state experience</li> <li>• Stakeholder input process</li> </ul>
Financing and Estimated Cost	Quantitative microsimulation analysis	<ul style="list-style-type: none"> <li>• The 2009 Vermont Household Health Insurance Survey (VHHIS)</li> <li>• The Medical Expenditure Panel Survey Household Component (MEPS)</li> <li>• Forecast of Vermont Health Care Expenditures 2009-2012 (from BISHCA)</li> <li>• 2008 Health Plan Administrative Cost Report (from BISHCA)</li> <li>• Annual Market Share Reports (from BISHCA)</li> <li>• Global Commitment to Health Annual Report</li> </ul>
Compliance with Federal Requirements	Legal analysis	<ul style="list-style-type: none"> <li>• ERISA and PPACA legislative language, regulatory guidance, and court interpretations</li> <li>• Published analyses of related federal law, guidance, and interpretations of federal requirements</li> </ul>

- **Payment for services.** Vermont’s Blueprint for Health calls for incorporating payments to physicians on behalf of Medicare patients in a statewide system of payment incentives that are consistent among all payers. This is just one example of Vermont’s attempts to improve quality at a system-wide level that is hampered by the state’s inability to control how Medicare funds stream. The Mathematica team will review the progress of current federal and state proposals (as in Massachusetts) to reform payment for services and systems of payment in other countries that use payment incentives to encourage better quality of care and more efficient service delivery. We will consider the potential need to modify payment systems in Vermont by region—for example, if the supply of health care providers would indicate that they might be unable to accept payment for highly bundled services. As discussed further below and in consultation with the project officer, we propose to use a stakeholder process to develop recommendations for a payment system, exploring in particular, how alternative payment systems might be crafted and implemented in each of the design options. This process will inform the payment assumptions that underlie the cost and financing estimates, as well as the implementation analysis of the recommended design option.

- **Enrollment processes.** Because enrollment processes may vary among the design options and therefore pose differences in administrative cost, we will develop the outlines of enrollment processes for each design option. We expect that these processes might be streamlined in some options (especially the single-payer option) and, therefore, pose lower administrative costs for those options than any state or private insurance program currently incurs. In earlier studies,<sup>5</sup> we have used international examples of differences in administrative cost associated with differently configured health care systems.<sup>6</sup> For this project, we will review recent literature for more recent estimates and also use the stakeholder process described further below to develop reasonable assumptions about enrollment processes and other aspects of administration that might affect administrative cost.
- **Integration of pharmacy best practices and cost control.** Recognizing that pharmaceutical costs represent the second-highest spending item for Vermont's health programs, after nursing home care, since 2002 OVHA has administered the Vermont Health Access Pharmacy Benefits Management (PBM) Program. Vermont's PBM program is a pharmacy best practices and cost control program to slow the growth in drug costs across all state-funded health programs, including Medicaid and SCHIP. A central component the PBM program is its pharmaceutical benefit design: all state-funded health programs use the same preferred drug list. Coverage of prescriptions in the same class but not on the list requires prior authorization. The PBM program claims success in slowing state spending for prescription drugs. Most recently, between 2008 and 2009, pharmaceutical spending on all state coverage programs net of rebates decreased a half percent.<sup>7</sup> The Mathematica team will review this program as a potential model for greater control of pharmaceutical costs in each design model, based on evidence of its effectiveness relative to trends in private plans and in other states.<sup>8</sup>
- **Grievances and appeals.** Each design option that Act 128 directs the consultant to study, as well as the additional design options we propose, could substantially

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<sup>5</sup> For example, see: Deborah Chollet, Su Liu, Beth Gillia, Paul Biderman, Lee Reynis, and William Wiese. "Quantitative and Comparative Analysis of Reform Options for Extending Health Care Coverage in New Mexico." Washington, DC: Mathematica Policy Research, July 2007 [<http://www.mathematica-mpr.com/publications/PDFs/quantitative.pdf>]. Also: Deborah Chollet and Lee Reynis. "Analysis of Reform Models for Extending Health Care Coverage in New Mexico." Washington, DC: Mathematica Policy Research, March 2008 [[http://www.insurenemexico.state.nm.us/Inm/documents/INM\\_MPR\\_FinalReport\\_2008Mar.pdf](http://www.insurenemexico.state.nm.us/Inm/documents/INM_MPR_FinalReport_2008Mar.pdf), accessed June 14, 2010].

<sup>6</sup> For example, see: Steffie Woolhandler, Terry Campbell, and David U. Himmelstein, "Costs of Health Care Administration in the United States and Canada." *New England Journal of Medicine*, August 2003, 349(8): 768-75.

<sup>7</sup> Pharmacy Best Practices and Cost Control Report 2009. Office of Vermont Health Access [<http://ovha.vermont.gov/for-providers/pharmacy-best-practices-and-cost-control-report-2009.pdf>, accessed June 14, 2010].

<sup>8</sup> For example, pharmaceutical cost trends in private insurance plans in Massachusetts are reported in: Deborah Chollet, Su Liu, Allison Barrett, Kate Stewart, and Thomas Bell, "Massachusetts Health Care Cost Trends Part III: Health Spending Trends for Privately Insured 2006-2008, Technical Report." Boston, Massachusetts: Division of Health Care Finance and Policy, February 2010 [[http://www.mass.gov/Eeohhs2/docs/dhcfp/r/cost\\_trends\\_files/part3\\_health\\_spending\\_trends\\_technical\\_report.pdf](http://www.mass.gov/Eeohhs2/docs/dhcfp/r/cost_trends_files/part3_health_spending_trends_technical_report.pdf), accessed June 15, 2010].

simplify and standardize eligibility determination and benefit coverage for Vermonters. Consequently, grievance and appeals processes related to eligibility and coverage might vary little from existing procedures established by BISHCA, or for Medicaid, SCHIP, or other programs managed by the Agency of Human Services (AHS). The Mathematica team will review existing private and public rules governing eligibility and benefit appeals, using as starting points the grievance and appeals processes and procedures under BISHCA Rule 10 and the Medicaid M108 process. Our report will identify and prioritize existing state laws governing eligibility and coverage appeals, as well as BISHCA and AHS regulations. We will offer specific suggestions about changes to combine or align eligibility grievance and appeal processes for each design option.

- (c) **Budgets and payments.** The Mathematica team will make a recommendation for budgets (including a global budget), payment methods, and a process for determining payment amounts based on available experience in the U.S. and other countries' experiences with budgeted health care systems. We will consider options for unifying the health care budget with statewide and regional health planning and resource allocation. Based on our understanding of experience in Vermont and other states, as well as the stakeholder process described further below, we will consider the strengths and weaknesses of alternative payment methods for each design option and health care sector with respect to Act 128's health system goals. However, within the time and resource constraints of this project, we do not propose to identify or draft amendments that may be needed in current law or regulation to implement payment system change.
- (d) **Cost containment.** The Mathematica team will identify cost containment strategies for each design option. Based on Vermont experience and experience in other states and countries, we will attempt to prioritize cost containment strategies in terms of their likely effectiveness for each design option. Where evidence of effectiveness is strong, and in consultation with the project officer, we will identify the specific cost containment strategies to be assumed in considering other elements of the analysis.

**Element 2: Coordinated regional health care delivery systems.** The Mathematica team will outline in detail the components of a regional system to plan and manage the health system. Such a system would have multiple goals, as articulated in Act 128, including: (1) better coordination of clinical health services to reduce redundancy and improve quality, and (2) better coordination with public health or population approaches to health improvement.

To address this element, the Mathematica team will build on the efforts to integrate clinical services with public health promotion as envisioned in Vermont's Blueprint for Health, and on Vermont's current state and regional health planning efforts. For regions of the state where the Blueprint model is not yet in development, we will propose strategies for creating new regional entities or other vehicles for planning and coordinating clinical and public health resources. We will also use the most recent state plans related to public health promotion, health information technology, and quality improvement (for example, the Vermont State Health Plan 2005, Vermont Program for Quality in Health, and Vermont Information Technology Leaders) to identify ways to tailor statewide priorities and strategies to Vermont's communities and regions.

The Mathematica team is deeply familiar with Vermont’s communities, health care systems, providers, and other stakeholders. We are uniquely positioned to help Vermont policymakers design regional and community systems that improve care coordination, monitor and evaluate system performance and assess community needs, improve regional system performance, and address community needs.

Our analysis will be focused on developing recommendations in the following areas, reflecting the overarching goals of Act 128:

- (a) Improvement in care coordination to reduce redundancy and improve quality.** The Mathematica team will identify strengths and weaknesses in Vermont’s current models to coordinate care across health care providers and settings in each region, and identify gaps or areas for improvement. We will propose strategies based on best practices in Vermont and in other states to enhance coordination of care across care settings and between clinical and public health providers within each region. At the direction of the Commission staff, we will seek to obtain stakeholder input into the proposed strategies—for example, at the Annual Blueprint for Health meeting. The Mathematica team’s final report will include recommendations for each design option, based on the degree to which the strategies meet the goals of Act 128 and follow best practices nationally.
- (b) Improvement in regional and community planning.** The Mathematica team will assess strengths and weakness of Vermont’s current regional health planning capacity and mechanisms, and identify gaps and areas for improvement. We will conduct two or three interviews with state or national health system planning experts to identify “best practices” and conditions or factors needed to implement them effectively. Our final report will contain proposals for regional mechanisms that are appropriate to each region of the state and that ensure public input into assessing community health needs and setting health system allocation priorities.
- (c) Regional health system management.** The Mathematica team will identify at least two options to structure and operate regional entities to perform the tasks specified in the Act 128. These include, but may not be limited to: (a) making budget recommendations and resource allocations for the region, (b) providing oversight and evaluation regarding the delivery of care in the region, (c) developing payment methodologies and provider incentive payments, and (d) other functions (such as regular monitoring and evaluation) necessary to manage the region’s health system. We will describe the strengths and weaknesses of each option based on Act 128’s goals and objectives. Our final report will recommend one or more options and fully explain the rationale for each recommendation, based on the degree to which it meets the goals of Act 128, follows best practices, and is appropriate for different regions in Vermont.

**Element 3: Health System Planning, Regulation, and Public Health.** Vermont takes a systematic approach to matching health care resources and services with the state’s health system priorities and its residents’ needs. For example, Vermont’s 2009 Health Resource Allocation Plan (HRAP)<sup>9</sup> offered several recommendations to ensure that new health care investments and certificate-of-need (CON) approvals support the state’s health system priorities.<sup>10</sup> For example, HRAP recommended that the Institute for Healthcare Improvement “Triple Aim” goals be used as the framework for evaluating new CON applications and health planning generally. Because Vermont currently lacks organizations that can take responsibility for achieving these goals for specified populations, HRAP endorsed the development of ACOs. Concurrently, Vermont’s Health Information Technology Leaders (VITL) developed a Vermont Health Information Technology (HIT) Plan<sup>11</sup> to support the expansion of health information technology—a critical element of integrated and effective care.

The Mathematica team’s approach will build on the substantial effort embodied in Vermont’s 2009 Health Resource Allocation Plan and the Vermont HIT Plan, focusing on how existing or new health planning processes might better support the three design options.

The Mathematica team will identify ways that the current state health planning processes could support the potential for each design option to achieve Act 128’s goals and objectives, highlight any gaps or discrepancies between current processes and the needs of each design option, drawing from “best practices” in other states and internationally to recommend strategies for adding to or modifying Vermont’s health planning systems. Our analysis will pay particular attention to opportunities to strengthen local and regional input in the development of health system priorities, as well as any changes to state agency authority or capacity that might be required to implement specific recommendations.

#### **Element 4: Financing and Estimated Cost**

- (a) **Total cost.** Estimation of total cost for each design will rely on microsimulation modeling customized to reflect Vermont’s population and demand for health coverage, projected sources of coverage available under each design option, and projected use and prices of health care in Vermont. The Mathematica team brings strong and unique experience for producing estimates for Vermont that will rely extensively on the state’s own data, as described in Section III.

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<sup>9</sup> See: [<http://www.bishca.state.vt.us/health-care/hospitals-health-care-practitioners/health-resource-allocation-plan-hrap>], accessed June 14, 2010.

<sup>10</sup> Act 128 mirrors these priorities for Vermont—namely, improved chronic disease management, health promotion, integration of physical and mental health and substance abuse services, and improving the cost-effectiveness of health services.

<sup>11</sup> See: [IT\_Strategic\_Implementation\_Plan\_10-11-09\_[1].pdf], accessed June 14, 2010.

The total cost of each design option will be estimated as the sum of medical costs and administrative costs. We will use consistent assumptions to the extent they are appropriate to each design option, to produce estimates that can be compared across the options.

*Medical costs* will be estimated by actuarially adjusting person-level utilization estimates for differences in service use associated with benefit design (service coverage and cost sharing), as well as the prices paid various third-party payers in Vermont (as described in Section 3). Total medical costs will be estimated as the sum of each person's medical costs, summed across all Vermonters. Absent compelling reasons to the contrary, we will assume that all payers adopt the payment system developed in the first element of the analysis (described above) when they operate in a structure (such as an all-payer system or exchange) over which the state would have authority to require use of that payment system.

Mathematica's method of calculating total medical costs has strong advantages over simpler methods that average costs among individuals who newly enroll in a particular benefit design, regardless of their individual characteristics. Specifically, it allows total medical costs to differ according to age, health status, and other personal characteristics of individuals who enroll in alternative benefit designs—all of whom likely vary their use of health care relative to the average among those who may already be enrolled. It also allows total cost to vary with differences in the prices various coverage sources pay providers.

Administrative cost is likely to be one of the major differences among the design options that Act 128 calls for. This cost category includes expenditures for several functions common to any insurance plan—including claims processing and adjudication, utilization review and provider profiling, disease and chronic care management, and marketing. For most insurance systems, administrative cost also would include expenses related to enrollment, enrollment verification, and billing and attribution of premiums. For private insurance plans, taxes, profit or margin, and additions to reserves or surplus also would contribute to administrative cost. For most public programs, administrative cost would include eligibility determination. Moreover, some design options (for example, a single payer plan) may divorce administrative cost entirely from health benefit costs over time (although PPACA's focus on medical loss ratios preserves this relationship for private insurance plans).

Estimates of system-wide administrative costs can vary widely, reflecting differences in the components of administrative cost among different types of insurers<sup>12</sup> and the relative

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<sup>12</sup> For example, Woolhandler et al. (2003) estimated average administrative costs of 11.7 percent among all privately insured individuals, compared with 6.8 percent for Medicaid, and 3.6 to 8 percent for Medicare. Holahan and Blumberg (2008) estimated administrative costs from 12.5 percent for large groups, to 23 for small groups, to 30 percent in for individuals. See: Steffie Woolhandler, Terry Campbell, and David U. Himmelstein, "Costs of Health Care Administration in the United States and Canada." *New England Journal of Medicine*, August 2003, 349 (8): 768-75; and John Holahan and Linda Blumberg, "Can a Public Insurance Plan Increase Competition and Lower the Costs of Health Reform?" Washington, DC: Urban Institute Health Policy Center, October 2008.

importance of any one type of insurer. The substantial differences among payers in their administrative costs relative to either enrollment or medical benefits highlights the importance of defining clearly the administrative functions and organizational structure inherent in each design option if administrative costs are to be correctly estimated.

The Mathematica team will estimate the costs of administering each design option using Vermont-specific data (see Section 3). Where Vermont-specific data are unavailable (for example, for Medicare administration), we will use national estimates, making adjustments as appropriate to estimate costs attributable to Vermont. For each design option, we will apply the average administrative cost rate (per medical expenditure) in each coverage category (individual, small group, Medicaid, SCHIP, Medicare, or another public plan) to each individual in the model to develop estimates of total administrative cost across Vermont's entire health care system. We will cross-check our estimates with various studies that offer state and national estimates of administrative cost compared with the administrative cost of alternative health care systems.<sup>13</sup>

- (b) Financing.** Because each design option would rely on private and public sources of coverage to varying degrees, each would be financed somewhat differently. The microsimulation approach we propose will identify sources of coverage at the individual level under each design option. As a result, our approach will support a detailed understanding of the financing needs for each design option, as well as the distribution of cost across different payers—including federal government, state government, employers, and individuals.

Just as each of the design options may result in different funding obligations for the various payers, each may release funds that are currently obligated. For example, a design option that would produce lower medical or administrative costs for state employees (as well as other Vermonters) could allow reallocation of funds that are currently used to pay for the state employee plan. Conversely, however, a design option that would require all payers to use a common payment method—or create a single payer in Vermont—might require the state to find additional funds to pay for the care of individuals eligible for (and enrolled in) Medicaid or SCHIP.

Retaining funds currently allocated to health care in Vermont but outside of state control can be difficult. Savings that accrue to employers and individuals may be released to other productive uses, and are difficult to recapture for the purpose of financing an alternative health care system. Similarly, it might be difficult to recapture community resources currently devoted to serving uninsured residents to help finance a transformed health care system. Recognizing the uncertainty of recapturing such funds, we will estimate the amount of the net funds needed to finance the design option (after reprogramming funds that the state directly controls) as a percentage of state taxable personal income. This estimate will offer a sense of the magnitude of additional financing needed, relative to the state's broadest available tax base. Conversely, to the extent that the design option reduces

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<sup>13</sup> David U. Himmelstein, Steffie Woolhandler, Sidney M. Wolfe, "Administrative Waste In The U.S. Health Care System In 2003: The Cost To The Nation, The States, And The District Of Columbia, With State-Specific Estimates Of Potential Savings," *International Journal of Health Services*, 2004, 34(1): 79-86.

the state's funding obligations, we will report the reduction both in dollar terms and as a percentage of state taxable personal income.

The Mathematica team is aware that, in addition to concerns about financing the direct delivery of care, other initiatives undertaken to achieve the goals of Act 128 might also entail cost and the need for new or different financing. For example, to achieve Act 128's efficiency and quality improvement goals, it may be necessary to refinance and expand the Vermont Health Information Technology (HIT) Fund. Similarly, any state-mandated clinical or delivery system changes might require funding support on either a transitional or ongoing basis.

- (c) **Need for and design of Medicare/Medicaid/SCHIP waivers.** The Mathematica team is very familiar with Vermont's previous efforts to obtain federal Medicaid waivers, as well as the state's leadership in exploring potential Medicare waiver opportunities. For example, Vermont long has been a leader in using Medicaid waiver authority to extend or expand eligibility for childless adults, pregnant women, and children; and currently covers children up to 300 percent of FPL. However, in addition to waivers from federal rules governing Medicaid eligibility, Vermont is interested in establishing a statewide system of consistent payment incentives among all payers, which would require federal participation under a Medicare waiver.

PPACA allows for many kinds of state waiver requests, potentially offering new opportunities for Vermont to craft a health care system that addresses its health system goals with coordinated financing (Table 2). Based on our national experience and knowledge of Vermont, the Mathematica team will assess provisions that (pending release of federal rules for these programs) are apparently the most relevant to each design option and Act 128's goals.

Act 128 calls for the consultant to develop a proposal to the Centers for Medicare & Medicaid Services (CMS) to waive provisions of the Medicare, Medicaid, and SCHIP programs. While we propose to explore in some detail waiver opportunities to implement each design option, especially as PPACA has expanded those opportunities, we do not propose to develop CMS-ready waiver applications under this project. Instead, the Mathematica team will examine opportunities where PPACA may provide avenues for Vermont to move forward on any of the five elements for each design option. The final report will incorporate our recommendations about pursuing waiver authority to help the state meet Act 128's payment and delivery system goals.

- (d) **Participation in the federal exchange under PPACA.** As described earlier, it will be necessary to understand Vermont's intentions with respect to participating in the exchange under PPACA in order to establish a baseline for comparing the design options. We have suggested that adopting a comprehensive and exclusive exchange (the latter, if permissible under ERISA) might be most consistent with Vermont's desire to develop a single, coherent system of health care and health care payments. As mentioned above, the Mathematica team will work with the project officer and others he may designate to understand how Vermont might wish to proceed under PPACA with respect to establishing a state exchange and also merging a SHOP into the exchange. However, we do not propose to develop a full proposal for PPACA implementation of an exchange, nor

do we propose to draft waivers as may be required to implement an exchange as Vermont may wish to design it.

**Table 2: Selected Pilot, Grant, and Waiver Programs in PPACA**

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<p>Payment reform</p> <ul style="list-style-type: none"> <li>• <b>Medicaid and Medicare bundled payments for hospital and post-acute care.</b> Up to eight states will be selected to participate in a Medicaid demonstration project, starting in January 2012, to test the use of bundled payments for hospital and physicians services for Medicaid beneficiaries. Starting as early as January 2011, Medicare will launch a demonstration program to support transitional care to prevent unnecessary hospital readmissions; collaborations of community based organizations and hospitals with high readmission rates will be eligible.</li> <li>• <b>Medicaid Global Payment System Demonstration Project.</b> Up to five states will be selected to receive funds for large safety net hospital systems or networks to transition from fee-for-service to a capitated, global payments.</li> <li>• <b>Medicare payment to promote care coordination.</b> While not specifically designed for states, PPACA authorizes a number of Medicare payment reforms designed to reduce preventable hospital readmissions and improve care coordination. For example, by January 2013, Medicare will reduce payments for acute care hospitals with high readmission rates relative to the expected readmission rate for selected conditions.</li> <li>• <b>Accountable care organizations (ACOs).</b> PPACA authorizes Medicare pilots offering global payment (full or partial capitation) to cover ACOs' total cost of care for a defined Medicare population.</li> </ul>
<hr/> <p>Coordinated regional delivery systems</p> <ul style="list-style-type: none"> <li>• <b>Medical homes and chronic disease management and prevention for Medicaid beneficiaries.</b> As early as January 2011, states can apply for a new state Medicaid plan option to enroll Medicaid beneficiaries with chronic conditions into "health homes", defined as teams of health professionals that provide enhanced primary care, comprehensive care management, care coordination, transitional care, referral to community support services, and other services. Health homes need not be offered statewide and costs would qualify for an enhanced federal matching payment of 90 percent during the first two years of the program.</li> <li>• <b>Patient-centered medical homes.</b> States are eligible for grants totaling up to \$25 million to develop new medical home amendments to their Medicaid state plans, and to develop patient-centered medical homes that include community health teams able to provide enhanced primary care, care coordination, and chronic disease management.</li> </ul>
<hr/> <p>Public health promotion</p> <ul style="list-style-type: none"> <li>• <b>Chronic disease prevention.</b> Grants will be available to states starting this year to support community based prevention programs that reduce the rate of chronic diseases. This could help to support and expand Vermont's implementation of the Chronic Disease Self Management Program on a statewide basis.</li> <li>• <b>Community health workers.</b> The Centers for Disease Control and Prevention will award grants to states, from 2010 to 2014, to expand the use of community health workers to promote positive health behaviors and outcomes in medically underserved communities.</li> </ul>
<hr/> <p>Financing, Benefits, and Insurance Exchanges</p> <ul style="list-style-type: none"> <li>• <b>Waivers from state exchanges.</b> States can apply for a waiver to cover non-Medicaid eligible low-income individuals through an alternative program, if it would not cost the federal government more and it would offer comprehensive benefits and comparable cost sharing protections. In return, states would receive an aggregate payment equal to what the federal government otherwise would pay for eligible low-income individuals in an exchange.</li> <li>• <b>Integrating care for dual Medicare/Medicaid eligibles.</b> PPACA authorizes Medicaid waivers for coordinating care for dual eligible beneficiaries for up to five years. In addition, by the end of December 2012, all Medicare Advantage Special Needs plans must have state Medicaid contracts. A new CMS Federal Coordinated Health Care Office will offer states help and support in arranging these contracts.</li> <li>• <b>State basic health plans.</b> States have the option of offering to low-income individuals not eligible for Medicaid a basic health plan with limited cost sharing, covering preventive and wellness services, maternity and newborn care, mental health and substance use disorder services, pediatric services, and chronic disease management.</li> <li>• <b>Consolidated waiver processes.</b> The Department of Health and Human Services must develop a process for coordinating and consolidating State waiver processes related to the insurance exchange with Medicare, Medicaid and SCHIP waivers, so that states can submit a single waiver application.</li> </ul> <hr/>

**Element 5: Methods to Address Compliance with and Options under Federal Law.** In earlier work, Mathematica developed an extensive analysis of federal law and regulation that relate to the development of an exchange.<sup>14</sup> This analysis considered not only COBRA, HIPAA, and ERISA provisions, but also federal tax law definitions that affect those laws. We propose to review this analysis to identify any changes that may occur under PPACA and that might be relevant to each design option. To the extent possible, the Mathematica team will recommend changes in the design option to avoid potential conflict with federal law.

Our preliminary review of PPACA's provisions suggests that ERISA may continue to be the most problematic with respect to Vermont's ultimate objectives. The Mathematica team will review PPACA provisions specifically with respect to how they might modify the state's options with respect to ERISA. In addition, we will identify provisions or assumptions for each design option that might conflict with ERISA.

### 3. Process for Involving and Soliciting Input from Key Stakeholders

To develop realistic, achievable, and implementable design options, all aspects of this work must be placed in the context of Vermont's current health system—including stakeholders' priorities and concerns, as well as the state's fiscal and policy priorities. The Mathematica team proposes to work with the project officer to engage administrative and legislative staff and various stakeholders as may be appropriate to understand how to proceed with respect to several key elements of this work.

Specifically, with the agreement and participation of the project officer and whomever he may designate, we propose to engage stakeholders in a series of as many as six meetings to understand in detail stakeholder concerns and objectives for (1) payment system design; (2) delivery system change; and (3) regional and community health monitoring and planning. These meetings will seek to gain input from individuals who know most about the Vermont health care system so the Mathematica team's report will reflect the best thinking of experts in the state.

We will ask the project officer to organize these meetings and will work with him (or others he may designate) to identify specific individuals who should attend them. The Mathematica team will propose an agenda for the meetings and list of suggested participants, and prepare all materials for the meetings. We propose an initial meeting for each topic area, at which participants will be asked to react to "starting point" ideas, followed by an additional meeting that will give participants an opportunity to review points raised and strategies offered in the earlier discussion. We anticipate that we may wish to convene the initial meeting for key state legislative and administration staff separately from other stakeholders; if so, these meetings will occur on the same day, in order to minimize use of project funds for travel.

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<sup>14</sup> Chollet, Deborah, Su Liu, Kate Stewart, Alison Wellington, Allison Barrett, Mila Kofman, and Amy M. Lischko. "Final Report: Health Insurance Exchange Study." Report submitted to the Minnesota Department of Health. Washington, DC: Mathematica Policy Research, March 2008 [http://www.mathematica-mpr.com/publications/PDFs/healthinsexchange.pdf, accessed June 14, 2010].

We anticipate that key administration staff will include representatives from several state agencies, including (but not necessarily limited to) BISHCA, OVHA, Workers Compensation, Blueprint for Health, Human Resources, the Vermont Department of Health (VDH), the Department of Disabilities, Aging, and Independent Living (DAIL), and the Department of Mental Health (DMH). Other key stakeholders might include (a) providers (for example, the Vermont Medical Society, Vermont Association of Hospital and Health Systems, Vermont Nursing Home Association, Vermont Association of Home Health Agencies, and the largest provider systems, Dartmouth and Fletcher Allen); (b) consumer advocacy organizations (for example, the Vermont Low Income Advocacy Council, Vermont Association for Mental Health, Vermont Statewide Independent Living Council, AARP Vermont, Community of Vermont Elders, and individual consumers identified by advocates or providers identified by their organizations); and (c) private health insurers (BCBS Vermont, MVP Health Care, and CIGNA Healthcare).

We note that the purpose of these meetings is to obtain information. They are not intended as a substitute for the robust public process that the state will undertake after the Mathematica team's report is submitted.

Finally, we recognize that the comment period between submission of the draft and final reports affords an opportunity for review of the draft report by not only by the Commission, but also by others whose comments and impressions would likely be valuable. We anticipate that the project officer and HSRC members may distribute the draft report at least selectively outside the Commission, offering stakeholders another opportunity for input before the Mathematica team develops the final report.

## B. Task Structure and Project Milestones

We propose to structure work on this project around the key elements and key deliverables for the project as follow. All proposed dates are estimated, and assume a contract is awarded and executed no later than July 15, 2010. A GANTT chart of project tasks, deliverables, and the timeline is provided as Table 3.

**Task 1: Kick-off meeting and client communications.** The Mathematica team will meet with the project officer (and others he may designate) at the beginning of the project, not later than July 27. Dr. Deborah Chollet, the proposed project director, will participate in this meeting, as will other senior members of the Mathematica team. At this meeting, we will review and discuss the objectives and the content of each key element, the timing and content of stakeholder engagement, and the overall project timeline and key deliverables. The project director will maintain regular contact with the project officer through biweekly conference calls, regularly reporting progress and any issues that have arisen.

**Task 2: Design option development.** The Mathematica team will undertake a process of drafting and discussion to develop the outlines and key assumptions for each design option. The project officer may choose to participate in this process, and we welcome his participation. Not later than August 9, we will submit a draft of each design option, key assumptions, and outstanding issues. We will request any comments within two weeks, and revise and submit final outlines of each design option by September 7.

**Task 3: Payment system development.** The Mathematica team will draft the initial outlines of a payment system that reflects the objectives and priorities established in Act 128 and Vermont’s Blueprint. We will pay close attention to details that will affect the estimation of costs, but also begin the outlines of a payment system, administrative structure, process for determining payment levels and budgets, and methods to constrain cost that will be the basis for an initial meeting with key legislative and administration staff, as well as other stakeholders. In consultation with the project officer and others he may designate, we will hold two or three meetings with stakeholders to obtain input on alternative aspects of a reformed payment system. Building on work already completed for the Blueprint and consistent with the goals and principles in Act 128, we will develop a “starting point” outline of payment reform for each design option, identifying national and international examples of alternative payment system details or entire approaches. This document will be the basis for discussion at an initial stakeholder meeting, to be scheduled no later than October 1, which may include key legislative and administration health staff, as well as other stakeholders, in a single meeting or (to be determined in consultation with the project officer) in two separate meetings. The Mathematica team then will prepare a revised document, incorporating stakeholder comments and suggestions that will be the basis of a second meeting with stakeholders, which we anticipate would be a single meeting to obtain input from all stakeholders about the strengths and weaknesses of a draft recommended payment system, with variations as needed for each design option.

**Task 4: Delivery system design.** Paralleling the process described for Task 3, the Mathematica team will draft the initial outlines of a coordinated regional health system that reflects the objectives and priorities established in Act 128 and Vermont’s Blueprint. Again, we will pay close attention to details that will affect the estimation of costs, but also begin the outline of a regional system consistent with Act 128’s access, quality, and system efficiency goals which will serve as the basis for an initial meeting with key legislative and administration staff and other stakeholders. Again, we will hold two or three meetings to obtain stakeholders’ input on the many dimensions of building coordinated regional health systems. Building on work already completed in Vermont and consistent with the goals and principles in Act 128, we will develop a “starting point” outline of how coordinated regional health systems might be developed in Vermont, suggesting potential alternatives and examples of such systems in other states and internationally. This document will be the basis for discussion at a stakeholder meeting, to be scheduled no later than October 15, which may include key legislative and administration health staff, as well as other stakeholders, either in a single meeting or (to be determined in consultation with the project officer) in two separate meetings. The Mathematica team then will prepare a revised document, incorporating stakeholder comments and suggestions that will be the basis of a second meeting with stakeholders, which we anticipate would be a single meeting to obtain input from all stakeholders about the strengths and weaknesses of a draft recommended system, with variations as needed for each design option.

**Task 5: Design of health system planning, regulation, and public health.** The Mathematica team will review how Vermont’s existing health planning processes might support the four design options. We will explore examples of health planning in other states and internationally, including how it is implemented, and how it aligns with their public health objectives. We will identify ways that the current state health planning processes could support the potential for each design option and draw from “best practices” in other states and internationally to recommend strategies for adding or modifying state-level health planning systems, paying particular attention to opportunities to strengthen local and regional input in the development of health system priorities. We will consult with BISHCA and other administration and legislative staff to understand recognize how various recommendations might necessitate increasing or changing agency authority or capacity and reflect these conversations in our final report. In addition, we will use the stakeholder meetings

scheduled for Task 4 to elicit input as needed from other stakeholders to understand their perspectives on specific issues related to health system planning and regulation.

**Task 6: Cost and financing analysis.** As described more fully in Section 3, the Mathematica team's cost and financing estimates will be based on microsimulation modeling that is fully customized to Vermont's population, programs, and cost experience. We will begin this task by building a "base case" using the 2009 Vermont Household Health Insurance Survey (VHHIS). We will download several years of the Medical Expenditure Panel Survey (MEPS) household component Northeast regional sample data, and statistically match a MEPS person record to each target person in the population survey by their personal socio-demographic characteristics (such as age, gender, marital status, education, family type, and employment and health status, as well as location and source and type of coverage). We then will adjust all spending to Vermont control totals, obtained from published BSHCA and AHS information and reports and occasional consultation as needed with agency staff. We also will develop actuarial estimates of the change in spending for each individual that would occur with a change in benefit design consistent with the variations specified in Act 128. We will build microsimulation logic to simulate 2014 coverage under PPACA as well as each design option (a total of four sets of simulations), develop programming algorithms for each, and apply those algorithms to the population data to generate microsimulation estimates of the population that would be covered in 2014 with PPACA compliance, and then for each design option and benefit variation. We will prepare detailed and summary tables and analysis of this information as the basis for proceeding to the financing analysis, which will identify the cost of coverage for individuals who remain enrolled or become newly enrolled in each coverage option (for example, employer-sponsored insurance, individual insurance, Medicaid, Medicare, or a newly available source such as a single-payer system or public option). We will compare these costs to currently obligated state and federal funds, and apparent new funding (for example, federal matching funds). We will compare any additional funds needed to finance the design option with taxable income in Vermont. All of this information will be compiled into detailed and summary tables to accompany the financing analysis. Finally, we will prepare extensive documentation of our methods and key assumptions, to be included in the final report.

**Task 7: Draft and final reports.** The Mathematica team will compile all information and analysis developed in Tasks 2 through 6 in a draft report to be submitted to the project officer and Commission no later than January 1, 2011. The draft report will be structured around each key element identified in Act 128, and will include a clear exposition of key assumptions underlying discussion and estimates for each design option, as well as for the baseline representing PPACA implementation in Vermont. As specified in Act 128, the Commission (and various stakeholders they may designate) will provide review and comments to the Mathematica team no later than January 15. The Mathematica team will consider all comments received by that date, and prepare a revised final report responsive to those comments. In addition, the final report will include an appendix with full documentation of methods.

**Task 8: Presentation to the Commission.** We propose to be available for one presentation to present the draft report to the Commission. This briefings will include presentation of the final report and allow Commissioners (and others whom they may invite) to engage in discussion with the Mathematica team about our recommended design option, payment system, coordinated health systems, and health system planning design, and the reasons underlying our recommendations.



### III. PROJECT STAFFING

We will leverage our experience with Vermont's health care system and data by tapping expertise of Administrative and Legislative staff, and also by consulting strategically with stakeholders. We anticipate making selective data requests of Administrative staff, including limited consultation about the details and limits of publicly available data; we may also request some tabulations of Medicaid per member per month medical costs. We are cognizant that each of the design options will entail some level of administrative cost incurred by private carriers, state government, or both. Therefore, we anticipate also approaching the AHS to obtain estimates of AHS administrative cost as well as administrative cost incurred by contracting carriers. In addition, we anticipate requesting from BISHCA estimates of its administrative cost associated with its duties to regulate, monitor, and license private carriers in Vermont.

Finally, we anticipate approaching legislative staff and stakeholders for their input in selected areas. We propose to organize six meetings with the cooperation and participation of the project officer and others he may designate (potentially including administration and key legislative staff), to obtain input and feedback with respect to key strategic and implementation issues related to payment reforms, system design, and planning and regulation.

## IV. DATA SETS AND MODELS

The Mathematica team brings extensive and unique experience to developing efficient, customized models to estimate and compare the coverage, cost, and financing implications of major state reform proposals. We recognize this project is not simply an academic modeling exercise and have brought together a highly skilled team that knows the Vermont health care system, data, prior research, programs, legislature, administration, and stakeholders. Having worked in Vermont and in many other states to design major health care reforms and estimate their impacts, the Mathematica team offers the practical experience necessary to ensure that our modeling is technically sound and efficiently designed, and that it accurately reflects Vermont's health care system, programs, and benefits.

The Mathematica team will build a model that is customized to Vermont and leverages the building blocks described in Section II of this proposal, including Vermont's extensive survey and administrative data. We will use Vermont data as the primary (or "root") data for our model and estimate key parameters (such as the demand for insurance and the propensity to enroll in public programs when eligible) using Vermont data and detailed understanding of program rules. This knowledge and customization distinguish the Mathematica team from other modelers who typically rely on multi-year state samples in national survey data (usually the Current Population Survey [CPS]); compared with good state surveys, that method produces low statistical power, biased estimates of the population that is uninsured, or both. In addition, unlike modelers that borrow estimates of behavioral parameters from national estimates available in the research literature, whenever possible, we will estimate these parameters using Vermont-specific data. Our work in other states indicates that behavioral parameters estimated for a specific state can vary substantially from national averages. Because we bring a portfolio of extensively tested and well-honed techniques, we have made this highly customized process very efficient, while delivering a product that reflects the state's unique circumstances, population, and programs.

### A. Data Sets

The Mathematica team will use six key data sources to build and estimate a Vermont microsimulation model:

- **The 2009 Vermont Household Health Insurance Survey (VHHIS).** The Mathematica team proposes to use the VHHIS as the core population micro-data base of our model. VHHIS offers large sample size (and therefore a relatively high level of precision in estimates) and contains all person- and family-level variables essential for estimating Vermont-specific behavioral parameters, matching expenditure records from other survey data (described below), and serving as the core population database for the Vermont microsimulation model.
- **The Medical Expenditure Panel Survey Household Component (MEPS).** The Mathematica team has extensive experience using MEPS to produce microsimulation estimates of major state health care reforms. The MEPS Household Component is a national (and regional) representative survey with person-level data on demographic characteristics, health status, use of medical care services, charges and expenditures, health insurance coverage, income, and employment. The Mathematica team will

benchmark MEPS expenditure totals to published Vermont-specific information control totals, using the following key data sources:

- **BISHCA’s Three-Year Forecast of Vermont Health Care Expenditures 2009-2012.**<sup>15</sup> Each year, BISHCA prepares a three-year projection of health care expenditures made on behalf of Vermont residents using a forecasting model similar to that which CMS uses to develop the national and state health expenditure accounts. The Mathematica team is aware that these projections assume no significant changes in enrollment or program policy changes in Medicare or Medicaid, such as expanded Medicaid eligibility under PPACA.
- **BISHCA’s 2008 Health Plan Administrative Cost Report.**<sup>16</sup> This report contains analysis of the administrative cost of private health insurance plans, the state employee health benefit plan, the Medicaid program, and health care services provided by the Agency of Human Services (AHS).
- **BHSCA’s Market Share Reports.**<sup>17</sup> These reports contain information about the number of covered lives and earned premiums for all carriers licensed in Vermont, and for major coverage sectors, including individuals, small and large insured employer groups, association plans, Medicare supplements, long term care insurance, third party administrator fees, Medicare Part D, and Medicare Part C.
- **Vermont’s Global Commitment to Health Annual Report.**<sup>18</sup> This report contains measures of utilization and capitated revenue spending by Medicaid enrollment category for Global Commitment to Health.

As necessary, we will contact BISHCA, the Office of Vermont Health Access (OVHA), and other agencies’ staff to obtain more recent information that might be available, and also to understand and resolve any issues we may discover after more thoroughly examining the data available in online documents. Our relationships in the state, knowledge of the datasets, and experience with managing data in general will facilitate these contacts. In addition, as necessary to augment other available data, we will consult with BISHCA to obtain summary estimates of expenditures by payer and type of service from the Vermont Healthcare Claims Uniform Reporting and Evaluation System (VHCURES) for the purpose of benchmarking our estimates. However, considering the time and resource constraints of this project, we do not propose to use VHCURES microdata for this project.

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<sup>15</sup> See [<http://www.bishca.state.vt.us/sites/default/files/Expenditure-Initial-Forecast-Report.pdf>], accessed June 13, 2010.

<sup>16</sup> See [<http://www.bishca.state.vt.us/sites/default/files/Health-Plan-Administrative-Cost-Reportpdf.pdf>], accessed June 13, 2010.

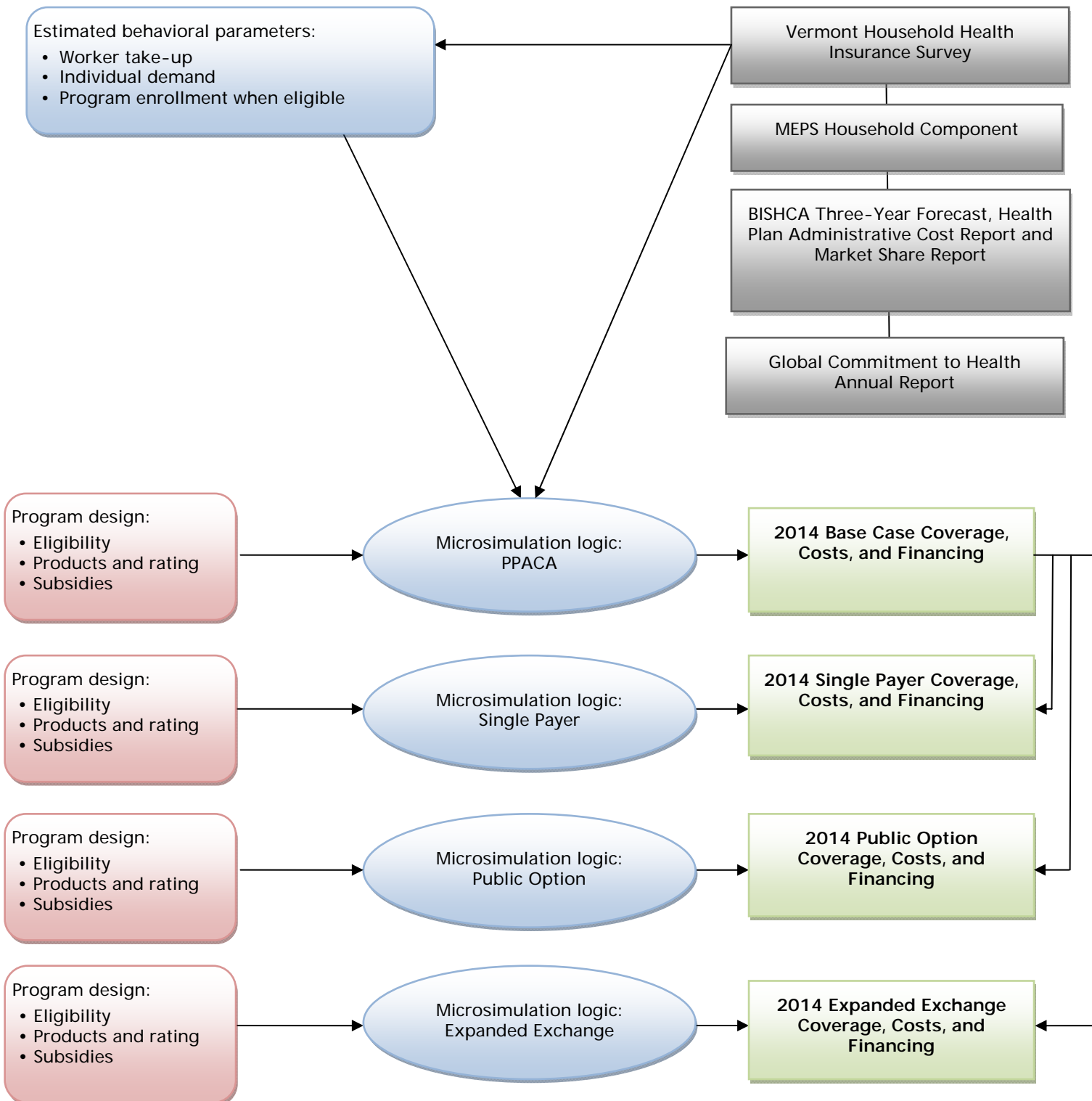
<sup>17</sup> See [<http://www.bishca.state.vt.us/health-care/health-insurers/market-share-reports-earned-premiums-year>], accessed June 13, 2010.

<sup>18</sup> See [[http://ovha.vermont.gov/administration/gcannual\\_reportffy07final.pdf](http://ovha.vermont.gov/administration/gcannual_reportffy07final.pdf)], accessed June 13, 2010].

## B. Model Development

The Mathematica team will construct a microsimulation model that is highly specific to Vermont’s population and programs, and optimizes the use of Vermont-specific data, in six steps. These are presented in detail below and summarized in Figure 3.

Figure 3. Flowchart of Microsimulation Model



1. **Construct baseline population and expenditures data.** The Mathematica team will first construct a 2009 baseline database by conducting a statistical match of MEPS expenditure records to VHHIS person records. We will match several years of Northeast-sample MEPS expenditure records to the 2009 VHHIS person-level data. All expenditures will then be benchmarked to Vermont expenditures using per-member-per-month (pmpm) control totals by source of coverage and by available geographic or demographic detail.
2. **Develop Vermont-specific behavioral parameters.** The Mathematica team will sketch out the design of the microsimulation model to identify the key behavioral parameters required to drive the Vermont model. When equally strong, alternative modeling logic might be used, we will choose the logic that most relies on behavioral parameters that we can estimate from the VHHIS. To the extent possible, we will estimate all key behavioral parameters (such as private insurance take-up and enrollment in public programs when eligible) using the VHHIS. Only when parameters cannot be estimated from Vermont-specific data will we incorporate the strongest and most recent available estimates from the research literature. As noted earlier, we have found that state-specific estimates of consumer behavior can vary widely from national estimates available in the literature, although they characteristically fall within the wide range of national estimates developed over the years. By estimating Vermont-specific parameters when possible, we will ensure that the model produces results that accurately represent Vermonters' responses to offers of coverage, not national averages.
3. **Develop and program model logic.** The Mathematica team next will develop detailed programming logic for the Vermont base case and each of the design options. Because we have extensive experience with this type of process, such customization will be very efficient. The Mathematica team will *not* retro-fit an existing model merely to "look like" the specific reform of interest, but instead will bring the skills, knowledge, and experience necessary to produce the most accurate estimates for Vermont. The microsimulation logic needed for this project will include logic to project the base case (simulating PPACA implementation in Vermont) as well as each of the design options.
4. **Develop actuarial estimates of utilization and cost variation related to differences in benefits and cost sharing.** To facilitate comparison among the design options, we will develop a set of standard benefit designs and cost sharing that will be common to all of them. Actuarial estimates for each benefit/cost sharing combination will be based on srHS' proprietary Benefits Pricing Modeler (BPM), which allows us to model the incremental utilization and cost impacts of varying such key plan design components as covered benefits, deductibles, co-pays, and coinsurance. As the consulting actuaries involved in setting or reviewing rates for more than 2 million lives covered by Medicaid, CHIP, Low Income Expansion Programs, Subsidized Insurance Programs, Individual Health Insurance, and Small and Large Employer coverage, srHS can use the BPM to model the cost and utilization of a standard benefit package and plan design for each of the aforementioned populations at various reimbursement levels (Medicaid, Medicare, commercial) and approaches (fee-for-service, capitation, global payment).

5. **Project the base case.** Using the model and actuarial estimates developed in Steps 3 and 4, the Mathematica team will develop a 2014 pre-PPACA database, reflecting Vermont's population, coverage, and health care costs in 2014 without implementation of federal reform. We will then model PPACA effects to produce the 2014 post-PPACA base case. These estimates will reflect changes in coverage associated with changes in eligibility for public programs under PPACA, as well as increase take-up of private group and individual coverage associated with PPACA's individual mandate. All private coverage estimates will be validated against experience following implementation of similar reforms in Massachusetts. Pmpm expenditures will be projected to 2014 using agency projections (if available) or by extrapolating from past growth, modified as may be indicated in consultation with BISHCA, OVHA, or others.
6. **Stimulate the design options.** The Mathematica team will estimate each of the health system design options as variations on the 2014 post-PPACA base case estimated in Step 5. For each design option, we will estimate the person-level insurance coverage status and adjust expenditures using the actuarial relativity factors developed in Step 4.

Mathematica has used such customized modeling to estimate enrollment and expenditures under major health system reforms in several other states—including Maine, Minnesota, Missouri, New Mexico, and Washington. Most recently, for Minnesota and Washington, Mathematica used state population surveys that are very similar to the VHHIS as the “root” population data file for microsimulation modeling. Similar to the process that we propose here, Mathematica mapped MEPS regional expenditures to the root file, benchmarked expenditure estimates to actual state experience, and estimated key behavioral parameters for the microsimulation model. srHS, our partner for this project, also brings extensive experience modeling health insurance reform impacts (and most recently PPACA implementation) in Arizona, California, Connecticut, Kentucky, Kansas, Louisiana, Maine, Massachusetts, New Mexico, Rhode Island, and Tennessee. The combined experience of Mathematica's team ensures an end product that uniquely reflects Vermont's programs and reforms, and that will be delivered efficiently and on time.

## V. REFERENCES

This section describes selected examples of recent work directly related to Act 128's requirements, conducted respectively by Mathematica and its proposed subcontractors.

### A. Mathematica Policy Research

Mathematica's health policy work with state clients is expansive and varied. Both singly and in collaboration with other organizations, we have helped states to develop, model, and implement many major reform options. Mathematica has extensive experience in providing technical assistance to state policymakers in developing major reforms to expand coverage, maximize federal funding, and improve system efficiency. In addition, Mathematica has developed customized models to provide estimates of key outcomes—coverage, cost, financing and economic impacts—of major state health care reforms for Illinois, Maine, Minnesota, Missouri, New Mexico, and Washington. Mathematica's analyses are tailored to states' particular needs. We work interactively with the project officer and state policy makers to provide the technical assistance needed for strong policy design and ease of implementation.

**Minnesota.** In 2007, Governor Tim Pawlenty proposed establishing the Minnesota Health Insurance Exchange as part of the "Healthy Connection" legislative proposal. Subsequently, the Minnesota legislature required the Minnesota Department of Health (MDH) to conduct a study and provide a report to the legislature on the issues involved in establishing a health insurance exchange. The objective of this project was to provide technical assistance to MDH as it prepared its report for the legislature on structuring a health insurance exchange. The project involved analysis to address four areas of concern to the state: (1) identifying design options and evaluating the advantages and disadvantages of each option; (2) estimating the impact of each option on coverage, the cost of health insurance, and state revenues; (3) estimating the administrative costs of implementing and operating the exchange, and identifying possible financing sources; and (4) examining operational and legal issues related to establishing both the exchange and Section 125 plans. Mathematica developed a customized microsimulation model for Minnesota, similar to that we propose for Vermont, and developed a final report to MDH incorporating findings in each area.

In 2008, using the newly available Minnesota Health Access Survey, Mathematica updated the model to estimate the impact of a proposal to make health care affordable for low-income workers and dependents who do not qualify for MinnesotaCare because they are offered job-based coverage and their employers would pay at least 50 percent of the premium. The Commissioner of Health proposed to make coverage affordable to these workers and dependents by capping their total family spending for health insurance premiums and health care services. Eligible families would receive a subsidy or refundable tax credit when the sum of their premiums, cost-sharing, and out-of-pocket expenditures exceeds established affordability standards. Mathematica estimated the coverage and cost impacts of the alternative policy configurations of this proposal to support MHD's report to the legislature. Mathematica prepared a report to MDH and also developed a spreadsheet model to facilitate on-demand presentation of the coverage and cost estimates.

**Washington.** The Washington State Health Care Authority (HCA) envisioned the Health Insurance Partnership (HIP) as a vehicle to improve the transparency and functioning of the individual insurance market, reduce small employers' administrative burden in offering coverage, and promote insurance portability for workers who change jobs. The HIP Board was charged with the development of rules and policies for HIP, including, but not limited to, minimum participation and contribution rules for small businesses and support of individual choice of plans within HIP. For the HIP Board, Mathematica undertook a study of an "expanded" HIP, which would operate as a single and exclusive market for small groups and individuals, with common health plan options and rating based on pooled experience. Mathematica worked collaboratively with HCA and other state officials, legislators, and others to develop detailed specifications for HIP rules and policies as outlined by the Board, and to identify potential problems and issues. Mathematica modeled the impacts of the HIP as authorized in statute, and then the expanded HIP, providing estimates of changes in small-group and individual coverage, cost, and financing. Mathematica provided separate estimates of impacts on the association health plan market, which accounts for approximately half of all insured small groups in the state.

After completing its work for the HIP board, Mathematica was selected by the Washington Citizens' Work Group on Health Care to model the coverage, cost, and economic impacts of five alternative proposals for major health reform in Washington State, assuming implementation of HIP as authorized in statute. For each reform proposal, Mathematica developed a matrix of key issues to assist the legislature in understanding specific aspects of each proposal that would drive impacts, and developed microsimulation estimates of cost and financing. Mathematica also produced a series of research syntheses to support a common understanding of the programmatic factors that may contribute to desirable outcomes—such as good health outcomes, evidence-based practice, and the development of medical homes—and qualitative evaluation of each of the reform proposals.

## **B. Bailit health purchasing**

Bailit Health Purchasing has assisted more than 50 clients since 1997 to improve methods for purchasing or regulating health and human services. Bailit has provided technical support for the design and implementation of health care reforms in California, Vermont, Massachusetts, and Colorado. Bailit also has worked with a number of states to help develop strategies to reduce the Medicaid budget, and identify the policy, programmatic, and operational implications these strategies for the states.

**Kansas.** Joshua Slen is currently working with the Kansas Health Policy Authority (KHPA) to develop Provider Survey content, conduct a state-wide system scan, and draft an RFP to obtain a vendor to draft the State Medicaid Health Information Technology Plan. This current state level policy work requires in-depth knowledge of federal law and regulations and their interaction with state level laws and regulations, it demands a precise understanding of the goals and timelines of both federal and state programs, and it necessitates a strategic level understanding of state level planning and the potential impacts on the overall health care system; providers, consumers, and institutions.

## **C. Health Policy Matters**

Health Policy Matters assists states and private organizations to develop and implement delivery systems, programs, and business strategies to serve publicly funded beneficiaries. Clients have

included Colorado, Vermont, and numerous private sector organizations that contract with Medicaid departments nationally.

**Vermont.** For this project, Meryl Price systematically reviewed the eligibility system and related processes to enroll the eligible but un-enrolled population in Vermont in Medicaid. Specifically, she was responsible for assessing Vermont's eligibility, enrollment and renewal processes and opportunities to improve both enrollment and retention in publicly funded health care programs. Ms. Price presented her assessment in a report to the Office of Vermont Health Access.

#### **D. shrammrleigh Health Strategy (srHS)**

srHS has worked as strategists and consulting actuaries for Maine, Massachusetts, and Connecticut, helping each to design, develop, implement, and evaluate the effectiveness of various program components to address the needs of the uninsured. srHS's consulting been been tailored each State's unique context and reform initiative.

**Maine.** srHS was hired to help implement the Dirigo Health Reform Act, Maine's comprehensive statewide health reform initiative designed to improve access to care and the quality of care while reducing the rate of growth in health care expenditures statewide. srHS worked with Dirigo to negotiate with CMS about the design and funding of the Dirigo program. srHS wrote the original DirigoChoice RFP for insurance coverage, calculated the actuarially certified capitation rates, and negotiated with the successful bidder (Anthem Blue Cross of Maine) on behalf of Dirigo. In addition, Dirigo's Board engaged srHS to measure the impact of the Dirigo program. srHS provided expert witness work during hearings on the impact of Dirigo coverage expansions, voluntary hospital cost-control mechanisms, strengthened certificate of need process, and insurance carrier underwriting limits resulted in recognized savings of more than \$200 million over the first five years of the program.

**Kansas.** The Kansas Health Policy Authority (KHPA) engaged srHS in 2007 to design, develop, and price the impact of five major health reform scenarios, each customized to Kansas's particular needs and health care marketplace. Using its Statewide Health Reform Projection (SHRP) model, srHS developed a hybrid micro-simulation process to determine who would receive coverage, what that coverage would cost, the impact upon payers, winners/losers, number of uninsured, and how it would be administered under each scenario. srHS presented the model and its findings to the Board and the Kansas Legislature.

Subsequently (in 2009 and 2010), KHPA engaged srHS to adapt the hybrid micro-simulation to estimate the impact of federal health care reform on Kansas, first on the emerging legislation and then as enacted in the federal health reform law. The model demonstrated how coverage would shift among groups, what new coverage would cost, the impact of federal reforms in the insurance market, the impact of state-level exchanges, the impact upon payers, winners/losers, and number of uninsured. srHS presented these results to the KHPA Board.

## VI. BUSINESS PROPOSAL

### A. INTRODUCTION

This chapter contains our line-item contract budget by task and other business materials for conducting the Health Care System Design and Implementation Plan in response to the request issued by the Health Care Reform Commission. It totals \$299,998 and is supported by Mathematica's detailed supporting price schedule. These supporting schedules, presented by task provide the number of budgeted hours for individuals and categories of labor and the price of materials and supplies to perform the proposed work. The fixed unit prices used to estimate costs are based on prices set each calendar year. A salary increment has been added as a separate budget line to account for labor increases anticipated in response to Mathematica's annual salary review process which occurs each July 1. Our budget assumes an 8 month period of performance and the award of a contract that is reimbursable based upon our fixed unit prices. This bid is firm for a period of 60 days from the date of submission.

We understand that the contract resulting from this proposal will be limited to the funds obligated. However, we also recognize the very nature of the proposed research requires Mathematica to estimate the levels of effort required to achieve particular components of the project. Inasmuch as some aspects of the work will not be susceptible to exact specification, the following protocol will be incorporated into the contract:

In the event that substantive issues are encountered, or problems occur affecting schedules or milestone events that could be expected to affect cost or performance, and these problems or issues are neither caused by Mathematica, nor are they within the reasonable scope of its control, Mathematica shall be obligated to provide timely notice concerning the nature of the problem and the potential impact upon the cost or performance. Thereafter, the parties shall be obligated to evaluate alternative resolutions in a timely manner and agree upon a course of action that delivers the overall goals and objectives of the study within the resources available.

The research being performed by Mathematica under the proposed contract will result in data and reports that are important to informing the academic and scientific community and policy makers on topics relevant to public policy. The reputation of Mathematica, and of the researchers responsible for the research effort, data, and the authors of the reports derived from this effort, rest on the integrity of the research, its methodology, and on the process of peer review. Equally important are the confidentiality of proprietary information of the client and the protection of research subjects from any harm through the inappropriate release of information acquired in the performance of the work.

In the event that this proposal shall lead to a contract to Mathematica to perform the proposed project, it is our expectation that language will be incorporated into the resulting contract that will address the subject of granting copyrights and license to publish and disseminate findings to Mathematica and its authors for publication in academic or scholarly publications or presentations, its right to post final reports or deliverable products on its internet website, its rights to publish deliverables developed under the contract, while protecting proprietary and confidential information acquired in the performance of the research from inappropriate use by Mathematica, or inappropriate disclosure of such information by it to third parties. It should also contain language that ensures that the client has full and unrestricted rights to use or authorize others to use the product of this research effort, without recourse to Mathematica in any form. Regarding copyright,

publication or dissemination of information, it is expected that reports or other research material attributed to Mathematica and its authors will be released in their entirety, and Mathematica will be provided an opportunity to review these materials prior to their release.

Mathematica proposes Bailit Health Purchasing, Health Policy Matters and schrammraleigh Health Strategy (srHS) as subcontractors on this project. Bailit Health Purchasing will serve as co-investigator and lead development of proposals for a coordinated regional health system (Task 4) and the design of health system planning, regulation, and public health (Task 5). He will also work with the project team to develop the design options (Task 2), and will be responsible for major components of the payment system development (Task 3) and the draft and final reports (Task 7). In addition to these tasks Bailit will also participate in any Commission and legislative briefings with Dr. Chollet (Task 8) and may attend additional Commission meetings at the invitation of the project officer. Health Policy Matter's will be providing research and strategic support especially on regional health system design (Task 4) and the design of health system planning, regulation, and public health (Task 5), as well as development of the design options (Task 2), development of the payment system (Task 3), review of the cost and financing analysis (Task 6), and development of sections of the draft and final reports (Task 7). srHS will work collaboratively with the team to develop the design options (Task 2), and will be responsible for major components of the payment system design (Task 3), including the development of alternative health service packages and cost sharing designs, estimates of the utilization and cost impacts of pharmacy management best practices, and the implications of the proposed payment method for each benefit design.

In addition to the proposed subcontractors Mathematica is bidding Patricia Butler and an unnamed international consultant. Ms. Butler will review each design option and the final report, and comment on any issues of federal law that might arise in the legislation or with implementation of the proposals, especially with respect to the overlay of PPACA on ERISA. The international consultant will provide assistant in Task 3, payment systems development.

Any questions relating to this proposal should be addressed to:

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