Statement by William C. Hsiao before Vermont State Legislature
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My name is William Hsiao and I am the K.T. Li Professor of Economics at the Harvard School of Public Health. I appreciate the opportunity to address the leaders and the public about the future of health care in the State of Vermont. Before discussing my role, and the role of my team of more than twenty specialists, in developing Vermont's bold agenda for health care reform, I believe it is important to frame those issues already identified by the Legislature and Governor Shumlin in Act 128.

Despite its valiant efforts, Vermont has not been able to provide high quality, affordable health care for all of its residents. It is fair to say that the system is broken. At present, roughly 47,000 Vermonters are without health insurance. While the Patient Protection and Affordable Care Act will make a dent in that figure, it is estimated that 32,000 Vermonters will remain uninsured. Beyond that, it is estimated that 15 percent of Vermonters are underinsured and dedicating too much of their household budget to covering health care expenses. On hearing these figures, the instinct is to immediately ask how the legislature can intervene to provide adequate coverage for those who currently lack it.

Problems Confronting Vermont

However, Vermont has another major problem: rapid health cost escalation. Vermont cannot begin to effectively address the coverage issue without first taking a hard look at the rapidly increasing cost of its health care. In recent years, Vermont's residents, employers and government have born the stress of rapidly increasing health care costs. Between 2004 and 2008 health care spending in Vermont grew at an average annual rate of 8 percent, in comparison to the national average of 5 percent. The net impact of this above average trend has been job loss, stunted wages, and an overall decline in the quality of coverage available to Vermonters. It is estimated that between 2010 and 2012 health care spending will increase by $1 billion, from $4.9 billion to $5.9 billion. These escalating costs strain all those who have to pay.

The leadership of Vermont's legislative and executive branches has recognized this emerging crisis. That brings us to why I am here today. Pursuant to Act 128, I was commissioned by the Legislature to conduct a detailed examination of the health care system in Vermont. I was directly involved with development of the new single-payer health care system in Taiwan that covers everyone with comprehensive benefits. That system, implemented in 1995 has reduced health care costs and holds Taiwan's health expenditure at around 6% of its GDP as compared to more than 16% in the United States. Besides Taiwan, I have led or closely advised eight other nations in their health system reforms.

Strategy and Approaches

To carry out the legislative mandate, I assembled a team of experts with both practical and academic experience. Our group of economists, political scientists and public health specialists has in depth knowledge specific to Vermont, as well as the US and international health care systems.

I commend Vermont's leadership for tackling this politically sensitive and complex issue head on. There is no easy solution to remedy a problem many years in the making. However, Act 128 is effective in establishing Vermont's goals for fundamental health care reform. Those goals are:

(1) universal health insurance coverage;
(2) provision to every Vermont resident of an adequate standard benefits package and equal access to health care;
(3) control of the rapidly escalating costs of health care in Vermont; and
(4) establishment of a system that prioritizes community-based preventive and primary care, as well as, integrated health care delivery.

Act 128 calls upon our team to develop three options. The Legislature requires that we evaluate a state government-administered and publicly-financed single-payer health benefits system. This system, which we refer to as Option 1, would provide all Vermonters with a uniform benefits package. Within those parameters, we looked at costs of both a "comprehensive" benefits package and a leaner, "essential" benefits package, which I will define and discuss later. The second option is a state government-administered, public option that would allow Vermonters to choose between public and private insurance coverage. Option 2 is designed to allow for and promote competition between the public and private plans, while keeping in place the current multiple payer system. Act 128 allows our team to develop a third option that we design after analyzing all aspects of Vermont's health care and assessing the positions of key stakeholders across the State of Vermont. We call Option 3 a public/private single-payer system. It provides an "essential" benefits package, is administered by an independent board with diverse representation, and it employs a competitively-selected third party to manage provider relations and claims adjudication and processing.

I believe it is important for us all to have a common understanding of what a single-payer system entails before I discuss our approach and findings. In short, a single-payer system provides insurance coverage to every Vermonter, provides them with a common benefits package, and channels all payments through a single system that establishes uniform processes and rates for all providers. The system also provides a single mechanism for resolving disputes. Contrary to some perceptions, a single-payer system does not need to be run solely by government, but rather can be administered by governmental, quasi-public, or private entities.

To assess the feasibility of a single payer option and its implementation, in Vermont, we focused our analysis on: the current fiscal conditions in Vermont, the legal and regulatory implications of broad health system reform, the impact of Federal interventions and programs, the interests of all major stakeholders, and lessons learned from Vermont's own history. Our research and findings, coupled with interviews of more than 100 key stakeholders in Vermont, allowed us to formulate a plan that is feasible and works within Vermont's unique socio-political environment. Our findings also identified at least 15 major fiscal, legal, institutional, political and operational barriers that must be overcome to achieve the goals outlined in Act 128. From a fiscal standpoint, the reform cannot result in additional overall health care spending. In legal terms, Vermont cannot implement a system that runs afoul of existing federal laws under ERISA, PPACA, as well as the Medicare and Medicaid programs. As with every major reform effort, Vermont's health care overhaul must take into account the state's diverse and often complex

political dynamic. Finally, Vermont will need to develop and deploy uniform, electronic management systems.

We developed a strategy to accomplish the goals of Act 128 and to overcome the challenges noted above. If implemented properly, a single-payer system can provide universal coverage; yield significant savings that help fund the under-insured and uninsured; and control the escalating costs of health care. Our plan contemplates a more equitable financing structure than the current premium-based financing that exists for most Vermonters. It derives its funding from a payroll-based contribution that is split between employees and employers and exempts low-income individuals and low wage employers. In short, it allows Vermont to do more for less over time, and to do so more fairly.

In developing options we were guided by 6 major design parameters:

1) We must maximize federal funds for Vermont.
2) There must be no increase in overall health spending and therefore all funding for the options must derive from savings.
3) No option could result in an overall increase of the health care cost burden faced by employees or employers.
4) No option could yield a reduction in the overall net income received by physicians, hospitals or other health care providers.
5) The implementation of any option must move Vermont toward an integrated health care delivery system that allows for a transition to global budgets and risk-adjusted capitated payments.
6) No option could entail changes for Medicare beneficiaries in Vermont.

System Structural Reforms and Potential Impacts

Meeting these objectives and the underlying goals of Act 128 will require significant structural changes to the Vermont health system. The current system is rife with perverse incentives, as well as inconsistencies in the regulatory, financing and payment structures. Therefore we propose changes that will better align the overall system with the goals of providing universal coverage and controlling the costs of health care in Vermont. In doing so, we recommend legal and regulatory reforms, as well as, reforms in how providers and hospitals are compensated for their services, the manner in which health care is financed, how providers interact with each other and their patients through integrated delivery, and how patients themselves approach wellness and their own use of the health care system. The success of a broad based reform effort will require consideration of all these elements and their coordination with one another.

As I've discussed, cost control is a significant motivator in health system reform. With a single payer system in place, Vermont will be able to realize substantial cost savings. We have approached our analysis conservatively, but have identified the following areas from which a single-payer system can derive cost savings. Specifically, a single-payer system yields administrative savings because there is one standard benefits package and one common system for payment and adjudication of claims. Under the current structure in Vermont, competing insurers offer a variety of benefit packages, maintain a broad array of rules and have numerous channels for payment. By streamlining the process, we eliminate much of the administrative

costs associated with multiple payers and the *administrative hassles* on providers and hospitals that cause waste and inefficiency. Though the vast majority of providers and patients are honest, the few who are not can cost the system significant sums of money. With a single-payer in place to manage all claims, Vermont can significantly reduce instances of fraud and abuse within the system. By implementing an integrated delivery system, providers will be able to share information about their patients more efficiently and will be required to do so by law. This will result in considerable savings and reduce overuse of services, tests, duplicative procedures, as well as the negative impact of overtreatment and drug interactions. Vermont has already begun the move towards an integrated delivery system through its Blueprint Program and medical homes. These actions represent an important first step but will be more effective in the context of a single-payer system. Major reforms to the overall health care system will also result in a favorable environment to reevaluate how medical malpractice claims are litigated and paid out. The opportunity to design tort reform, including the possibility of a no fault system, would reduce the practice of defensive medicine.

Vermont will realize considerable savings upon implementation of the system in 2015. Table 1 gives more details. Those savings will be immediate. In addition, Vermont will continue to realize savings over the longer-term that will contribute to a more sustainable and cost-controlled health care system. In analyzing the three options, we determined that all will yield significant savings. However, our research and analysis indicate that the single-payer options will have a more dramatic impact on reducing cost than the public option because they incorporate a uniform benefits package and reduce much of the administrative structure needed to compensate multiple payers. Therefore, we estimate that Option 1 will produce savings of 24.3% of total health expenditure between 2015 and 2024. Option 2 will produce savings of 16.1% of total health expenditure between 2015 and 2024. Finally, Option 3 will produce savings of 25.3% of total health expenditure between 2015 and 2024. Option 3 produces additional savings as compared to Option 1 because it incorporates a public/private partnership in governance and administration. These percentages of savings are shown in Graph 1 and they represent the savings that can be achieved in cost of current benefits. The estimated dollar figures of savings are shown in Table 1 and they are expressed in 2010 dollars.

GRAPH 1: COMPARISON OF VERMONT HEALTH EXPENDITURE PER PERSON UNDER DIFFERENT OPTIONS (IN REAL TERMS), 2010 - 2024

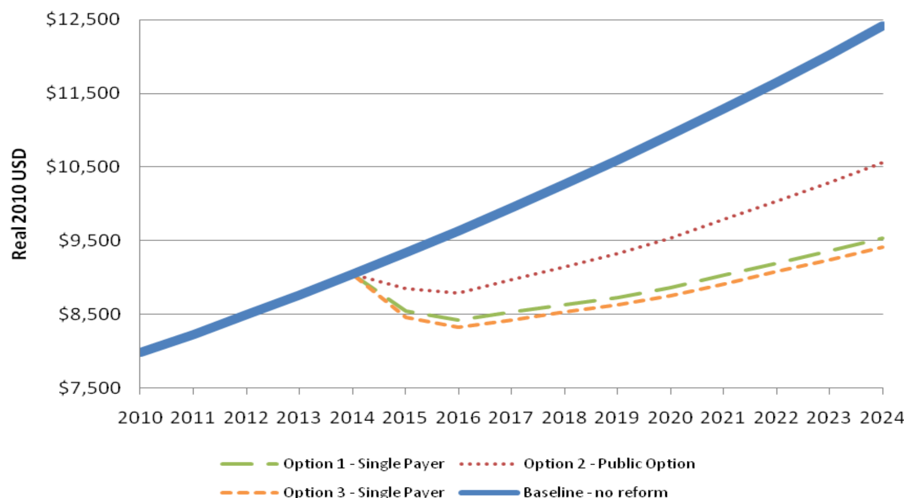

TABLE 1: SAVINGS ESTIMATIONS (EXCLUDING MEDICARE SAVINGS)

	Percent of total health spending from 2015 to 2024	Absolute savings in 2010 Dollars 2015	2019	2024
Option 1	24.3%	$530 million	$1,280 million	$2,000 million
Option 2	16.1%	$330 million	$870 million	$1,300 million
Option 3	25.3%	$590 million	$1,350 million	$2,100 million

Margin of error ± 15%

We recognize that these estimates are inherently uncertain and that the true impact will depend largely on how the proposed system is implemented. The estimates could vary by ± 15%. However, we used conservative approaches in our estimation of cost savings and that still revealed considerable opportunity for Vermont to build a more sustainable health system.

Option 3 will yield the most significant cost savings, as compared to Option 1 and Option 2. As we discuss, Option 3 is more cost effective and more feasible on account of its governance structure. Unlike Option 2, which continues a multiple-insurance system and Option 1, which incorporates a strictly government-administered, single-payer system, Option 3 proposes a single-payer structure overseen by an independent board with representatives of patients, providers, employers and responsible government agencies. Board members will be charged with establishing a budget for the single-payer system, determining the benefits package, and making adjustments to payment rates. Under Option 3, the Governor has discretion to veto decisions by this board. In addition to establishing an institutional board, Option 3 proposes a third-party to administer provider relations and claim processing function, awarded through a competitive bidding process. Both public and private entities will be eligible to submit proposals for this work. Under Option 3, the Vermont state government will be responsible for determining the eligibility of beneficiaries, collecting premiums, credentialing and licensing providers, and regulating patient safety throughout the system. Many of these functions are currently undertaken by Vermont state agencies in the context of administering the Medicaid system and other government-run health programs.

We note that in estimating cost savings for the various options, we take into account services for only those Vermonters under the age of 65. None of the options contemplate changes to the Medicare system, or its application in Vermont.

Proposed Benefit Packages

Alongside cost considerations, a principal challenge in health system reform is designing a benefits package that provides all citizens with adequate care, while allowing those with more generous benefits to supplement with private insurance. Under a single-payer system the benefits package is a primary means of allocating resources. By tailoring the contents of a benefits package to promote prevention, primary care and improved general health outcomes, Vermont can affect both cost savings and a system-wide behavioral shift. Act 128 calls on us to design both an essential and a comprehensive benefits package for a single-payer system. In designing those benefits packages, we drew on three basic principles: (1) reducing financial barriers to provide easy access to all health services; (2) emphasis on the need for prevention and the importance of primary care; and (3) protecting Vermonters against the financial risk of high health care expenses that can lead to bankruptcy and poverty.

The comprehensive benefits package covers a range of services including prevention, primary and specialty medical care, mental health, other allied health services, prescription drugs, vision care, dental care, nursing home care and home health care. Under this package, the cost sharing burden on patients is very low and consists only of minimal co-payments that temper demand slightly, without impeding access to services. The essential benefits package also provides coverage for prevention, medical care including primary and specialty services, mental health services, other allied health services, prescription drugs, some vision care and dental care. Unlike the comprehensive benefits package, the essential benefits package does not cover nursing home care or home health care. In addition, the essential benefits package calls for more significant cost sharing relative to specialty services, surgical procedures, the use of brand-name prescription drugs and high-technology tests. The essential benefits package also provides lower amounts of coverage for dental and vision care.

Uses of Savings

Because a fundamental premise of our proposal is to ensure that no additional money is spent on healthcare over current levels it is important to determine where the realized savings will be reallocated. In developing Options 1, 2 and 3, we allocated these savings to providing insurance for all Vermonters, guaranteeing either a comprehensive or an essential standard benefit package that are described above. Beyond this, options 1 and 3 allocates $50 million of savings towards investment in human resources for primary care and updates to community hospitals to ensure an adequate supply of services to meet increased demand. Table 2 shows our estimates of the spending to cover the uninsured, under-insured, investment in primary care and updating some hospitals, etc. Option 1 with comprehensive benefit package has the highest cost because it has minimum cost sharing and Act 128 asked us to consider the inclusion of full dental, vision, nursing home and homecare. The services covered and cost sharing provisions in the essential benefit packages of option 1 and 3 are the same.

TABLE 2: RECOMMENDED USE OF THE SAVINGS UNDER DIFFERENT OPTIONS (IN 2010 DOLLARS)

	Essential benefit package (Same for Options 1 and 3)	**Comprehensive benefit package**
To cover uninsured	$189 million	$217 million
To increase benefits for underinsured	$69 million	$141 million
Investments in primary care and community hospitals	$50 million	$50 million
Additional dental and vision benefits	$106 million	$314 million
Long-term care benefits	-	$215 million

Margin of error ± 15%

Financing, Payment and Delivery Reforms

Though few could argue against the benefits of cost savings, inevitably, the discussion must turn to the politically sensitive and economically complex issue of financing the uninsured, under-insured and expansion of benefits. We recognize that in developing a financing mechanism for a single-payer system, our plan must account for day-to-day realities facing Vermonters. Therefore, our single-payer Options are financed by a payroll tax that provides exemptions for low-wage employers and low-earning workers. By using this financing method, we ensure that

no additional cost burdens will be placed on the overwhelming majority of employers and their workers if the employers decide to rely on the single payer benefit plan. Simply put, under our plan, most Vermonters will pay no more for coverage under the single-payer system than then they currently pay for private insurance premiums. It is well understood that healthier populations experience lower healthcare costs on average. We factor that recognition into our proposed system by offering incentives for employers to institute healthy workplace initiatives and programs that encourage preventative care. Those employer-based incentives will run parallel with broad incentive programs to promote healthier lifestyles for individual Vermonters.

In addition to changing how Vermonters pay for coverage, the single-payer system would fundamentally alter how providers receive compensation. Under the current system, every insurance plan, both public and private has its own payment method and rates. It is overly complex and inefficient and *allows providers to do cost-shifting*. We recommend Vermont adopt a two-stage approach to reforming provider payment, consisting of a transitional phase and a full implementation phase that would center on the use of accountable care organizations (ACOs), which are discussed in detail below. The first step in this process would see Vermont move towards uniform payment method and rates for all insurance plans. Vermont can implement this through both law and regulation. The uniform payment rates would incorporate risk adjusted capitation rates for ACOs, along with performance incentives for providers. The goal of this phase is to transition both patients and providers towards the uniform payment structure contemplated in the full implementation phase. When the transition is complete, payment for services in Vermont will be managed and overseen by ACOs, which are a central component of an integrated delivery system. The ACOs will bear primary responsibility for negotiating payments rates for providers, and we recommend that the principal method of payment for primary physicians, center on risk adjusted capitation and pay-for-performance. For specialists and other health professionals, we recommend payments based on a salary and performance bonus structure.

A central component of both our cost savings estimate and our payment reform plan is the deployment of an integrated delivery system. To realize these savings, we recommend that Vermont use ACOs as a means of facilitating payment and integrating service delivery. This cannot be completed overnight, and as noted above we recommend a phase-in process that gradually implements a uniform rate and payment structure. While there is no single format for designing ACOs, they are generally understood to control health care costs by creating payment mechanisms that hold providers accountable for the cost of services, the quality of those services and population health outcomes. ACOs encourage providers to communicate and coordinate patient care across service levels. Vermont's move towards ACOs should account for the lack of a one-size-fits-all model. As such, Vermont should allow for innovation and experimentation with respect to the development of ACOs. The system should foster competition where appropriate and provide strict oversight mechanisms that evaluate the effectiveness of various ACOs and set guidelines.

Comparison of Impacts

Option 1, 2 and 3 produce different savings, benefit packages, payment systems, governance structures, etc. Act 128 requires us to assess and compare their impacts. We relied on the GMSIM model to estimate the impacts of the PPACA and three options on uninsured persons, the Vermont government, employers and households. Professor Jonathan Gruber of MIT developed the GMSIM model and his model produces the results. Kavet/Rockler Associates then use the Regional Economic Model to estimate the macroeconomic impacts of the options such as employment in Vermont and its gross domestic product. We first present the impacts of PPACA in Table 3, and compare the impacts of the three options in Table 4. Finally, we show the estimated payroll contribution rates for the various options for employers and workers.

TABLE 3: IMPACTS OF PPACA COMPARED TO NO REFORM, 2015 AND 2019

	No reform		**PPACA**		**Impact**	
	2015	**2019**	**2015**	**2019**	**2015**	**2019**
Number of uninsured individuals	50,000	53,000	32,000	31,000	-18,000	-22,000
Federal funds into Vermont (in 2010 dollars)	$400 million	$460 million	$640 million	$880 million	$240 million	$420 million
Number of jobs created	-	-	1,700	2,300	1,700	2,300

Margin of error ± 15%

TABLE 4: ESTIMATED INCREMENTAL IMPACTS OF THE THREE REFORM OPTIONS

		Option 1		**Option 2**	**Option 3**
Benefits package		Essential	Comprehensive	Multiple	Essential
Number of uninsured individual	2015	-32,000	-32,000	-2,000	-32,000
	2019	-31,000	-31,000	-3,000	-31,000
Total employer spending*	2015	-$50 million	$340 million	-$100 million	-$75 million
	2019	-$190 million	$225 million	-$140 million	-$215 million
Per employee health spending*	2015	-$101	$855	-$264	-$159
	2019	-$450	$566	-$356	-$507
Number of jobs created	2015	5,000	8,500	-1,200	5,000
	2019	4,000	7,000	-3,000	4,000
Number of individuals migrating into Vermont	2015	1,000	2,000	-500	1,000
	2019	3,700	7,000	-2,200	3,500
Gross State Domestic Product Change*	2015	$190 million	$340 million	-$90 million	$180 million
	2019	$130 million	$250 million	-$230 million	$110 million

*In 2010 Dollars

Margin of error ± 15%

TABLE 5: ESTIMATED PAYROLL CONTRIBUTION ESTIMATES

		Projected contribution rate under PPACA	**Impact compared to PPACA**			
			Option 1 – Essential BP	**Option 1 – Comprehensive BP**	**Option 2**	**Option 3**
Total	2015	17.5%	-2.8%	1.8%	0.0%	-3.0%
	2019	18.5%	-6.4%	-2.2%	0.0%	-6.6%
Employer Contribution	2015	12.0%	-0.9%	2.5%	0.0%	-1.1%
	2019	12.9%	-3.8%	-0.7%	0.0%	-4.0%
Employee Contribution	2015	5.5%	-1.8%	-0.7%	0.0%	-1.9%
	2019	5.6%	-2.6%	-1.5%	0.0%	-2.6%

Margin of error ± 15%

The results above indicate that the impacts of PPACA will be felt gradually over four years. In 2015, the first full year of implementation, PPACA would reduce the number of uninsured by 18,000 people; however 32,000 Vermont residents will remain uninsured. Ultimately in 2019, PPACA will reduce the number of uninsured by 22,000 in 2019. PPACA will likely add an additional $240 million of federal funds in 2015 to the State of Vermont, which will eventually rise to $420 million in 2019. All of these dollar values are expressed in 2010 dollars.

In comparison with option 1 and 3, Option 2 would still leave approximately 30,000 Vermonters uninsured. Option 2 would not expand the current benefits to cover some dental and vision care nor bring up the benefits for those who are currently under-insured.

The comprehensive benefit package under option 1 covers all health services with minimum cost sharing. As a result, it costs more and requires more funds to finance it. Under a payroll contribution scheme of financing, employers and workers will have to pay more than what they would pay if no reform takes place. This comprehensive benefit option would also increase the total health spending in Vermont which would make this option less feasible.

The essential benefit package under option 1 and 3 have leaner benefits and they can be financed through payroll contributions without increasing the amount that most employers and workers would have to pay as compared to if no reform takes place. It would reduce the total health spending in Vermont slightly in 2015 when the proposed reforms are implemented.

Both option 1 and 3 would create several thousand new jobs in Vermont when the cost of health care declines and results in increases in workers' cash wages. Option 2 would not produce this positive effect. Option 1 and 3 would also increase gross state domestic product by approximately $180-$240 million in 2015.

Discussion and Recommendations

Beyond yielding greater cost savings, we believe Option 3 is most feasible because it is likely to be accepted by the broadest cross-section of Vermont stakeholders. In other words, we designed Option 3 to be both economically responsible and politically palatable. Through discussion with more than 100 stakeholders, we gained a critical understanding of what the various competing interests would tolerate, where they disagreed and where common ground could be reached. We focused on providing access to care, maximizing cost savings and where possible, relying on market-based efficiencies within a single-payer system. Political opposition to single-payer systems is often rooted in concerns over transparency and accountability. We designed Option 3 to address those issues and to operate with input from a broad base of stakeholders, with no one constituency holding total control. In sum, we believe that Option 3 provides benefits to patients, providers and the system at large in keeping with the goals of Act 128, with an eye towards long-term sustainability.

In addition to benefiting the Vermont health care system at-large, Option 3 will provide immediate, direct benefits to the uninsured and the underinsured. All Vermonters will receive dental and vision coverage. Most employers and employees will pay less for the essential benefits package in Option 3 than they currently pay for private insurance. Additionally, the new

focus on preventative and primary care will result in more physicians practicing in that space, and greater incentives for those that chose to do so.

It is a general rule that with any broad reform effort, some individuals and groups will benefit more than others. The provisions implemented under Option 3 are not an exception. While all Vermonters will have access to coverage under Option 3, the single-payer system will require private health care organizations to adapt and evolve. Though we cannot estimate the full impact, it is inevitable that under a single-payer system, certain private insurance functions will become obsolete and will leave the market in Vermont. We believe that these changes will have the most significant effect on sales, marketing and underwriting personnel within the private health insurance industry. Further, many of the persons performing billing, coding and claims management functions for providers may also be displaced. Beyond the jobs-related impact of Option 3, it is fair to conclude that certain employers who currently do not provide coverage for their workers, or who provide minimal coverage, will face greater costs on account of the payroll tax used to finance the system.

Though one may be inclined to focus attention on the near term challenges of health system reform, it is critical that we not lose sight of the long term benefits of a single-payer system. If Vermont implements the structure contemplated under Option 3, it will set in place a policy that controls the long range escalation of health care cost, affords every Vermont resident coverage with an essential benefits package, creates jobs by allowing employers to better plan for the costs associated with their workers' coverage, attract new workers to Vermont with better healthcare and higher wages and finally, creates a healthier and more productive citizenry.

As I have discussed at length, Vermont is in a unique position to fix its broken health care system. The Legislature has taken the first, critical steps towards controlling health care cost escalation while providing coverage and essential benefits for all Vermonters. Though we have outlined multiple options, and considered various legal and regulatory structures, our research and analysis shows that a single-payer system can immediately reduce health care costs in Vermont by 8-12% and reduce health care costs by an additional 12-14% over time. We believe that a single-payer plan will serve as an effective way to integrate delivery of health care, making it more efficient, more intuitive and less costly. If Vermont is successful in designing and implementing health care reform based on our recommendations, it will be seen as a leader in resolving the most important domestic policy issue of our time. Vermont can show the way forward for the rest of the United States and I am grateful for the opportunity to inform this process.