Building the Roadmap to Coverage:

Policy Choices and the Cost and Coverage Implications

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Report for the Blue Cross Blue Shield of Massachusetts Foundation

June, 2005

roadmap
TO COVERAGE

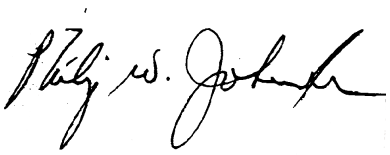
FOUNDATION
BLUE CROSS BLUE SHIELD OF MASSACHUSETTS

The "Roadmap to Coverage" is an initiative to inform the debate about how to provide health coverage for the uninsured in Massachusetts and generate a practical roadmap for achieving that goal. Major funding for the project has been provided by Blue Cross Blue Shield of Massachusetts with additional support from Partners HealthCare. The research and policy analysis is being conducted by the Urban Institute, a nonprofit, nonpartisan policy research organization.

In November 2004, the Foundation released the first report of the Roadmap initiative. The report, *Caring for the Uninsured in Massachusetts, What Does it Cost, Who Pays, and What Would Full Coverage Add to Medical Spending?*, written by researchers at the Urban Institute, found that we are already spending more than $1 billion a year for health care for the uninsured.

This report presents options for expanding coverage to everyone in the Commonwealth and analyzes the cost and coverage implications for each option. The Urban Institute's analysis indicates that Massachusetts could achieve universal health coverage by building on our current mix of employer and government sponsored coverage, and by making coverage more affordable for low-wage workers and small employers. The analysis concludes that Massachusetts could cover all of the uninsured for between $700 and $900 million in new government spending, which would produce $1.5 billion in economic and social benefits due to improved health as well as other positive effects on the state's economy.

In the fall, the Foundation will release the "Roadmap"—a practical, phased-in implementation plan to expand coverage to most, if not all, residents of the Commonwealth. We hope the research and analysis in this report supports the discussion about how to improve access to health coverage in the Commonwealth.



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Blue Cross Blue Shield
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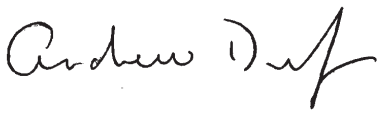

Andrew Dreyfus
President
Blue Cross Blue Shield
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Acknowledgments: The authors are grateful to Jessica Kelly for her programming work on this project, and acknowledge the contributions of Len Nichols, Yu-Chu Shen, and Lisa Dubay to the development of the Health Insurance Reform Simulation Model (HIRSM).

Funding for this report was provided by the Blue Cross Blue Shield of Massachusetts Foundation. The views presented here are those of the authors and should not be attributed to the Foundation or its directors, officers, or staff.

Additional copies of this report are available upon request. Please contact the Blue Cross Blue Shield of Massachusetts Foundation at 617.246.3744 or info@bcbsmafoundation.org.

Executive Summary

The Commonwealth of Massachusetts is engaged in a vigorous debate about expanding health coverage to its residents. There are three different plans now before the legislature that would expand health coverage. The current activity continues the state's history as a leader on health care reform, most recently with the implementation of a significant Medicaid expansion in the late 1990s.

This report describes alternative strategies to expand coverage to the estimated 532,000 Massachusetts residents without health insurance. Our goal has been to develop options to achieve universal coverage while minimizing disruption of employer-sponsored coverage and the existing insurance market, as well as minimizing the expansion of government and the need for new revenues.

Massachusetts is well positioned to achieve universal coverage. The state already has a strong base of employer and public coverage and a relatively low uninsurance rate. But like other states, it is faced with rising health care costs that are likely to contribute to an increase in the number of uninsured. The state currently has a high level of spending on the uninsured through its Uncompensated Care Pool and a number of other safety net programs. A November 2004 report for the Roadmap to Coverage initiative, *Caring for the Uninsured in Massachusetts: What Does it Cost, Who Pays, and What Would Full Coverage Add to Medical Spending?*, estimated that in 2004 approximately $1.1 billion was spent in Massachusetts providing care to the uninsured. This existing spending represents resources that could potentially be redirected to help fund new coverage. The recent agreement with the federal government to extend the state's Medicaid waiver, while limiting state options for generating matching funds, does allow for a continued flow of federal funds to help support the uninsured.

Addressing the issue of the uninsured is important for several reasons. Lacking health insurance has serious health and financial consequences. Being uninsured reduces access to care and limits use of preventive services. There is strong evidence that the lack of health insurance leads to adverse effects on the overall population's health as well as to the health of the uninsured. Being uninsured also increases the financial uncertainties faced by individuals and families and is a major contributor to personal bankruptcy. Finally, it leads to inappropriate use of services and strains the health care delivery system that is used by everyone.

In this report, we outline policy proposals and the effects on cost and coverage of the proposals. Each option has common building blocks, which include an expansion of MassHealth, tax credits, a purchasing pool and public reinsurance. Although implementation of these building blocks alone would result in a significant reduction in the number of people without health coverage, a substantial number of people would remain uninsured. Therefore, we present two options that would achieve full coverage: a requirement that all individuals purchase health insurance; and a requirement that employers either offer coverage or pay a fee to the state, coupled with a requirement that individuals purchase coverage. We have estimated the cost and coverage impacts of each option using the Health Insurance Reform Simulation Model developed at the Urban Institute. The model has been adapted to reflect the Massachusetts coverage distribution and cost structure.

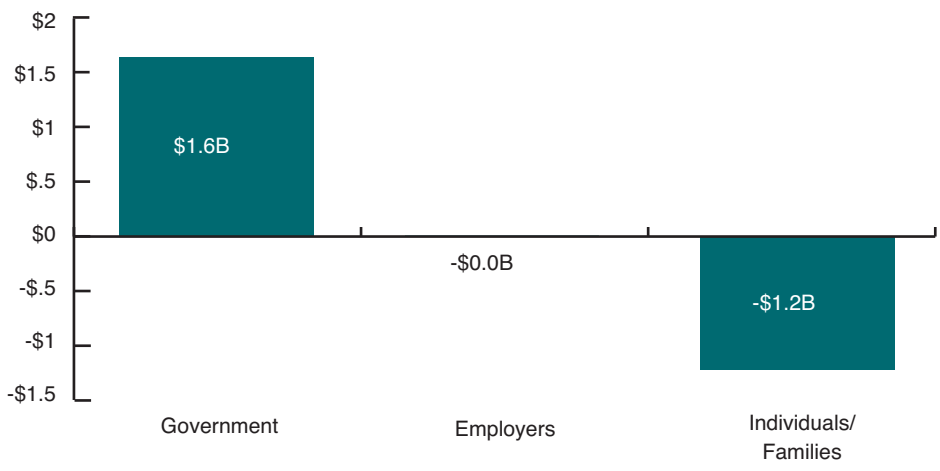
Building Blocks for Universal Coverage

These steps alone would substantially increase health coverage in Massachusetts, but would not achieve universal coverage. The building blocks for expanding coverage include:

- MassHealth expansions to 200% of the federal poverty level (FPL) for children and parents and to 133% of FPL for childless adults;
- Tax credits for individuals for the difference between premiums and a specified percentage of income (sliding from 6% to 12% of income) for those up to 400% of the FPL;
- A voluntary purchasing pool open to all that would ease access to an increased choice of plans for small firms and low-income individuals; and
- Government funded reinsurance which pays 75% of individual costs incurred above $35,000 in the non-group market and for firms with fewer than 100 workers.

We found that a voluntary approach made up of these building blocks would reduce the number of uninsured by 211,000 people, but 321,000 people would remain without health coverage. Government spending would increase by $1.6 billion per year, although some existing spending could potentially be reallocated to help fund the expansion of coverage and some would be financed by Medicaid federal matching payments. As a result of the MassHealth expansions and tax credits, there would be considerable savings to individuals at all income levels, but particularly to those with low incomes (below 200% of the federal poverty level).

Building Blocks
Changes in Health Spending
(in Billions of 2005 $)

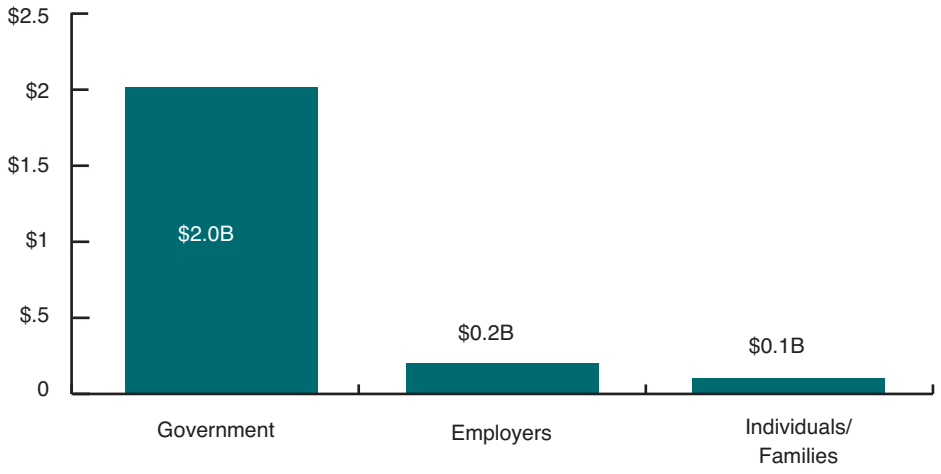


Individual Mandate

One option that would achieve universal coverage is an individual mandate which would require that all individuals purchase health insurance coverage. It would include all of the building blocks for coverage expansion, but would also require all residents to purchase at least a high-deductible health plan. There would be no change in the tax treatment of employer-sponsored insurance, and as a result, there would be little change in the incentives for employers to provide coverage. The mandate would be enforced through the tax system.

An individual mandate would result in universal coverage. Government spending would increase by $2.0 billion per year, although some existing spending could potentially be reallocated to help fund the expansion of coverage and some would be offset by an increase in federal Medicaid matching funds. There would also be small increases in employer and individual spending. However, as a result of the building blocks, which include an expansion of MassHealth and tax credits, spending by low-income individuals and families would decrease significantly.

Individual Mandate
Changes in Health Spending
(in Billions of 2005 $)



Employer Mandate

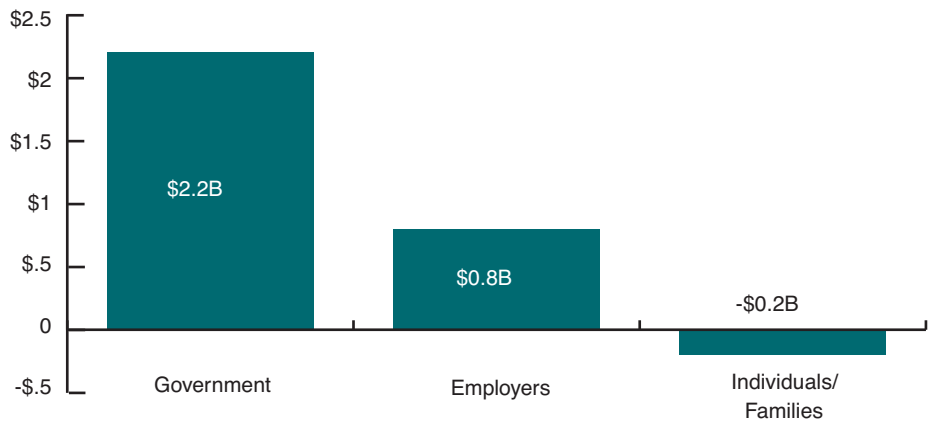
Another option to achieve universal coverage is an employer mandate combined with an individual mandate. An employer mandate alone (without an individual mandate) would not result in universal coverage. Some workers would choose not to enroll, part-time workers could be exempt, and non-workers would not be affected. Thus, an employer mandate must be combined with an individual mandate in order to achieve universal coverage. This option would also include all of the building blocks for coverage expansion. In addition, employers would be required to pay a payroll tax, but would receive credit against the tax liability for contributions to worker and dependent health insurance coverage.

There are many different ways to structure an employer mandate. Policy choices include the tax rate and tax base and whether to exempt small firms and part-time workers. We have modeled the impact of an eight percent payroll tax on a wage base equal to one-half of the Social Security wage base. Firms with fewer than 10 workers, as well as part-time workers, would be exempt from the employer mandate, although individuals would be required to purchase coverage if their employers did not offer it.

The tax payments would help offset the cost of the tax credits offered through the purchasing pool. The state could not mandate a set of benefits that employers must provide, but there would be a strong incentive for employers to provide coverage that is at least equal in value to the tax payment.

This version of an employer mandate would also provide universal coverage and would cost the government $2.2 billion per year. As with the other proposals,

Employer Mandate (with individual mandate)
Changes in Health Spending
(in Billions of 2005 $)



some existing spending could potentially be reallocated to help fund the expansion of coverage and some of the cost would be offset by an increase in federal matching funds. Employer spending in the aggregate would increase by $0.8 billion, while individual and family spending would fall slightly. Under the employer mandate, government costs are highest because the option to pay a tax results in a larger purchasing pool with higher expenditures for tax credits and government reinsurance.

We analyzed many other versions of an employer mandate. For example, a 10 percent payroll tax on the full Social Security wage base with no exemptions would cost the government only $1.2 billion, but would greatly increase costs to employers —by $7.2 billion. A five percent payroll tax on the smaller wage base with exemptions for very small firms and part-time workers would increase government costs by $2.9 billion, but would result in no aggregate increase in costs to employers. In addition, in our modeling of the eight percent payroll tax option, we assume workers of employers who "pay" will obtain coverage in the pool at a substantial discount. Eliminating the discount would reduce the government cost of the eight percent employer mandate by about $600 million, for a total of $1.6 billion, but increase costs to individuals and families by about $500 million.

Financing Universal Coverage

The results of the modeling suggest that financing universal coverage in Massachusetts could be achieved without a major increase in revenue. The Medicaid waiver renewal continues to make $650 million in federal dollars potentially available each year, provided the state can identify a similar amount of state matching funds, for a combined total of $1.3 billion.

However, there will still be a need for new state revenues. Achieving universal coverage would require an additional $700 million under an individual mandate, and $900 million under the employer mandate design presented here. Some of this cost would be offset by increases in federal Medicaid matching funds. Additional funding would likely also be necessary for selective increases in MassHealth provider payment rates, as well as residual funding for safety net providers who would continue to treat the small number of people who could remain uninsured. There are a number of options for raising the additional

revenue needed to finance universal coverage, including increases in insurer and/or hospital assessments, new provider taxes, and/or increases in sin taxes, sales taxes, and income taxes.

While increasing taxes in tight budgetary times is challenging, it is important to put the need for new revenues in perspective. These results show that universal coverage could be achieved in Massachusetts for $700 to $900 million per year. With a $400 million allowance for MassHealth rate increases and residual safety net funding, the total new spending would be about $1.2 billion annually. To place this in perspective, $1.2 billion represents about 0.3% of Massachusetts gross state product, about 2.0% of current health expenditures, and about 5.0% of the current state budget.

Economic Impact

Achieving universal coverage in Massachusetts would result in an estimated increase in economic and social benefits due to improved health of about $1.5 billion. Universal coverage would also provide other benefits that are difficult to quantify, including a reduction in bankruptcies and other financial problems, reduced demands on emergency rooms and the public health system, and greater workplace productivity and hence higher tax payments. Some of the new spending would reduce the financial burdens now borne by low-income families and small firms when they purchase health insurance.

We have also conducted analyses of the economic effects of financing universal coverage on the state, including the impact on employment, gross state product and personal incomes, using a model developed by Regional Economic Model Incorporated. This tool is a detailed model of the Massachusetts state economy and allows for estimates of the impact of coverage expansions financed through a variety of mechanisms, including increases in income tax rates, as well as increases in sin taxes and sales taxes. The analyses suggest that the impacts on employment and gross state product are likely to be mildly positive because foregone consumption due to tax increases will be offset by increased health spending. The mildly positive effects result because the new health spending will largely stay in state, while some of the foregone consumption would be goods or services purchased out of state.

While moving to universal coverage in Massachusetts appears to us to be economically feasible, the state faces a number of difficult choices and tradeoffs. First, because of the number of uninsured and the costs of health care, the state cannot have a significant reduction in the number of uninsured without some new spending. Second, Massachusetts cannot have an equitable financing system without also providing help to some low-income families that currently have coverage. Third, expanding Medicaid means a larger government program, but also means more federal revenues, thus reducing the amount that would otherwise be spent by Massachusetts taxpayers to finance the expansion of coverage. Fourth, safety net providers may lose much of the support that now goes directly to them, with the exception of a residual safety net pool to deal with those who are not covered under the new system. But these providers would have access to many more patients with insurance than they do today. Fifth, insurers would have more covered lives, but competition in the purchasing pool and other cost containment efforts could mean lower profit margins per covered person. Finally, serious cost containment is necessary to assure affordability over the long-term, but could affect the growth in provider revenues over time.

In spite of these challenging issues, Massachusetts is well positioned to address the problem of the uninsured and has a unique opportunity to implement a solution that could serve as a model for the rest of the nation.

I. Building the Roadmap for Universal Coverage in Massachusetts

The Commonwealth of Massachusetts is once again considering alternative approaches for expanding health insurance to its residents. There are three plans currently before the legislature. Governor Romney and Senate President Travaglini have filed proposals to improve access for the uninsured. Health Care For All, supported by a broad coalition of organizations, has also filed comprehensive legislation to broaden coverage. While these bills differ, they also share many common features. Each bill, for example, reforms the private insurance market to make coverage more affordable. The Senate President's and Health Care For All's bills include financial assistance for low and moderate income people for the purchase of private coverage as well as reinsurance for expensive claims to lower the cost of private coverage. In a separate initiative, another coalition is proposing to make health care a right under the state's constitution.

The current interest continues the state's history as a leader in healthcare reform, stemming back to the enactment of an employer mandate in 1988 (subsequently repealed), and reinforced by a significant Medicaid expansion in the late 1990s.

Massachusetts is uniquely positioned to move towards universal coverage. It has a strong base of employer-sponsored health insurance, and a Medicaid program that serves a relatively high share of its low-income residents. As a result, it has a lower uninsurance rate than most other states. The state has made a large commitment to supporting care for the uninsured, particularly through the state's Uncompensated Care Pool. Holahan, Bovbjerg, and Hadley estimate that in 2004 approximately $1.1 billion was spent in Massachusetts providing care to the uninsured.[1] Thus, there is a considerable amount of money already in the system, much of which has the potential to be redirected to help pay for insurance coverage.

On the other hand, a primary barrier to coverage expansions is the high cost of the Massachusetts healthcare system. As a consequence, coverage expansions are more expensive.

There are several reasons for the growing interest in reform. The number of uninsured has grown in recent years in Massachusetts, as it has elsewhere, because of rising health care costs and declines in employer-sponsored insurance. This has placed

[1] John Holahan, Randall Bovbjerg, and Jack Hadley, "Caring for the Uninsured in Massachusetts: What Does it Cost, Who Pays and What Would Full Coverage Add to Medical Spending," Boston, MA: Blue Cross Blue Shield of Massachusetts Foundation, November 2004. http://www.bcbsmafoundation.org/foundationroot/en_US/documents/roadmapReport.pdf.

increasing pressure on the Commonwealth's Uncompensated Care Pool and on the insurers and hospitals that largely finance it. The annual growth in health care spending is likely to continue and will pose an ongoing threat to current coverage arrangements. In addition, the economic slowdown has also contributed to the recent decline in coverage.

The renewal of the state's Medicaid waiver adds to the urgency of reform.[2] Under the recent waiver renewal, the federal government requires the state to cease the use of intergovernmental transfers as a way of providing the state share for much of the waiver expenditures. The federal government estimates that there is about $1.3 billion in payments for which the state/local matching contribution is in question. The federal government has agreed to allow the Commonwealth to use some existing expenditures on safety net-like programs together with existing insurance and hospital assessments. New revenues may also be needed. But if funds can be made available, through a variety of mechanisms, the state can keep about $650 million in federal dollars flowing into the state. The waiver agreement would allow these funds to be used in a variety of ways, including the kinds of coverage expansions that we discuss below.

In this paper we consider options to expand health coverage in Massachusetts beginning with a voluntary system centered on four building blocks that could achieve, by themselves, substantial increases in insurance coverage. These are:

- a MassHealth expansion;
- tax credits to help families and individuals purchase health insurance;
- the establishment of a purchasing pool open to all that would improve access to coverage for those who do not have employer-sponsored health insurance (largely low-income people and those employed by small firms); and
- publicly funded reinsurance to subsidize the costs of the most expensive cases.

However, voluntary measures will not achieve universal coverage. We therefore discuss an individual mandate and several alternative forms of employer mandates. An individual mandate alone, or an employer mandate linked with an individual mandate, would achieve universal coverage (not including non-residents and possibly some non-citizens). An employer mandate by itself, together with the four building blocks mentioned above, would greatly expand coverage though not achieve universal coverage.

In this paper we first describe the building blocks for coverage expansion and outline policy proposals for two paths to universal coverage built upon them. Second, we describe the simulation model used to estimate the cost and coverage implications of the proposals. Third, we describe the simulation results for each proposal. Finally, we draw some conclusions about our findings.

[2] The MassHealth program began with a Section 1115 waiver implemented in 1997. This waiver has allowed the state to expand Medicaid coverage by about 300,000 people. It also provides federal matching payments for spending in the state's Uncompensated Care Pool, as well as other revenues supporting safety net hospitals and managed care plans associated with those hospitals.

II. The Building Blocks for Coverage Expansion

MassHealth Expansion

Improving affordability is a key to expanding coverage both under voluntary reforms or mandates. The first building block for any coverage expansion in Massachusetts should be to expand MassHealth, the state's Medicaid and State Children's Health Insurance Programs (SCHIP). A MassHealth expansion would offer a comprehensive set of health benefits with very limited cost sharing to the lowest income residents. An expansion of MassHealth would be consistent with one of the ways existing federal funds could be used through the recent Medicaid waiver renewal. The most important reason for expanding coverage through MassHealth to a significant extent is because state spending through this program is matched with federal dollars.

A primary issue with a MassHealth expansion is that it could lead to some "crowding out" or displacement of current private health insurance coverage. In other words, it could cause some employers to stop offering coverage to their workers, and/or some workers to forego taking up private coverage for themselves or their dependents in favor of enrolling in MassHealth. The extent of crowd out is modest when expansions are targeted to low-income populations, although it can become more substantial when eligibility is extended to populations above 200 percent of the federal poverty level (FPL)[3]. A second issue related to a MassHealth expansion is that rates of payment for several types of providers in the state are considered inadequate. Rate increases on a selected basis should clearly be part of any MassHealth expansion. This will, of course, increase the cost of a coverage initiative.

MassHealth can be expanded in any number of ways, including extending coverage to children as high as 300 percent of FPL, as several other states in the New England region have done. (See table 1 for FPLs by family size in 2005.) Parents and non-parents could be extended coverage up to 200 percent of FPL or to alternative income levels. Our preferred option is to extend coverage in MassHealth to children and parents up to 200 percent of FPL, and to non-parents up to 133 percent of FPL. We

[3] See a summary of the Medicaid literature on this topic in Lisa Dubay, "Expanding Public Insurance Coverage and Crowd-Out: A Review of the Evidence," in Options for Expanding Health Insurance Coverage: What Difference do Different Approaches Make? co-edited by Judith Feder and Sheila Burke, Washington, DC: Henry J. Kaiser Family Foundation, 1999. Evidence on SCHIP can be found in Thomas Buchmueller and Anthony LoSasso, "The Effects of the State Children's Health Insurance Program on Health Insurance Coverage," Journal of Health Economics, September 2004; Lisa Dubay and Jenny Kenney, "Estimating the Impact of SCHIP on Insurance Coverage and Access to Care," presentation at the American Public Health Association Meetings, November 2004; and Gestur Davidson, Lynn Blewett, and Kathleen Thiede Call, "Public Program Crowd-Out of Private Coverage: What are the Issues?" Research Syntheseis Report No. 5, June 2004, www.shadac.umn.edu/publications/papers/RWJF_Crowd-ou_SYNTHESIS_6-23-04.pdf.

rely upon tax credits for private insurance to expand coverage further; the tax credits are discussed below. An argument for extending public coverage to even higher income levels for children and even their parents is the availability of the higher matching rates in the SCHIP program. Such an approach has been taken in other states.

Table 1. 2005 Federal Poverty Levels

Family Size	Poverty Level
1	$9,570
2	$12,830
3	$16,090
4	$19,350
For each additional person, add	$3,260

Tax Credits

The second building block is income-related tax credits to make private health insurance premiums more affordable for individuals and families. Health insurance is very expensive in Massachusetts, with premiums in excess of $10,000 for a family policy. Tax credits that limit health insurance premiums to a percentage of family income address the issues of affordability for even middle-income individuals. Tax credits can phase out at particular income levels or can be extended up the income distribution as desired. Our preferred strategy is to cap the amount that any family must pay for health insurance on a sliding scale ranging from six percent of family income for families with incomes below 150 percent of the FPL, with the cap rising in steps to 12 percent of income for families with incomes between 300 percent–400 percent of the FPL (see table 2). For administrative simplicity these tax credits are available only to those enrolling in coverage through a newly organized purchasing pool that we discuss next.

Table 2. Structure of Sliding Scale Tax Credits

Family Income as a Percent of the Federal Poverty Line (FPL)	Premium Payment Capped at:
≤150% FPL	6% of Family Income
151%–225% FPL	8% of Family Income
226%–300% FPL	10% of Family Income
301%–400% FPL	12% of Family Income

Purchasing Pool

A new purchasing pool is the third building block to expanding coverage. A purchasing pool would reduce the administrative cost of coverage in the individual market and perhaps in the small group market, offer families and individuals both easier access to and a broader choice of health plans, and provide consistency in coverage as people move from one job to another. In addition, the pool would be the focus of the administration of the tax credits, eliminating the complexities of providing subsidies in a dispersed and varied market. The purchasing pool would be voluntary—no individuals, families, or employers would be required to buy insurance through the pool—but it would be available to all individuals, families, and employers. All individuals enrolling in coverage through the pool would have access to tax credits if the premiums they face are greater than the applicable percentage of income cap. Since tax credits would be available only for plans purchased through the pool, all individuals would need to have access to it.

Pool administrators would enroll individuals in the plan of the family's choosing and remit payments directly to the insurance plans. The administrators would determine eligibility for, and the value of, tax credits, and the Department of Revenue would advance the credits to the pool. The pool administrators would then submit payments from individuals, employers, and government to the plans. The Massachusetts Department of Revenue would track advance credits and determine at the end of the year if the credit was appropriate given the final income reported on the tax return. Individuals could then be responsible for additional payments or could receive additional subsidies if appropriate.

The pool would be available to all employers, though it would probably be most attractive to small firms and those employers with high concentrations of low-wage workers. Employers that choose to purchase through the pool would be responsible for combining their own contribution with those of employees in remitting the payment for coverage to the pool. Employers contributing to health insurance plans outside of the pool could make equivalent contributions to the pool on behalf of any workers choosing to enroll in coverage there.

No insurance plans would be required to participate in the pool. But those plans participating in the pool would be required to offer plans with low in-network cost sharing. For example, the cost sharing for in-network plans could be limited to $20 per visit, $100 per hospital admission, and $100 for non-emergency room use. Deductibles could be set at $100 for in-network providers for single policies and $200 for family policies, with $1,000/$2,000 as the out-of-pocket maximum for in-network services. The intent of having low cost sharing plans is to avoid the administrative burden of reimbursing large numbers of low-income individuals for out-of-pocket expenses from each of their provider contacts. Because cost sharing would be minimal, plans would control costs through provider payment policy and the structure of their networks (though subject to minimum standards of adequacy).

They would compete on customer service, on network attractiveness, and by providing less costly optional benefits such as dental care, podiatry, and vision and hearing services.

Finally, an organized purchasing pool would provide an administrative structure that would manage the competition among plans to control the growth in premiums. Premiums in the purchasing pool would be subject to the same modified community rating rules already in place in the Massachusetts private non-group insurance market. The pool would establish a benchmark premium. The benchmark could be set to the average or median premium in the pool. The income-related cap would be tied to the benchmark premium; any amount of the premium in excess of the benchmark would not be offset by a tax credit. Those who choose premiums below the benchmark could keep some or all of the savings. If the competitive structure did not successfully control costs, the pool could negotiate or bargain with plans over premiums.

Public Reinsurance

The final building block in this approach is government funded reinsurance for high cost cases. The distribution of health care expenditures is highly skewed. In small risk pools, such as the small group and non-group insurance markets, a relatively small number of high cost individuals can have significant effects on premiums. These markets are inefficient mechanisms for spreading the costs associated with high risk cases. Public reinsurance would transfer a portion of the costs associated with high cost cases from private insurers to the government. There are many possible ways to structure public reinsurance.[4] A threshold level of expenses above which reinsurance would become effective must be chosen. In addition, the policy must define whether all costs above the threshold would be reimbursed, or whether only a portion would be covered. We propose to reimburse eligible insurers for 75 percent of an individual's cost incurred above $35,000 each year. All of those purchasing non-group insurance or purchasing employer-based coverage in firms with fewer than 100 workers would be eligible for reinsurance. This would apply to coverage purchased inside or outside of the pool. Implementing public reinsurance both inside and outside the purchasing pool makes it much less likely that a substantial adverse selection problem would materialize inside the pool.

Establishing a purchasing pool may still result in some risk selection, i.e. those with higher than average healthcare risks might be more likely to purchase inside the pool because the policy offered is more comprehensive than what is typically found in the non-pool market. It may be necessary to redistribute some costs associated with this adverse selection back onto those obtaining insurance outside the pool. There is also likely to be a need to adjust for selection across plans within the pool. Doing so would prevent those plans that attract the sickest enrollees from being penalized financially.

[4] See Linda J. Blumberg and John Holahan, "Government as Reinsurer: Potential Impacts on Public and Private Spending," Inquiry, vol 41, pp. 130–143, summer 2004.

III. Achieving Universal Coverage

The measures outlined thus far—an expansion of MassHealth, the development of a purchasing pool which would provide income-related premium subsidies, and public reinsurance for small group and non-group insurers—would make considerable progress in reducing the number of uninsured. However, it is simply not possible to achieve universal coverage without requiring the purchase of insurance. There are essentially two alternatives for achieving universal coverage: 1) an individual mandate, and 2) an employer mandate coupled with an individual mandate.

Individual Mandate

An individual mandate would achieve universal coverage. In this approach, individuals would face a legal requirement to obtain coverage for themselves and their families. The individual mandate would build upon all of the mechanisms discussed thus far, the MassHealth expansion, tax credits, establishment of a purchasing pool and public reinsurance. Each of these would be designed to assure that affordable coverage options are available to all residents of Massachusetts.

An individual mandate would establish a minimum level of coverage that would be required to meet the mandate. Too rich a benefit package would make the coverage unaffordable to a sizable segment of the population without extensive subsidies. We propose that the mandate be satisfied with a less generous set of defined benefits than is typical in the employer-sponsored insurance market today, e.g., with higher deductible and stop loss levels. We recommend that the minimum benefit package required to fulfill the mandate have an in-network deductible no larger than $1,800 for a single policy or $3,600 for a family policy with out-of-pocket maximums of $3,600 and $7,200 respectively (values expressed in 2005 dollars). The list of benefits would include inpatient and outpatient care, emergency room services, physician care, a range of preventive services and prescription drugs, but with limited mental health services and no dental care.[5]

Individuals could meet the mandate with more generous policies (lower deductibles, lower out-of-pocket maximums), but not with less generous policies. Allowing a high deductible policy to satisfy the mandate reduces the burden on higher income individuals who do not need low deductible policies for protection against medical expenses. It also allows those who might prefer to use Health Savings Accounts to

[5] These latter benefits could obviously be included but would add to affordability issues.

satisfy the mandate with those types of products. At the same time, low and moderate income individuals are protected against high out-of-pocket costs through the availability of MassHealth and tax credits. While MassHealth provides comprehensive coverage with little to no cost-sharing for those with the lowest incomes, the purchasing pool and the associated tax credits guarantee that all individuals and families will have a choice of plans that have relatively low cost-sharing requirements and limit their health insurance spending to a fixed percentage of income.

There would be a system of automatic enrollment for those who do not voluntarily enroll. The Commonwealth of Massachusetts would guarantee that everyone meeting a residency requirement would automatically be covered. Individuals would be responsible to enroll in a plan of their choosing, obtain an insurance card, pay premiums, and they would receive tax credits if eligible. Individuals could enroll through employers, the purchasing pool, purchase coverage directly through other private non-group insurers, or enroll in MassHealth. Those who do not directly enroll could also be enrolled by providers when medical care is required. A mechanism would be established that would allow providers to link electronically with state enrollment offices, provide basic information, and then enroll the patient in MassHealth or the purchasing pool. After enrollment, a card would be issued, and premiums would be collected, if applicable. The provider would be assured of payment.

For those who do not use the health system, premiums would be collected (with a penalty) when taxes are filed as part of the person's tax obligation. These penalties would take the form of back payment of premiums for the year. Low-income individuals eligible for MassHealth would not be responsible for back payments of premiums because they would not have had a premium obligation regardless of enrollment date. Modest income people eligible for subsidized coverage would face reduced penalties.

An individual mandate would not change the dominance of the employer-based insurance system. Indeed, employer-sponsored insurance is one way of fulfilling the terms of the mandate. Employer-based insurance would remain attractive under an individual mandate because the federal tax exemption for employer contributions for health insurance means that middle- and high-income employees would still be better off financially obtaining coverage through their employers, given that they would have little or no eligibility for income-related subsidies provided in the pool. Large employers are likely to be able to obtain insurance with lower administrative loads than the purchasing pool, maintaining a strong incentive for those employers to continue to offer coverage to their workers. Further, employers typically compete for workers through their compensation packages, including health benefits; nothing in an individual mandate changes this reality.

Employer Mandate

The other alternative is a mandate that would require that all employers (or most) provide health insurance coverage to their employees and their dependents. An employer mandate combined with an individual mandate would achieve universal

coverage. Without an individual mandate, employees could decline to enroll themselves and/or their dependents, and those not in the labor market would have no requirement to obtain coverage. An employer mandate by itself, however, could reach most workers and their families, leaving a minority of the population to be covered, albeit voluntarily, under alternative means: private coverage, MassHealth or the purchasing pool.

One issue facing any state in enacting an employer mandate is the preemption clause of the Employee Retirement Income Security Act of 1974 (ERISA). ERISA prohibits states from enacting laws related to employee benefits. The approach that may not violate the provisions of ERISA is to require employers to pay the state a tax or fee ("pay") unless they provide employees with health insurance ("play"). The amount of the tax owed by an employer that chooses to play is reduced by the amount the employer contributes toward the health insurance coverage provided to their employees. The revenues from those who pay instead of play would be combined with other funds to provide insurance to those who are not covered through their employers. This approach does not actually require employers to give their employees a specific benefit; thus, it has the best chance to stand up to a legal challenge under the provisions of ERISA.

We have considered different versions of the pay or play model. Any of these could be enacted with or without an individual mandate. All include the building blocks described above: expansion of MassHealth, tax credits, a purchasing pool and public reinsurance. Design choices that must be made include the payroll tax rate, e.g., five percent, eight percent, ten percent, and the wage level to which the tax is applied, e.g., total wages, wages up to a maximum of the Social Security wage base per employee, or a smaller amount. Both the tax and the wage base to which it is applied could be indexed to keep pace with the rising cost of health care over time. The mandate could cover all firms as well as all workers. Alternatively, it could exempt small firms, and/or part-time workers.

Under any of these models, employers would receive a credit against the tax for the payments they make for employee health insurance. Under any model, firms choosing to play could offer coverage within the purchasing pool. Alternatively, they could offer coverage outside the pool but still make contributions to the pool on behalf of workers who would prefer to obtain coverage there. Firms could also offer plans within the pool alone and pay the required amount.

Under the terms of ERISA, the Commonwealth cannot define a specific benefit package that employers must provide in order to avoid the requirement to pay the tax. This means that the state cannot guarantee that firms will have a specific level of benefits. If an individual mandate is included as part of the policy, employers would have an incentive to provide policies that would, at a minimum, allow their workers to meet the standards of the individual mandate.

Employers that offer coverage would have a strong incentive to make sure that coverage is sufficiently comprehensive to at least equal the value of the tax. This is because employers spending less on premiums would be required to pay the difference into the state system. The premium payments offset the tax liability dollar for dollar, but the total liability of the employer is equal to the tax. The residual tax liability that could occur if a firm offers limited benefits would provide no value to the firms' employees, while a more comprehensive package would benefit employees through better coverage and the more favorable tax treatment of employee compensation. Thus, we assume that employees of firms that play will be provided with coverage that meets or exceeds the value of the tax, though the nature of the coverage may vary across firms.

Firms that play would be providing health insurance and quite likely would reduce wages and salaries so that the effect on overall compensation is minimized. Employees of firms who pay would not be directly provided with health insurance, although they would also be likely to see a reduction in wages or salaries as their employers compensate for the new tax. These workers should get a benefit from their employer's contribution. Thus, we assume that workers of employers who pay would receive coverage in the pool at a discount.

Finally, we note again that an employer mandate must be coupled with an individual mandate to achieve universal coverage. Workers would be required to enroll in coverage that satisfies the terms of the mandate, be it through coverage offered by an employer, MassHealth, the purchasing pool, or a non-group policy sold outside of the pool. Without an individual mandate, an employer mandate could substantially increase coverage and provide funds that could support subsidies, but some workers would not take up employer offers of coverage, and those without an attachment to the workforce may not seek coverage elsewhere.

IV. Estimating the Effects of Reform

We used the Health Insurance Reform Simulation Model (HIRSM), developed by Urban Institute researchers, to predict the effects of insurance reform options. A microsimulation model differs from other types of models in that it operates on individual units rather than aggregate information. In the social sciences, these units are individual economic units, such as an individual, a family, or a business. The database used as the input to a microsimulation model consists of survey data that has individual level records describing characteristics of individuals, families and/or businesses. The simulation model also applies a set of rules, e.g., eligibility for a public program, or eligibility for an employer offer of insurance coverage, to each individual record. The result of the computations are information on offers of coverage by firms, take-up of employer offers by individuals and families, eligibility for and enrollment in public programs, and so forth.

Microsimulation models permit an analyst to change the conditions under which an employer decides to offer coverage, or the worker to take-up coverage; e.g., changes in the price of insurance, employee contributions, etc. Alternatively, an analyst could change the eligibility rules for a public program, such as increasing eligibility to a higher income level. The model could then generate the impacts of the change on coverage and the cost to employers, individuals, or government.

The impacts are derived for each individual in the database. Each individual's result is multiplied by the survey weight associated with that individual in the micro-data file. This is necessary because surveys contain data on a sample of people chosen to represent the U.S. population; thus, to obtain results for the entire population, we apply weights to each individual and add them together to obtain nationally representative aggregate results.

In a health care microsimulation model several steps are required. First, it is necessary to establish a baseline that reflects current insurance coverage and health care costs. HIRSM's baseline reflects the actual distribution of coverage between employer coverage, public coverage, non-group coverage, and uninsurance. Baseline costs reflect the amount of money spent on health care within the various sectors. This includes health care spending by government and employers, as well as premium and out-of-pocket costs for individuals.

Unlike other microsimulation models, HIRSM simulates current law before it simulates reforms. That is, rather than taking data on the distribution of insurance coverage directly from a survey, HIRSM predicts the actual distribution of insurance coverage as a check on the statistical or econometric equations in the model to see if they are accurately reflecting reality. The notion behind this approach is that one can have greater confidence in the predictive capacity of the simulation if the model can accurately replicate what is known about insurance arrangements prior to reform.

While originally a national model, HIRSM has been adapted to reflect the distribution of individuals and employers in Massachusetts. It has also been restructured to reflect Massachusetts' current distribution of insurance coverage and the level of health expenditures.

The simulation model also requires statistical or econometric models that predict behavior. These models will predict the types of products and premium offers that insurers make in each market depending on the health risks they expect to enroll. They will also predict the likelihood that a business with particular characteristics will offer coverage, that individuals with various characteristics will take-up employer offers, that individuals will obtain coverage in the non-group market, and that those who are eligible for public programs will actually enroll in them. The statistical models control for a large number of characteristics of individuals and families and thus are sensitive to the effect of those characteristics on behavior. For example, we know that large firms are more likely to offer coverage than small firms, that higher income people are more likely to take-up employer offers of coverage, and that children are more likely to enroll in public insurance coverage than adults. These statistical models allow us to reflect behavioral observations.

All decision making within HIRSM is generated by econometrically estimated equations which reduces the number of assumptions that are required in the model. The model reflects the best research evidence on how various actors, e.g., employers, families, or individuals, actually make their decisions in the current world.[6]

The actual simulations involve affecting coverage by changing the rules within the health care system. For example, an analyst could simulate the impact of expanding Medicaid, or offering tax credits to low- and middle-income individuals. The model would generate how many people would be newly eligible for Medicaid or for full or partial tax credits. The model could subsequently generate the costs of expanding coverage through Medicaid or the loss of tax revenues because of the use of tax credits for health insurance. Because the results are done at a micro level, it is possible to obtain detailed information on the effect by size of firm, by income group, or other characteristics. For example, the model can reveal, under a Medicaid expansion, not only how many firms would no longer offer coverage and how many workers with non-group coverage would drop that coverage to take-up Medicaid, but also how much the number of uninsured would fall.

[6] Further detail on HIRSM can be found in Blumberg et al., "The Health Insurance Reform Simulation Model (HIRSM): Methodological Detail and Prototypical Simulation Results," Report to the US Dept. of Labor, PWBA, July 2003. http://www.urban.org/UploadedPDF/410867_HIRSM_Report.pdf.

Finally, an innovation specific to HIRSM is that premiums for offered insurance policies and Medicaid costs are generated within the simulation model using survey data on health expenditures as opposed to being assigned to each purchaser from datasets on premiums. A major advantage of HIRSM is that it reflects the actual composition of risk pools; that is, the expected health care expenditures of individuals grouped together are used to determine the health insurance premiums within the model. Reforms that change the composition of individuals within these pools will potentially affect the costs being borne by those in all insurance markets and thus the premiums offered. This will, in turn, affect individual and group decisions regarding coverage. For example, a reform that makes free public coverage available to individuals with high expected health costs, thus causing high cost individuals to leave the private market and take-up public coverage, will reduce the premiums for those who remain in the private insurance market. Without the ability to model the expenditure distribution within risk pools, it is not possible to accurately estimate the changes in costs to employers and individuals that could occur from a health system reform.

V. Policy Options Simulated

While we modeled an array of different policy options to expand coverage, we present the voluntary building blocks and two universal coverage options in detail. The voluntary system includes each of the building blocks described earlier:

- Eligibility expansion for MassHealth up to 133 percent of the federal poverty level (FPL) for non-parent adults and up to 200 percent of FPL for parents and children;
- A purchasing pool including income related tax-credit subsidies for those with incomes up to 400 percent of FPL;
- Publicly funded reinsurance for 75 percent of individual expenses in excess of $35,000. Reinsurance applies only to individuals insured through either firms of fewer than 100 workers or direct-purchase insurance markets.

The tax credits modeled here can be used for the purchase of private health insurance policies within the newly organized purchasing pool only. The tax credits limit premium contributions to a specified percentage of income. The value of the tax credit declines at higher incomes as the cap on premium contributions rises, phasing out the tax credit entirely at incomes above 400 percent of FPL. Individuals or families with incomes at or below 150 percent of FPL would be eligible to have their premium contributions capped at six percent of their income. Individuals and families between 150 percent and 225 percent of FPL would be eligible for the eight percent caps. Those between 225 percent and 300 percent of FPL would be eligible for 10 percent caps, and those up to 400 percent of FPL would be eligible for the 12 percent caps. The voluntary purchasing pool is guaranteed issue and subject to the same modified community rating rules as the current Massachusetts' rules for the direct purchase health insurance market.

The first universal coverage option is an individual mandate. The individual mandate incorporates all of the voluntary measures, but additionally requires each individual or family to enroll in the coverage option that is most preferable to them. The minimum benefit package required to satisfy the individual mandate is relatively parsimonious, in order to ensure that an affordable option is available to those individuals and families who are not eligible for substantial tax credits. The minimum required package is one consistent with a high deductible policy such as those that can be purchased in conjunction with a health savings account (HSA). Typical employer-based coverage is predicted to stay relatively comprehensive, however.

The second universal coverage option presented here is an employer "pay or play" model, in which we add a low-tax employer mandate to the voluntary and individual mandate policies described above. The "pay or play" policy in this simulation requires employers to pay an eight percent tax on the first half of the social security wage base per employee. Employers receive a credit against the payroll tax obligation for any contributions made to employer-based insurance on behalf of their workers. Firms with fewer than 10 employees and employees who work less than 30 hours per week are exempted from the "pay or play" policy.

Workers who purchase coverage in the pool and who have employers who "pay" are eligible for tax credits that are more generous than the standard ones described above. In this way, we treat the employer payroll tax payments as akin to employer contributions to health insurance on behalf of their workers. According to economic theory, over time, these payments will be passed back to workers in the form of lower wages. To require such payments but not allow the workers to reap any financial benefit from them, would be to penalize them relative to others in the system. As a consequence, any worker who buys coverage in the pool and who has an employer who "pays" receives a tax credit equal to the difference between the cost of the premium and five percent of family income. The extra cost of these subsidies (over and above the standard tax credits) is more than offset by the payroll tax revenue collected.

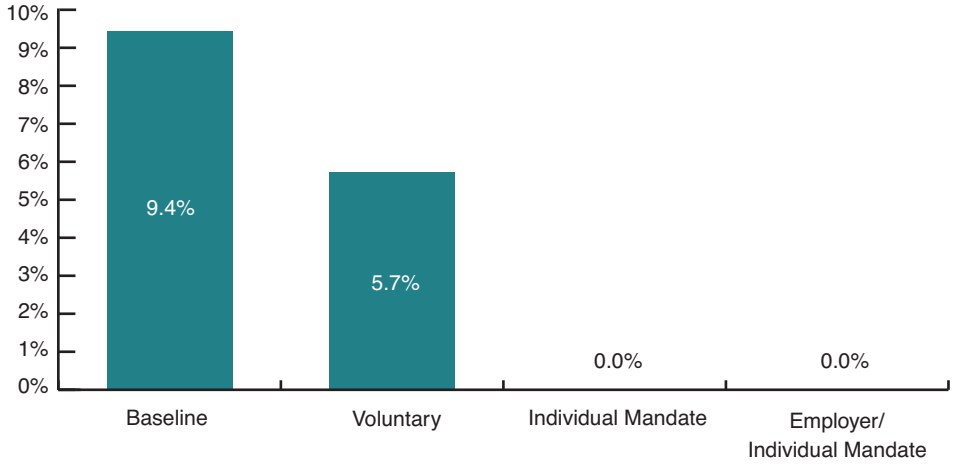
We modeled several other policy options that are not presented in detail here. We found that all of the voluntary MassHealth expansions alone fell far short of achieving the project's goal of universal coverage, with no effect on populations above the income eligibility thresholds. We also modeled a number of employer mandate options that excluded an individual mandate. Under such options, employers would be required to "pay or play" but there would be no requirement that individuals enroll in coverage of any type. These approaches were relatively expensive and all left at least 270,000 people uninsured. Combination employer/individual mandates which used higher payroll tax rates, applied taxes to higher wage thresholds, and did not allow exemptions for small employers or part-time workers, resulted in very large increases in aggregate employer spending, making them unattractive options.

VI. Current System Coverage and Changes Expected Under Reforms

The Uninsured

We estimate that approximately 532,000 Massachusetts residents (nine percent of the population) are uninsured under the current system (Figure 1). The voluntary system of reforms, or building blocks, are expected to decrease the share of the population that is uninsured to 5.7 percent. The two mandate options would theoretically reduce the number of uninsured to zero. While we recognize that certain subpopulations (e.g., undocumented immigrants, the homeless) may be particularly difficult to reach under the mandates, we believe that a combination of a number of strategies could make enforcement very successful. These strategies will be discussed in more detail in a forthcoming paper describing the implementation of these plans to be released in the fall.

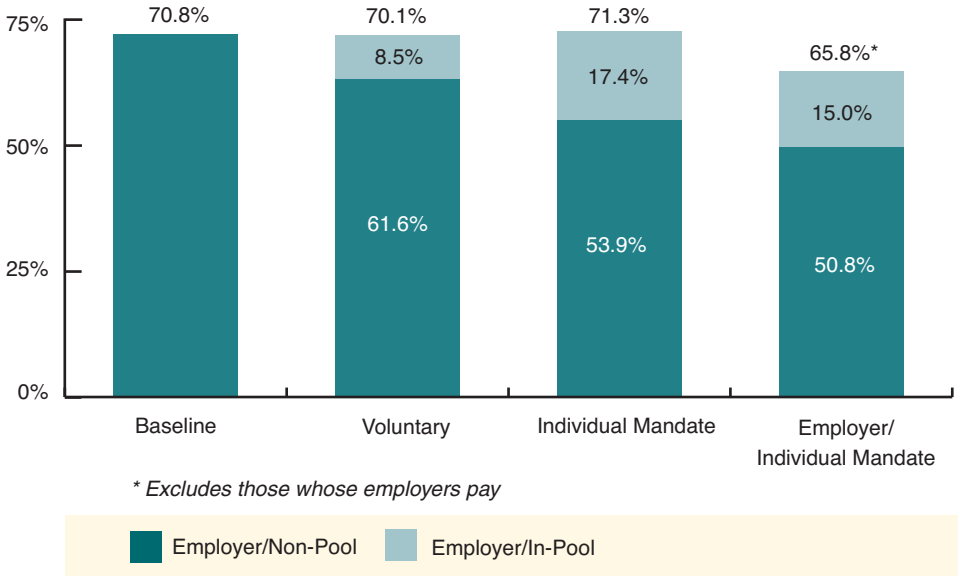
Figure 1. The Uninsured



Employer Sponsored Insurance Coverage

Figure 2 offers a comparison of the share of Massachusetts residents with employer-sponsored insurance (ESI) coverage that can be expected under each reform alternative. Roughly 71 percent of Massachusetts residents have ESI, either through their own employer or that of a family member. Under the voluntary system of a MassHealth expansion, public reinsurance, a purchasing pool and income-related tax-credit subsidies, ESI would continue to cover about the same share of the state population; however, 8.5 percent would enroll through the new purchasing pool, with 61.6 percent obtaining it through plans sold outside of the purchasing pool.

Figure 2. Employer Sponsored Insurance Coverage



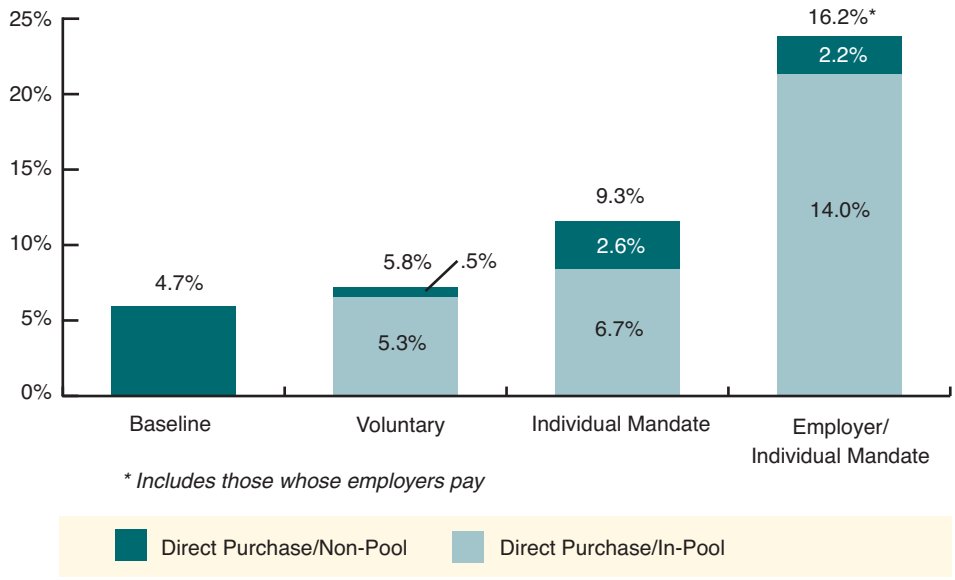
Under an individual mandate the share of residents obtaining ESI through the pool doubles relative to the voluntary option, to 17.4 percent. Overall, the share covered by ESI is virtually constant, with 71.3 percent receiving such coverage under the individual mandate, compared to 70.8 percent under the current system. Under this policy option, all individuals must find a source of coverage, and employer sponsored-insurance remains very attractive to the majority of the population. Some workers are expected to encourage their employers to offer ESI inside the pool so that they can maintain employer-based coverage while taking advantage of the subsidies available in the purchasing pool.

Under the combined employer mandate/individual mandate approach, the share covered by ESI falls to 65.8 percent (15.0 percent obtaining ESI through the pool). This difference in results is due to the introduction of the employer "pay" option. When employers choose to pay the eight percent payroll tax instead of providing coverage themselves, their workers who directly purchase coverage through the purchasing pool are not considered to have ESI. Consequently, the availability of the "pay" option will tend to increase the size of the purchasing pool, leading to more direct purchase of coverage and lower enrollment in ESI coverage. The share of the population who has an employer either providing them with ESI or paying a payroll tax toward their coverage in the purchasing pool is greatest under the employer/individual mandate.

Direct Purchase of Coverage

Directly purchased coverage includes policies purchased through the non-group market and policies purchased by the self-employed and others who report direct purchase as opposed to having employer-based insurance. We estimate this type of coverage to include less than five percent of the current Massachusetts population (see figure 3). As the second bar in the figure illustrates, the direct purchase market would increase very modestly under the voluntary reform, to 5.8 percent of the population. However, virtually all of this market would purchase its coverage through

Figure 3. Directly Purchased Insurance Coverage



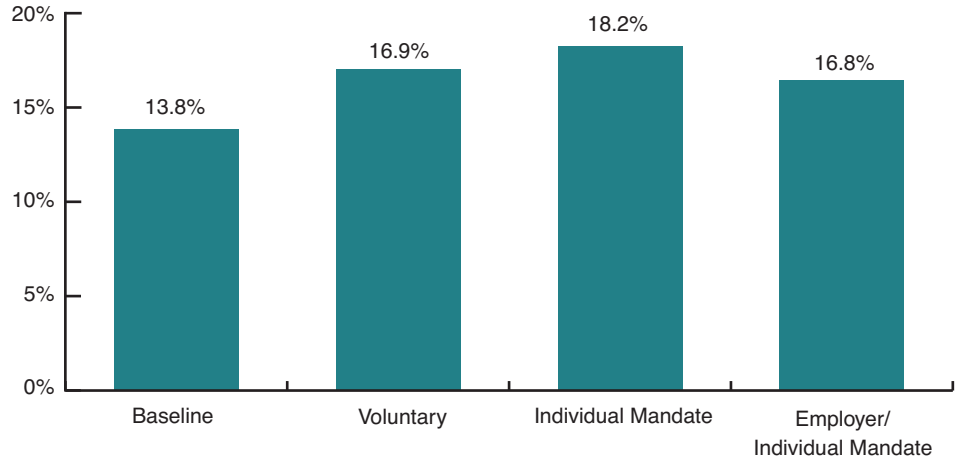
the new purchasing pool. This market would be expected to grow to cover almost 10 percent of the population under the individual mandate option, with roughly three-quarters of that group purchasing through the new pool.

As alluded to in the discussion of ESI, the combined employer mandate/individual mandate reform can be expected to lead to a marked increase in the share of the population directly purchasing coverage. Roughly 16 percent of the population would purchase insurance directly, with the vast majority doing so through the purchasing pool. The employer "pay" option, coupled with the special tax credits offered to workers whose employers pay, make the purchasing pool significantly more attractive to many individuals and families.

MassHealth

We estimate that roughly 14 percent of the MA population is currently covered through the MassHealth program (Figure 4). Under the voluntary reform option, the MassHealth program is expected to increase coverage to about 17 percent of the population. Adding an individual mandate is estimated to bring that figure up to 18

Figure 4. MassHealth Insurance Coverage



percent. Under the employer/individual mandate, MassHealth is anticipated to cover only 17 percent of the population, as more workers who are eligible for the program opt to take advantage of the extra purchasing pool based subsidies and directly purchase their coverage instead.

Coverage Summary

Table 3 provides a brief overview of the key coverage changes that we estimate would occur under each of the three reform options. The voluntary option would decrease the number of uninsured by roughly 211,000 people, about 40 percent of the currently uninsured in the state. Either mandate option could produce universal coverage. The expansion in eligibility for MassHealth would increase the size of that program by about 183,000 people under the voluntary reforms, 255,000 under the individual mandate alone, and by about 173,000 under the combined employer/individual mandate. The smaller increase under the employer/individual mandate is attributable to more workers preferring to buy directly through the purchasing pool once they are made eligible for the additional tax credits afforded to workers whose employers "pay."

Under the voluntary system, the purchasing pool would cover about 805,000 people, including those enrolling through their employer and those purchasing directly. The pool would cover about 1.4 million people under the individual mandate alone because the requirement that everyone has coverage leads more people to take advantage of the subsidies in the pool. The pool gets even larger under the employer/individual mandate, covering about 1.7 million people as a result of introducing the employer "pay" option and providing additional subsidies to workers whose employers choose it.

Table 3. Post Reform Changes in Coverage

	Voluntary	Individual Mandate	Employer/ Individual Mandate
Uninsured	-210,600	-532,000	-532,000
MassHealth	+183,000	+255,000	+173,000
Purchasing Pool	+804,800	+1,395,900	+1,684,400

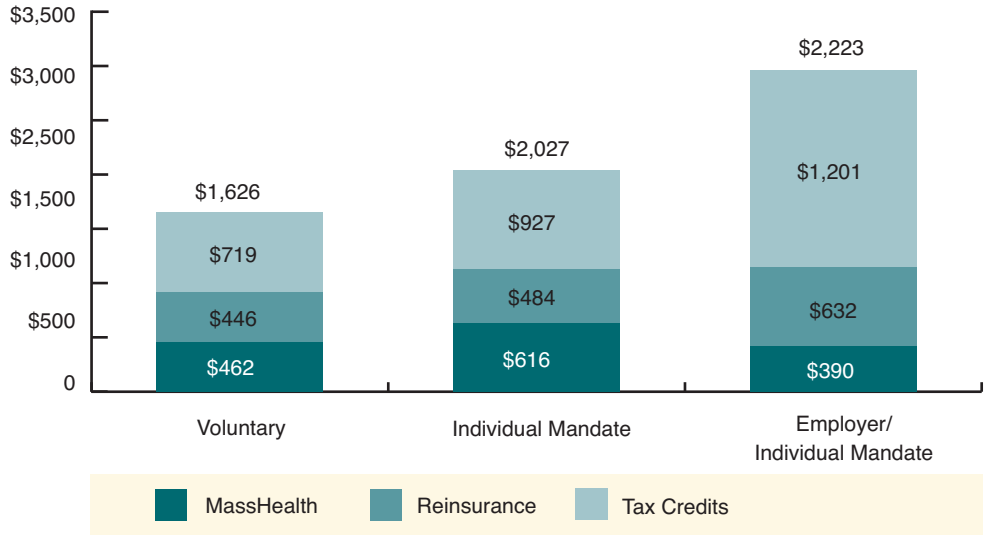
VII. Changes in Spending Under Reform

Government Spending

Government spending on MassHealth for the non-elderly is estimated to be $3.3 billion dollars in 2005. This amount includes spending by both the state and the federal government. Figure 5 shows the change in government spending anticipated under each of the reform options, over and above current system spending on MassHealth. It is important to note that these government costs do not take into account other health care spending in the state that could be redirected to help finance these programs, one example being the state's Uncompensated Care Pool. Costs are presented in 2005 dollars, and reflect one year costs as if the program was fully implemented in 2005. They include both state and federal government spending.

Under the voluntary program, government spending is predicted to increase by 50 percent. Of that $1.6 billion increase, $719 million is attributable to the sliding scale tax credits provided in the new purchasing pool, $446 million would be used to finance the public reinsurance program for individual and small group purchasers, and $462 million would fund increased spending in MassHealth. MassHealth spending would be shared by the state and the federal government.[7]

Figure 5. Changes In Government Health Spending (in Millions of 2005 $)



[7] The exact federal and state shares depend on the relative reliance on Medicaid and SCHIP.

The individual mandate would increase government spending by roughly $2 billion dollars. Of this increase, $927 million would finance the tax credits, $484 million would pay for the public reinsurance program, and $616 million would go toward an expanded MassHealth program. While coverage increases in the purchasing pool under the mandate compared to the voluntary option, the cost of the public reinsurance subsidy would be only modestly higher, since most high cost individuals are covered under the voluntary program since they would find even voluntary inducements to enter the system quite compelling.

Under the combined employer/individual mandate, government costs would increase by about $2.2 billion. This amount is net of the $1.1 billion in payroll tax revenue anticipated under the policy. While we estimate that tax credit costs will amount to roughly $2.3 billion for this option because so many workers would benefit from the five percent income cap on premiums, we subtract the payroll tax revenue from that amount, leaving $1.2 billion in net tax credit costs. We anticipate that $632 million would be needed to fund the public reinsurance component, with an additional $390 million going to MassHealth.

Employer Spending

Figures 6 and 7 show the impact of the reform options on aggregate spending by employers of different types. This spending includes contributions to premiums on behalf of workers as well as payroll tax payments for employers choosing the "pay" option under the employer/individual mandate. Figure 6 shows changes in aggregate employer spending under each option, separating employers by whether they offer coverage under the current system. Under the voluntary approach and the individual mandate, those employers currently offering insurance coverage achieve savings while those employers not currently offering incur additional costs. The distributional impacts are greatest under the employer mandate option, where most employers are subject to a new requirement. Under the combined employer/individual mandate, employers currently offering would experience a very modest increase in their spending, suggesting that the 8 percent spending requirement under this option is roughly consistent with their current spending levels. The employer mandate would lead to the highest level of spending ($637 million) by employers currently not offering coverage to their workers.

Figure 7 categorizes employers by firm size: small firms are those with fewer than 100 workers; medium firms are those with 100–499 workers, and large firms are those with 500 or more workers. Under the voluntary reform, there are very little distributional differences across firm sizes. Under the individual mandate, both small and medium sized firms would spend five to six percent more than under the current system and the large employers would spend about the same as today. These modest increases for small and medium firms are the consequence of some employers spending more and others less. Some will begin to offer health insurance coverage to their workers once all individuals are required to enroll in coverage of some kind. Some workers will consider the possible coverage options and conclude that employer based coverage is their preferred option. In circumstances where a sufficient number of

Figure 6. Changes in Employer Spending by Baseline Offer Status (In Millions of 2005 $)

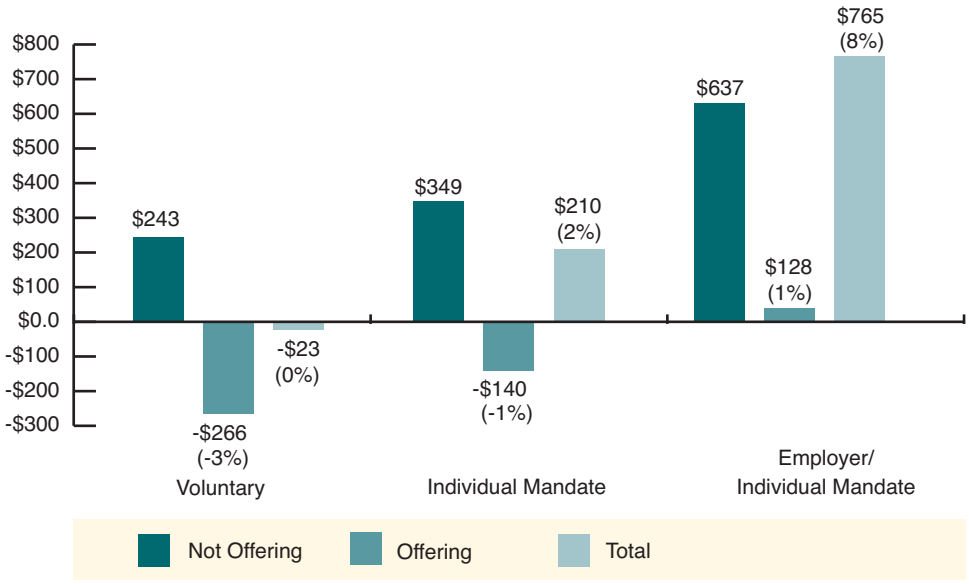
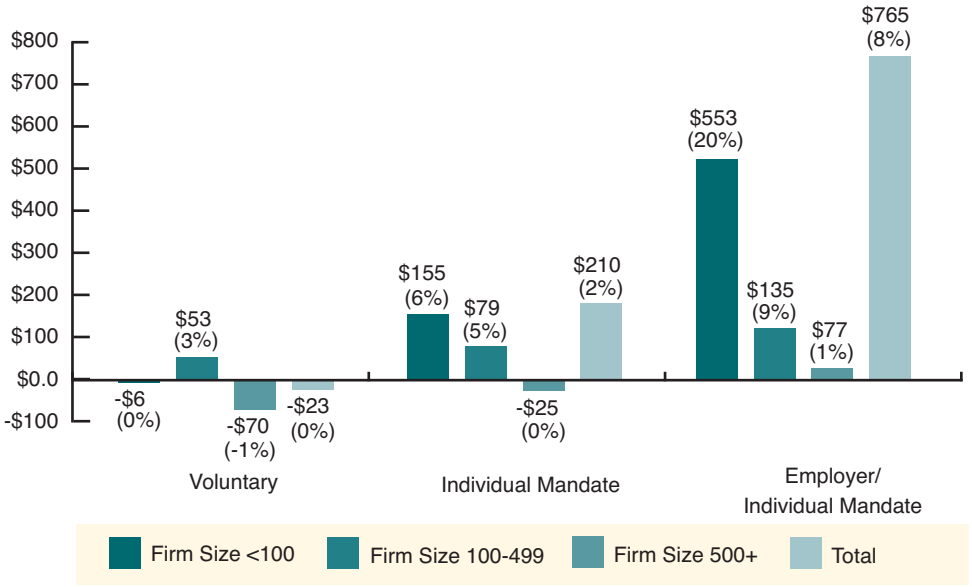


Figure 7. Changes in Employer Spending by Firm Size (In Millions of 2005 $)



workers are willing to exchange wages for health insurance, employers will be more likely to offer such coverage under the mandate than they are under the current system. At the same time, other employers who had been offering coverage may opt to stop doing so, as their workers prefer to obtain coverage independently through the pool or elsewhere.

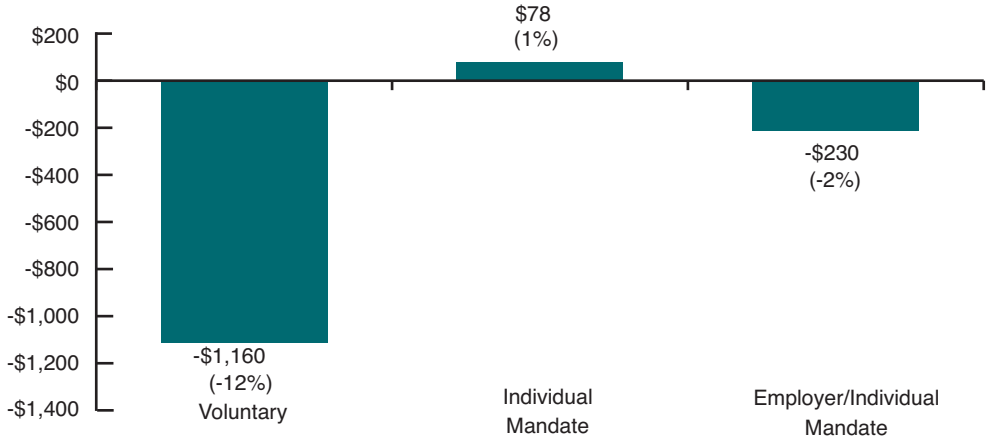
The combined employer/individual mandate would lead to sizable employer spending increases of about twenty percent for small employers, those least likely to offer under the current system, and therefore those most likely to be affected by the new "pay or play" requirement. Medium firms would experience a nine percent increase in spending, while the largest employers would experience only a minimal increase.

It is important to note that while distributional differences can be expected to result from these reforms, aggregate changes in overall employer spending are modest, particularly in the case of the individual mandate. Aggregate employer spending would increase by $210 million under the individual mandate, a change of only two percent of baseline spending. Under a combined employer/individual mandate, aggregate employer spending increases by eight percent.

Individual/Family Spending

Figure 8 shows the aggregate impact of the three reform options on direct spending by individuals and families. This spending includes direct payments for premiums as well as out-of-pocket payments not covered by insurance. We see that the voluntary option saves individuals the most—roughly $1.2 billion. This option provides an array of new programs and subsidies that make coverage more affordable, without requiring a change from individuals who would prefer to remain uninsured. Once an individual mandate is put in place, individual/family spending is virtually unchanged in aggregate because more people now have to pay for coverage. There is a modest degree of savings to individuals/families under the employer mandate option, since

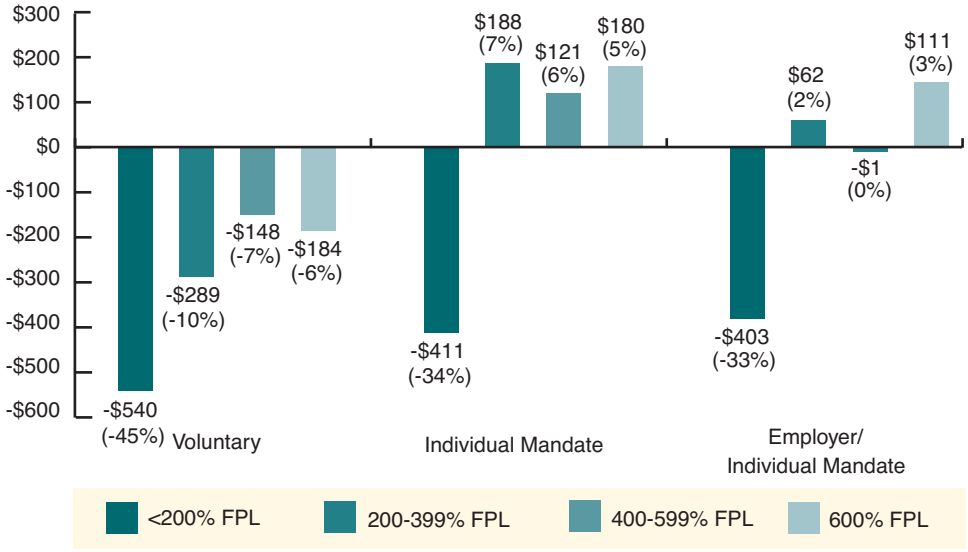
Figure 8. Changes in Individual/Family Spending (In Millions of 2005 $)



both government and employer spending are greater under this option, and much of that increased spending leads to savings for individuals.

Figure 9 shows how the changes in individual and family spending would be distributed across different income groups. Under each of the reform options, the greatest savings accrue to those individuals and families with incomes below 200 percent of FPL. As noted previously, the voluntary system leads to savings across the income distribution, since those who do not gain from the new coverage options can simply decide not to participate. In the individual mandate, there are large savings for the lowest income group, but spending for those at 200 percent of FPL and above would increase by five to seven percent. Under the employer mandate, the lowest income group would save an amount roughly equivalent to that under the individual mandate, and spending increases for the higher income groups would be somewhat more modest. This result is the consequence of the fact that individuals purchasing coverage

Figure 9. Changes in Individual/Family Spending by Income (In Millions of 2005 $)



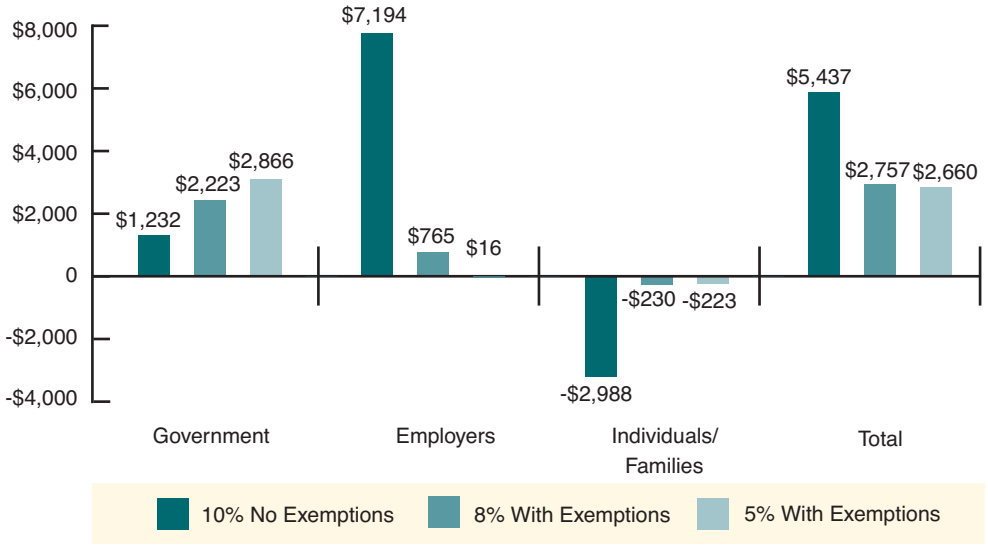
through the new pool whose employers choose to pay a payroll tax on their behalf are eligible for more generous tax credits than the general population. These more generous subsidies are more than offset by the employer payroll tax payments in aggregate.

Other Employer Mandate Options

It is important to keep in mind that each of the options presented here reflects the implications of particular design choices. The payroll tax rate, the amount of wages to which the payroll tax applies, whether or not certain types of firms and workers should be exempted from the "pay or play" mandate, whether workers whose employers pay should receive extra premium discounts, are all parameters that can be changed. However, each choice leads to particular tradeoffs. Figures 10 and 11 illustrate some of these tradeoffs. Figure 10 compares the employer/individual mandate presented earlier (shown as the second bar in each set) with two different employer/individual mandate options. One alternative imposes a 10 percent payroll tax and does not exempt either small employers or part-time workers (the first bar in each set). This option also doubles the wage base to which the payroll tax is applied, up to the full social security wage base. The second alternative (the third bar in each set) imposes a five percent payroll tax on half the Social Security wage base and does exempt small employers and part-time workers.

Again, the change in government costs net out the payroll tax revenue received under the mandate. Because the 10 percent option brings in more payroll tax revenue than does the eight percent option, the net change in government spending is lower. The fact that the 10 percent option does not exempt any employers or workers and uses a higher wage base amplifies this difference. Conversely, the five percent payroll tax option brings in less payroll tax revenue than the eight percent mandate; consequently, it has a higher net government cost.

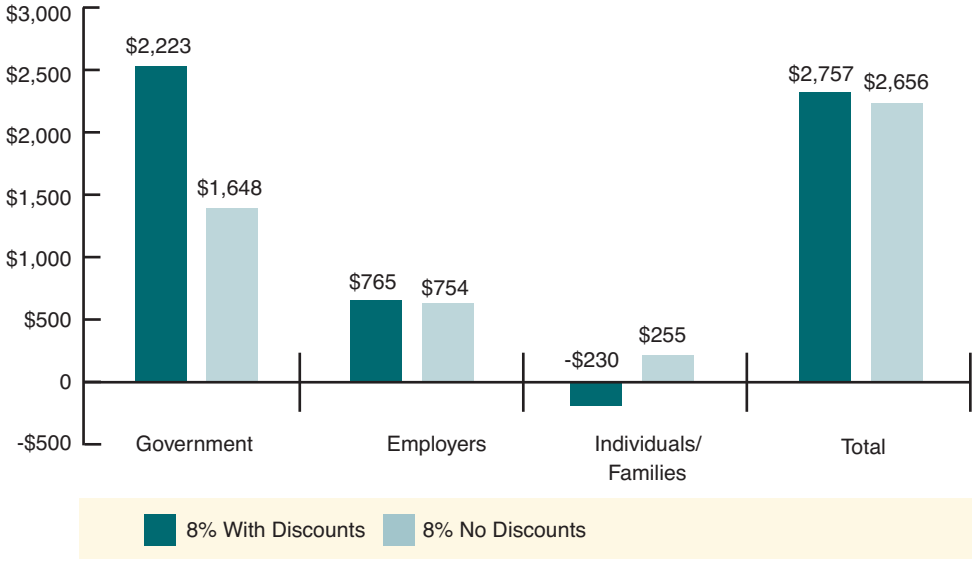
Figure 10. Changes in Health Spending – Comparison of Employer Mandates (In Millions of 2005 $)



The change in employer spending is particularly large under the 10 percent option, as this minimum spending requirement represents more spending than is done by most currently offering employers. As a consequence, not only does spending increase for those employers who do not currently offer coverage to their workers, it also increases for those who do currently offer. Additionally, no employers are released from the requirement. Because employer spending is required to be so high under this option, employers who do offer coverage post-reform are likely to provide more generous policies than is the case today, leading to significant reductions in spending for individuals and families. In total, the 10 percent option would increase health spending in the system to a much greater extent than either of the other two options. Employer spending would remain relatively constant in aggregate under the five percent payroll tax option.

An employer/individual mandate could also be designed that altered or eliminated the more generous tax credits for workers whose employers choose to "pay." Figure 11 shows the eight percent payroll tax employer mandate option with and without these additional subsidies. While eliminating these subsidies (i.e., treating those whose employers "pay" no differently from others who purchase coverage in the purchasing pool) would lower new government spending from $2.2 billion to $1.6 billion, it would increase individual and family spending by roughly $500 million in aggregate. If the extra subsidies were structured differently, in ways that made them less generous but did not eliminate them, less extreme tradeoffs could be made between government and family spending, but tradeoffs would remain. In general, employer mandates can be structured in many different ways, but options that would reduce costs to government would increase costs to employers, individuals, or both.

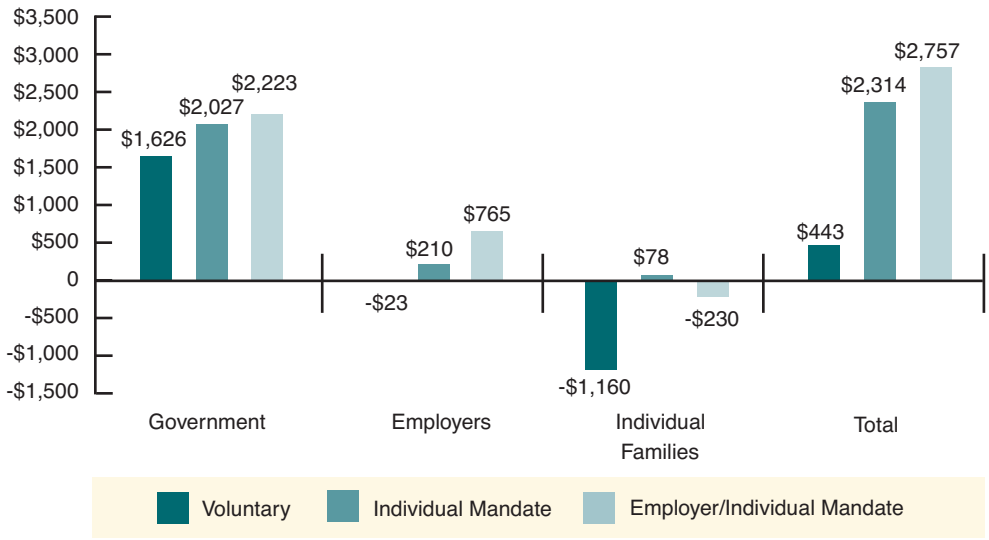
Figure 11. Employer Mandates with and without Discounts for Workers of Employers who Pay (In Millions of 2005 $)



VIII. Discussion

The data presented in the previous section (and summarized in figure 12) show that voluntary arrangements with all of the affordability provisions of this plan would still leave 321,000 people without coverage. The cost to the government for the MassHealth expansion, tax credits, and reinsurance would be $1.6 billion per year. Employer spending would be largely unchanged because the cost of those who are newly offered would be offset by savings to many of those who now currently offer. Individuals and families would receive large savings because of the expansion of MassHealth and the availability of tax credits. Overall, spending would increase by about $400 million.

Figure 12. Changes in Health Spending
(In Millions of 2005 $)



An individual mandate would increase government spending by $2.0 billion. Employer spending would be higher because many workers would find it in their economic interest to encourage their employers to provide coverage, even if it meant a wage reduction. On balance, individual and family spending would be unchanged. The savings to those who currently have coverage would be offset by the increased cost to those who would now be required to have coverage. Overall, system costs would increase by about $2.3 billion.

Under the employer mandate coupled with an individual mandate, government costs

would increase by $2.2 billion. Employers in the aggregate would spend $765 million more than they do currently, although this increase falls largely on those who do not currently offer (predominantly small and some medium sized firms). Individual spending would fall as more individuals enter the pool to take advantage of subsidies. Overall spending would increase by about $2.8 billion.

Spending in the employer/individual mandate exceeds that in the pure individual mandate for a number of reasons. First, the Medicaid program is smaller under the employer mandate, with more Medicaid eligibles choosing to enroll in the purchasing pool instead, aided by more generous subsidies for workers whose employers pay. Medicaid coverage is less expensive than is coverage through the pool due to the program having lower administrative costs and lower payment rates. Second, under a pay or play employer mandate, more coverage is obtained through the pool than under the individual mandate alone. This difference is increased when extra premium discounts are offered in the pool to workers whose employers pay the payroll tax. Because pool coverage is more comprehensive than non-pool private coverage, it leads to somewhat higher overall use, hence greater spending. Third, the availability of the "pay" option leads more workers in large firms to obtain coverage in the pool under the employer mandate. For the largest firms, administrative costs associated with the purchasing pool are higher than those associated with non-pool employer-sponsored coverage, especially for employers who would have self-insured otherwise. These increased administrative costs constitute a modest efficiency loss in the system. Finally, the eight percent payroll tax requirement under this option leads some employers choosing the play option to buy more comprehensive benefit packages than they otherwise would have in order to satisfy the terms of the mandate.

We have also shown that employer mandates with higher payroll taxes would reduce costs to government but dramatically increase costs to employers. Only a mandate with a low payroll tax would keep employers in the aggregate unaffected. But even with a low tax, those not offering would now pay more than they do today, while those who currently provide coverage could achieve cost savings.

Financing

The increase in government costs under either mandate is substantial. But much of this can be offset by costs already in the system. As noted earlier, it is estimated that there is potentially $1.3 billion in federal dollars and state dollars that are available for coverage. That is, the waiver renewal makes $650 million federal dollars available, assuming states can identify programs or new revenues that would constitute state matching funds. To retain all of the $650 million in federal dollars, the state must identify either existing state funds or new revenues.

But even with the funds currently in the system, new spending will still be needed. By our estimates, there would be a need for $0.7 billion under an individual mandate, and $0.9 billion under an employer mandate. There would also, no doubt, be a need for additional funds for MassHealth provider payment increases. Some residual funds for safety net providers would also be required because there are some who are likely

to stay outside the new system (e.g. undocumented immigrants), and services must continue to be provided to them. Such residual funding would be small, however, because providers would be required to assist residents to enroll in coverage at the point of service if they are uninsured.

The additional funds needed to finance universal coverage could be identified in a number of ways. Structuring the expansion to maximize the state's SCHIP allotment will bring in federal dollars. The cost of new MassHealth enrollees who come into the program under current eligibility rules could also be financed partially with federal dollars. Both steps would bring in $75 to $100 million per year in federal funds. There could also be increases in current assessments on insurers and hospitals, and additional provider taxes, such as on managed care plans. Funds could also be made available through increased taxes on cigarettes and alcohol or increases in sales or income taxes.

While significant new spending is necessary, it is important to put these numbers in perspective. These results show that universal coverage could be achieved in Massachusetts for $700 to $900 million. With a $400 million allowance for MassHealth rate increases and residual safety net funding, the total new government spending would be about $1.2 billion. To place this in perspective, $1.2 billion is about 0.3 percent of state gross domestic product. That is, Massachusetts could achieve universal coverage for about one-third of one percent of state GDP. Stated differently, $1.2 billion is about two percent of current health expenditures, and about five percent of the state budget. Further, $1.2 billion could be raised with an increase in the sales tax from 5.0 percent to 6.5 percent, or an increase in the income tax rate from 5.3 percent to 6.0 percent.[8] It could also be increased through a combination of taxes, e.g. combining some increases in cigarette and alcohol taxes with small increases in sales or income taxes or both.

Economic Impacts

While the need for revenues is still no doubt formidable in a tight budget environment, it is important to remember that universal coverage would result in increases in economic well-being from improved health. Using a methodology developed by the Institute of Medicine, we calculated that the estimated increase in economic well-being from improved health in Massachusetts would be about $1.5 billion. There are several other benefits that are potentially associated with universal coverage that are difficult to quantify. These include the reduced risk of financial problems for individuals and families due to bankruptcies,[9] reduced demands on emergency rooms by the uninsured assuring greater access for those with insurance in time of need, and finally greater workplace productivity and higher tax payments from those whose health would be enhanced.

Finally, some of the spending that would result from universal coverage would go to

[8]Tax revenue estimates provided by the Massachusetts Taxpayers Foundation.

[9]Melissa Jacoby, Teresa Sullivan, & Elizabeth Warren, "Rethinking the Debates over Health Care Financing: Evidence from the Bankruptcy Courts," New York University Law Review, vol. 76, no. 2, pp. 375–418, May 2001.

reduce the financial burdens on low-income families and small firms who currently purchase health insurance. It is not practical or even feasible to develop a new system that is targeted only to the uninsured. Many with the same incomes are currently obtaining coverage, though at great cost to the individuals. Any equitable system would treat these individuals and families in the same way as it treats the uninsured in similar economic circumstances. This adds to the cost of the system, but the result is a system that is equitable.

Since many of the alternatives for achieving and financing universal coverage affect the cost of doing business and living in Massachusetts as well as the demand for health care services, they can affect employment, overall economic activity and personal incomes. We used the Regional Economic Models Incorporated (REMI) Policy Insight framework to assess the economic impacts of the health reform options we developed. This model is based on econometric relationships that reflect how the various sectors of the economy interact, including how labor can flow between sectors depending on changes in demand.

The REMI Model is flexible enough to allow us to analyze how a system of universal coverage that increases healthcare spending and finances it through increased employer or individual payments as well as through tax increases would affect the state's economy. The preliminary results shown in Table 4 suggest that the economic impacts will be mildly positive under either an individual mandate or a combined employer/individual mandate.

Table 4. Economic Impact of Massachusetts Health Reform Options

Individual Mandate

	Baseline Projection	Increase spending on medical care by $1.4B		Increase spending on medical care by $1.4B financed by increased personal income taxes		Increase spending on medical care by $1.4B financed by an increase in sales (.75) and excise (.25) taxes	
	2005	*Difference*	*% Change*	*Difference*	*% Change*	*Difference*	*% Change*
Total Employment (Thousands)	4,100.0	23.7	0.58%	7.3	0.18%	7.9	0.19%
Private Non-Farm Employment (Thousands)	3,635.0	23.5	0.65%	7.5	0.21%	8.1	0.22%
Total State GDP (Billion $)	$420.7	$1.8	0.42%	$0.4	0.10%	$0.4	0.11%
Personal Income (Billion $)	$278.5	$0.9	0.33%	$0.3	0.12%	$0.4	0.13%

Note: The increase in spending is net of the $1.3 billion in the federal waiver agreement and includes the net increase in spending by employers and individuals. It also includes an additional $400 million for safety net providers.

Employer Mandate

	Baseline Projection	Increase spending on medical care by $1.9B		Increase spending on medical care by $1.9B financed by increased personal income taxes		Increase spending on medical care by $1.9B financed by an increase in sales (.75) and excise (.25) taxes	
	2005	*Difference*	*% Change*	*Difference*	*% Change*	*Difference*	*% Change*
Total Employment (Thousands)	4,100.0	31.1	0.76%	7.9	0.19%	8.6	0.21%
Private Non-Farm Employment (Thousands)	3,635.0	30.8	0.85%	8.2	0.23%	8.9	0.25%
Total State GDP (Billion $)	$420.7	$2.3	0.55%	$0.4	0.09%	$0.4	0.10%
Personal Income (Billion $)	$278.5	$1.2	0.44%	$0.4	0.13%	$0.4	0.14%

Note: The increase in spending is net of the $1.3 billion in the federal waiver agreement and includes the net increase in spending by employers and individuals. It also includes an additional $400 million for safety net providers.

Table 4 shows 2005 employment, state gross domestic product (GDP) and personal income, followed by the change in each resulting from an increase in health care spending alone as well as the increase in health spending together with increases in taxes (both income taxes and a combination of sales and excise taxes) to finance the greater government health spending. The simulation also includes the increase (or decrease) in employer and individual spending under either an individual mandate or an employer/individual mandate. We also add another $400 million for provider rate increases in MassHealth and for residual safety net costs. This is not a recommendation, but is included to recognize that some additional spending will likely be necessary and should be part of the economic impact analysis. Netting out the $1.3 billion in the waiver renewal results in new payments for health care by government, as well as by employers and individuals of $1.4 billion for the individual mandate and $1.9 billion for the employer/individual mandate.

Table 4 shows that increased health care spending would increase employment, state GDP and personal incomes by a small amount—by less than one percent. The tax increases that could be implemented to finance the system would, by themselves, have a negative impact on employment, state gross domestic product and disposable incomes. But this negative effect is more than offset by the positive effects from increased healthcare spending. Stated differently, increased healthcare spending has a greater positive effect on employment, state GDP, and personal incomes than the negative impact of increased taxes, regardless of whether financing occurs through an increase in income taxes or a combination of higher sales and excise taxes. One reason for the mildly positive economic impacts is that new health spending will largely stay in the state, while more of the foregone consumption due to higher taxes would be goods or services that are purchased out of state.

Additional Issues

There are several conclusions and implications from the work presented in this paper. First, it is not possible to have a significant reduction in the number of uninsured without any new spending. The number of uninsured is too high (532,000) and the cost of health care too great to achieve universal coverage without putting more resources into the health system. The new spending that would be needed, however, is actually quite small in comparison to the state's economy and current health spending.

Second, it also not possible to have an equitable financing system without also providing some help to low-income families who currently have coverage. As noted, many low-income families as well as many small firms currently provide coverage at great cost to themselves. We believe it is important that any system treat these families and firms at least as well as those who currently do not purchase coverage. This shifts some costs to the government that are now being borne by employers and families, but doing so assures that the system will meet a high standard of fairness.

Third, we believe that the very low-income population is best served through an expansion of MassHealth and SCHIP. We recognize that this means a larger government program but it also means that federal revenues would help finance the

expansion. These expanded programs could be coupled with higher provider payment rates to assure appropriate levels of access to care for beneficiaries.

Fourth, safety net hospitals that now receive large amounts of direct federal and state dollars would lose most of their current direct support. These institutions would still need some direct allocations because of the need to serve the small number of people who stay outside the new system. But much of the loss of direct support should be offset by the fact that there will be more insured patients, most of whom would likely rely on the same plans and providers as they do today. However, because those who receive an insurance card under the new system could choose from a broader array of plans and providers than they can today, safety net hospitals may lose some of their current revenue base.

Fifth, the expansion of coverage will mean that private insurers will have more covered lives, both inside and outside the purchasing pool. But the structure of the pool and managed competition could mean lower margins per covered life.

Finally, it is essential that strong cost containment provisions be incorporated into the system to assure continued affordability. Allowing the purchasing pool to produce a competitive marketplace for insurers is a critical component of such an approach. High deductible plans remaining accessible outside of the pool may help as well. Further use of disease management techniques may also lead to some savings in the future. One implication of successful cost containment is that it will reduce the growth in provider revenues over time. Thus while providers will benefit from having more insured lives to serve, successful cost containment policies should eventually lower revenues per person served. More extensive discussion of cost containment provisions will be included in a later paper to be released this fall.

There are many competing reform objectives for the panoply of stakeholders in the Massachusetts system. Covering the uninsured and guaranteeing future coverage for all residents brings significant health, economic, and social benefits. The desire to achieve these benefits while keeping government spending relatively controlled, requires strong cost-containment. Control of cost growth, an issue that will impact all Massachusetts residents with or without system-wide reform, can only be achieved by moderating growth in provider payments and/or controlling individual use of services over time. The simulation results presented here demonstrate that the cost to the Commonwealth of Massachusetts to insure all of its residents is not large. However, a broad system reform will still require some very difficult choices and tradeoffs.

About the Authors

Linda J. Blumberg is an economist and Senior Research Associate at The Urban Institute. Her research focuses on issues related to private health insurance and health care financing. She is the principal investigator in the development of the Health Insurance Reform Simulation Model (HIRSM), an individual and employer level model which can be used to simulate the effects of reforms affecting private and public insurance. Her research includes estimating the coverage and risk pool impacts of tax credit proposals, estimating price elasticities of employers offering health insurance and of workers taking up employer offers, the effect of the Medicaid expansions on private insurance coverage of children, and a series of analyses of the working uninsured. From August 1993 through October 1994 she served as Health Policy Advisor to the Clinton Administration.

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Lisa Clemans-Cope joined the Urban Institute in 2004 as a Research Associate in the Health Policy Center. She is currently involved in developing the Health Insurance Reform Simulation Model (HIRSM) for simulation and evaluation of state and national reform proposals. She is also assisting in research investigating how public policies affect access to health care, use of services, and enrollment in health insurance for vulnerable populations. Recently, Dr. Clemans-Cope has been involved with the calibration and use of the econometric models in Regional Economic Models Inc. (REMI), for simulating regional economic impacts of changes in health policy. In 2003, she completed a Ph.D. in the Health Economics program at the Johns Hopkins Bloomberg School of Public Health.

Matthew Buettgens has been with the Urban Institute since 1995. In addition to the Health Insurance Reform Simulation Model (HIRSM), an individual and employer level model which can be used to simulate the effects of reforms affecting private and public insurance, he has worked extensively with other projects such as the Transfer Income Model (TRIM). He is currently in the doctoral program in mathematics at the State University of New York at Buffalo.

Fredric Blavin is a Research Assistant at the Urban Institute. His research focuses on the analysis of the private health insurance market. Mr. Blavin has worked extensively on the Urban Institute's Health Insurance Reform Simulation Model (HIRSM), a micro-simulation model used to simulate the impact of public policy reforms on the private health insurance market. Recently he has worked on regional economic simulations of changes in health policy using the models developed by the Regional Economic Models Inc. (REMI). Mr. Blavin received his B.A. in Economics and Political Science at the University of Michigan in 2003.

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