# THE MILBANK QUARTERLY A MULTIDISCIPLINARY JOURNAL OF POPULATION HEALTH AND HEALTH POLICY

## Health Care Reform in Massachusetts: Implementation of Coverage Expansions and a Health Insurance Mandate

### MICHAEL T. DOONAN and KATHARINE R. TULL

Brandeis University

**Context:** Much can be learned from Massachusetts's experience implementing health insurance coverage expansions and an individual health insurance mandate. While achieving political consensus on reform is difficult, implementation can be equally or even more challenging.

Methods: The data in this article are based on a case study of Massachusetts, including interviews with key stakeholders, state government, and Commonwealth Health Insurance Connector Authority officials during the first three years of the program and a detailed analysis of primary and secondary documents.

**Findings:** Coverage expansion and an individual mandate led Massachusetts to define affordability standards, establish a minimum level of insurance coverage, adopt insurance market reforms, and institute incentives and penalties to encourage coverage. Implementation entailed trade-offs between the comprehensiveness of benefits and premium costs, the subsidy levels and affordability, and among the level of mandate penalties, public support, and coverage gains.

**Conclusions:** National lessons from the Massachusetts experience come not only from the specific decisions made but also from the process of decision making, the need to keep stakeholders engaged, the relationship of decisions to existing programs and regulations, and the interactions among program components.

Keywords: Coverage expansion, health reform, state health care reform, universal coverage, individual mandate.

Address correspondence to: Michael Doonan, Heller School for Social Policy and Management, Brandeis University, 415 South St., Waltham, MA 02454-9110 (email: doonan@brandeis.edu).

The Milbank Quarterly, Vol. 88, No. 1, 2010 (pp. 54–80) © 2010 Milbank Memorial Fund. Published by Wiley Periodicals Inc.

ITH A SINGLE-PAYER OPTION OFF THE TABLE, AS IT WAS in the 2009 federal health reform debate, requirements, incentives, and regulations now are the tools available to reformers who seek universal health insurance coverage. The experience of the 2006 health reform in Massachusetts suggests that in combination, these tools can be helpful. Data show that only 2.6 percent of the state's population was uninsured in 2008 (Long, Cook, and Stockley 2008). This article describes the substance and the politics of the steps that were taken to achieve this level of coverage.

Massachusetts had several advantages as it approached reform, including a relatively high percentage of the population that already had coverage, an uncompensated care pool that could be converted to dollars for coverage, and the ability of a Republican governor and Democratic legislature to work constructively together. Even so, seeking coverage expansions in a multipayer context (individual and employer-based coverage plus public programs) posed a set of policymaking challenges. Who would be required to obtain coverage? What coverage would be required? How would mandates for individuals to obtain coverage or employers to provide coverage be enforced? And how could the required coverage be made affordable?

First, we provide an overview of health reform in Massachusetts and background on the efforts that led to its implementation. Next, we systematically analyze how affordability was defined, how minimum insurance benefits packages were established, how insurance market regulations were changed, and how the mandate has been enforced. This is followed by an assessment of current health insurance coverage and broader policy lessons from the Massachusetts experience.

#### Overview of Massachusetts Health Reform

Massachusetts launched its health reform initiative in 2006 based on the principle of shared responsibility among individuals, government, and business. Building on the existing system, the state expanded its Medicaid program, created a new subsidized program through a health insurance exchange, instituted insurance market reforms to make insurance more available and affordable, and required employers not offering insurance to contribute a modest amount of money to help finance government subsidies. The state was also the first to require individuals who could afford it to purchase health insurance. Early projections from the Urban Institute, which was contracted by local stakeholders to provide research informing the reform debate, indicated that coverage expansion reforms would not reach anything close to universal coverage without an individual mandate (Holahan et al. 2005). Because it interacts with the coverage expansion tools, the mandate must be understood in reference to the broader reforms, subsidies, and insurance regulations.

Massachusetts broadened eligibility for its Medicaid program, MassHealth, by extending coverage to children in families with income up to 300 percent of the federal poverty level (FPL). The state created Commonwealth Care, which provides access to subsidized health insurance for eligible people with a family income below 300 percent of FPL. People with a family income below 150 percent FPL and no other source of insurance have the option of choosing a plan with no monthly premium and low cost sharing. The premiums of eligible people with a family income between 150 and 300 percent FPL are subsidized according to a sliding scale. A third program, Commonwealth Choice, makes a range of unsubsidized insurance plans available to individuals and small businesses (fifty or fewer employees).

Massachusetts also expanded its Insurance Partnership Program, which provides subsidies and incentives for employers to provide, and for employees to enroll in, employer-sponsored insurance. Under this program, the government subsidizes insurance costs for employees who would otherwise be eligible (because of income level) for government-subsidized programs. Small businesses are eligible for up to \$1,000 in support per qualified employee (less than 300 percent FPL)<sup>1</sup> (Massachusetts Division of Health Care Finance and Policy 2009). The government pays the portion of qualified employees' premiums equal to what they would pay if they were in a subsidized government plan (Massachusetts Division of Health Care Finance and Policy 2009). Insurance reforms were also enacted in the individual and small-group (fifty or fewer employees) markets, which are described later. Employers who do not provide health insurance to their employees must pay a "fair share" assessment to the state of up to \$295 per employee per year. Employers can avoid this penalty if they pay at least 33 percent of their employees' health insurance premiums and a minimum of 25 percent of employees enroll in employer-sponsored coverage. This employer assessment raises less than \$20 million a year (Massachusetts Taxpayers Foundation 2009). As we discuss later, however, health reform and the individual mandate led many individuals who previously declined employer insurance coverage to sign up for health insurance at work. This additional coverage has cost employers who do offer health insurance an estimated \$750 million a year in new costs (Massachusetts Taxpayers Foundation 2009).

Massachusetts had several major advantages that made a mandate more feasible than it would be in most other states: a relatively low number of uninsured persons, broad Medicaid eligibility, a high percentage of employer-sponsored coverage, and relatively high per capita income. Massachusetts also had an uncompensated care pool (UCP), created in 1985, to help compensate hospitals for otherwise unpaid care. Compensation for people without insurance who are eligible for the program based on family income and payments is made directly to hospitals and community health centers<sup>2</sup> (Seifert 2002). This program made tangible the expenses of the uninsured and provided a source of revenue to help fund subsidies under the Massachusetts reform, which was seen as critical to a viable mandate. Reform in general was facilitated by the fact that Massachusetts was threatened with losing \$385 million annually in federal funds for the pool under an 1115 Medicaid waiver. To maintain these funds, the state needed to shift money from the pool, which provided funding directly to hospitals, and to use this money to provide broader insurance coverage to individuals (Massachusetts Medicaid Policy Institute 2005). Massachusetts also had a strong history of health care coverage expansion (McDonough et al. 2006). Finally, the political climate enabled reform with bipartisan efforts from Republican Governor Mitt Romney and a majority Democratic legislature. Conservatives argued that the uninsured do not go without health care but often receive it in emergency situations, leading to costly uncompensated care that raises premiums for those with insurance. Some liberals and consumer organizations initially opposed the mandate, contending that it was unfair to require low- to moderate-income families to spend large sums on health care coverage, but eventually supported it as a means to achieve near universal coverage and a bargaining chip for higher subsidies.

Massachusetts also established the Commonwealth Health Insurance Connector Authority (the Connector) to operate as an insurancepurchasing exchange. The Connector is led by the Connector Board, which was created to address crucial aspects of health reform implementation. According to the statute, the Connector Board is composed of representatives of various interests, including consumers, business, and labor. The board is charged with defining affordability, negotiating premium rates with health plans, developing consumers' cost-sharing provisions, and defining the benefit package (minimum creditable coverage, or MCC) that would satisfy the mandate. Understanding how the Connector Board grappled with decisions and the data it used in doing so highlights key implementation lessons associated with coverage expansion and an individual mandate.

#### Defining Affordability

A major part of implementing coverage expansions and an individual mandate was defining affordability. While the new law stated that the individual mandate applied only if "affordable," the legislature left the task of defining this term to the Connector Board. The board's decision would determine to whom the mandate would apply and who would be exempt. The goal was to encourage as many people as possible to obtain insurance, without penalizing those who could not afford insurance. But for various reasons, no method was sufficient to model affordability for all residents. In making its decision about affordability, the Connector Board sought input from affected groups, including consumers, payers, and providers. It relied on a number of data sources and negotiated with the interest groups to develop an affordability schedule based on family income.<sup>3</sup>

Consumer groups, economists, and policy analysts suggested different methodologies for determining affordability, influencing what was ultimately a political decision. An economist on the Connector Board, Jonathan Gruber of the Massachusetts Institute of Technology, proposed basing affordability on families' purchasing decisions in the insurance market. There were two models for doing so. One examines family expenditures to determine what percentage of income remains after purchasing "necessities." Here, most families with more than 100 percent FPL were found to have some funds remaining that could be used for health insurance (Gruber 2007). The second model considers enrollment decisions, assuming that if a majority of families at a given income level choose to purchase insurance at a particular price, the product is essentially affordable at that income level (Gruber 2007). Findings from the analysis indicated that 60 percent of families with an income below 100 percent FPL enroll in insurance when it is offered by an employer (Gruber 2007). Another approach, suggested in the Massachusetts health reform statute, based affordability on spending limits in existing public health programs, such as the Children's Health Insurance Program (CHIP) and eligibility for the state's Uncompensated Care Pool (Barber and Miller 2007). The Greater Boston Interfaith Organization (GBIO) devised still another approach based on an analysis of monthly expenses for nonrandomly selected individuals and families with incomes from 0 to 800 percent FPL (Greater Boston Interfaith Organization 2007). The GBIO's survey found that more than half those interviewed said they could not afford the out-of-pocket costs associated with the planned Commonwealth Care insurance packages (Greater Boston Interfaith Organization 2007). A model developed by the Urban Institute for the Blue Cross Blue Shield of Massachusetts Foundation examined the amount of money that people actually spend on health care and insurance (Holahan, Hadley, and Blumberg 2006). The Urban Institute recommended using spending patterns to set an affordability standard. Specifically, people with incomes above 300 percent FPL would be the initial benchmark for creating affordability standards because people with lower incomes could not afford unsubsidized coverage as established in the health reform legislation (Holahan, Hadley, and Blumberg 2006). Furthermore, the institute contended that median, rather than mean, health care spending in an income stratum was the appropriate affordability benchmark because it was affected less by extreme circumstances or preferences (Holahan, Hadley, and Blumberg 2006).

With insight from these analyses, the advocacy organization Community Catalyst developed a framework for the Connector Board to consider in deciding affordability standards. The principles of the framework were that (1) any affordability schedule should be a conservative measure and should utilize a progressive scale as income increased; (2) people with very low incomes could not afford health care; (3) the "upper bound" of affordability should be set at about 8.5 percent of income; (4) a progressive scale of affordability was needed; and (5) what was affordable might not be available (Barber and Miller 2007). These principles demonstrate the range of factors that had to be evaluated. They also highlight the range of issues addressed by the Connector Board in attempting to set a fair framework for measuring affordability in order to implement the mandate.

Taking stakeholder perspectives into account, a number of principles were used in establishing affordability standards for the first year that the mandate was in effect. The Connector Board evaluated affordability

in the context of "universal obligation" and promotion of the sharedresponsibility concept on which health reform was based (Board of the Commonwealth Health Insurance Connector Authority April 2007). This involved making coverage affordable and financially appealing to both unhealthy and healthy residents with incomes at or below 300 percent FPL; moving significant numbers of people from the state's uncompensated care pool (UCP) to Commonwealth Care; maximizing the budget of Commonwealth Care to cover as many people as possible; and avoiding crowd-out, or the movement of people with private insurance to publicly subsidized programs (Commonwealth Health Insurance Connector Authority 2006). To achieve these objectives, the Connector Board analyzed the population targeted by Commonwealth Care, with a particular focus on people eligible for the UCP, the first large segment of the population eligible for Commonwealth Care. Premiums and copayments were added for people using the UCP so that they would have cost-sharing requirements similar to those for people receiving coverage through Commonwealth Care. The state did not want the UCP to be more attractive than obtaining comprehensive insurance through Commonwealth Care (Commonwealth Health Insurance Connector Authority 2006). The Connector Board examined the proportion of the insured and uninsured people by income level, take-up rates among the uninsured when offered insurance by employers, and the amount paid in premiums for group coverage by employees with incomes between 200 percent and 400 percent FPL (Commonwealth Health Insurance Connector Authority 2006). Issues of equity and the potential for crowdout were especially relevant to those with employer-sponsored coverage and incomes between 200 and 400 percent FPL (Commonwealth Health Insurance Connector Authority 2006). The demographics of the uninsured and the cost of living in Massachusetts relative to those of other states with programs similar to Commonwealth Care also were considered (Commonwealth Health Insurance Connector Authority 2006).

Ultimately, the Connector Board decided that the affordability schedule for the 2007 tax year would be based on income levels, having determined that the details of household spending were too complicated to use in devising general affordability guidelines (Board of the Commonwealth Health Insurance Connector Authority April 2007). Specific household spending and circumstances could, however, be considered in the appeals process for waiving the mandate (Board of the Commonwealth Health Insurance Connector Authority April 2007). For example, a family could have significant income but because of high mortgage payments or rent or other household expenses still not have enough money available for health insurance, at least in the short term. In these instances, individuals and families could appeal to waive the mandate and its penalties based on specific circumstances. The Connector Board recognized that determining affordability would be based on unknowable and changing information at the beginning of the process and therefore recommended reexamining affordability designations annually (Commonwealth Health Insurance Connector Authority 2006). The critical component of the process was general consensus across consumer and interest-group representatives in developing the standard, creation of an appeals process, and recognition of the need to continually monitor issues of affordability. This gave legitimacy to the affordability schedule.

Separate affordability schedules were set for individuals, couples, and families, which included parent(s) and children. Table 1 shows the resulting affordability standard for families. As income increases, people are required to spend a larger portion of their income on health insurance. This ranges from zero percent responsibility for people below the poverty level to full responsibility for people with incomes more than 500 percent of the poverty level (\$114,401 for a family of four in 2009). The Connector Board took several factors into account in revising the affordability schedule between 2007 and 2008: the 2007 median income in Massachusetts, January 2008's premiums for the least

IMDLE I	TABLE	1	
---------	-------	---	--

Cost of Health Insurance Premium Considered Affordable by Family Income 2009

Family Income	Affordable Monthly Premium	Percent Family Income at Midrange (%)
\$0-\$27,468	\$O	0
\$27,469-\$36,624	\$78	2.9
\$36,625-\$45,780	\$154	4.5
\$45,781-\$54,936	\$232	5.5
\$54,937-\$72,800	\$364	6.8
\$72,801-\$93,600	\$569	8.2
\$93,601-\$114,400	\$820	9.5
\$114,401+	Always affordable	

*Note:* Family includes parent(s) and children. Separate affordability standards are constructed for individuals and couples.

Source: Commonwealth Health Insurance Connector Authority 2009c.

expensive health plans available through the Connector, FPL guidelines, expected premium trends for Commonwealth Choice plans, the results of Massachusetts Division of Health Care Finance and Policy employer and household surveys, and Commonwealth Care enrollee contributions by income level (Board of the Commonwealth Health Insurance Connector Authority January 2008; Kingsdale 2008). The 2008 affordability schedule was developed through public and private debate, including opportunities for public comment between the time the affordability schedule was proposed and when the Connector Board voted on it (Board of the Commonwealth Health Insurance Connector Authority January 2008). The standard for 2008 made only minimal changes to the 2007 affordability schedule (Katz 2008). Such struggles by the Connector Board to define affordable health insurance underscore the crux of the implementation decisions forced by the mandate. An annual review of the affordability schedule allows for a continuous dialogue on balancing the objectives.

The premium responsibilities in the Commonwealth care program were considered affordable for people with incomes below 300 percent FPL. People with access to employer-sponsored insurance or other public insurance programs (MassHealth, Medicare) are not eligible for Commonwealth Care, regardless of their income. Therefore, people with a family income below 150 percent FPL who are not eligible for Commonwealth Care are required to have insurance only if it is free. Those with incomes between 150 and 300 percent FPL are required to have coverage only if their portion of the premium is equal to or less than that required under Commonwealth Care.

#### Defining Insurance

An individual mandate also requires defining what constitutes insurance for the purpose of compliance. Once again, the legislature placed the important decision in the hands of the Connector Board. This decision required significant trade-offs between the cost of health insurance and the comprehensiveness of the benefits. More generous benefits mean more expensive insurance plans and greater costs for individuals, employers, and government subsidies. The higher the subsidies are, the greater the cost to the state will be, meaning more revenue must be collected by the state and more potential taxpayer resistance. Conversely, the less comprehensive the coverage is, the lower the value of the insurance will be that people are required to purchase. For example, the newly insured may not see the value of paying monthly premiums for a high-deductible plan for which they face high out-of-pocket costs. Higher copayments and deductibles keep premium costs down but also may create barriers to care. Less comprehensive plans also risk leaving people underinsured and subject to medical debt. The trade-off for greater first-dollar coverage is higher premiums.

Massachusetts struggled to find a balance between costs and benefit levels in establishing the criteria for minimum creditable coverage (MCC), a base level of coverage below which insurance products fail to fulfill the individual mandate's requirements (Board of the Commonwealth Health Insurance Connector Authority January 2007a). In setting this standard, the Connector Board evaluated existing benefit packages across Massachusetts and nationwide (Board of the Commonwealth Health Insurance Connector Authority January 2007a) to develop cost targets for deductibles, premiums, cost sharing, and corresponding benefit levels (Board of the Commonwealth Health Insurance Connector Authority January 2007b). The Connector Board also grappled with how to handle existing plans that failed to meet the new MCC criteria, in order to facilitate the transition to the new requirements and phase in the compliance period (Board of the Commonwealth Health Insurance Connector Authority March 2007). Caps on lifetime benefits, for example, were included in an estimated 300,000 existing plans and were a critical concern. Moreover, the Connector Board extensively debated whether or not to require prescription drug coverage as part of the MCC.

The Connector Board's recommendations for the MCC for the first year of health reform reflected an effort to balance affordability and the comprehensiveness of benefits with attention to what was being provided in the marketplace. The most restrictive MCC regulations did not take effect until January 2009, which was a decision made by the Connector Board to give employers sufficient time to adjust to the new requirements (Board of the Commonwealth Health Insurance Connector Authority March 2007). The Connector Board recommended that MCC include preventive and primary care, emergency services, hospitalization benefits, ambulatory patient services, mental health services, and prescription drug coverage (Board of the Commonwealth Health Insurance Products meeting the MCC cannot have annual or per-sickness benefit maximums, although lifetime-benefit caps were ultimately permitted because they are included in many existing employer-sponsored insurance plans (Meckler 2007). The MCC also limits annual deductibles to \$2,000 for individuals and \$4,000 for families and establishes separate prescription coverage capped at \$250 for individuals and \$500 for families (Board of the Commonwealth Health Insurance Connector Authority March 2007; McDonough et al. 2008). This means, for example, that a person or family with a health insurance plan that includes a \$10,000 deductible does not meet the requirements of the individual mandate and may be subject to the penalties described later.

Guidelines for prescription drug coverage were established as part of the MCC regulations for the second year of reform, beginning in January 2009 (Carey 2007). Before the passage and implementation of health reform, approximately 160,000 Massachusetts residents had health insurance that lacked prescription drug coverage (Carey 2007). Recognizing the costs associated with drug coverage, the Connector Board pursued the development of drug benefits priced at approximately 5 percent of premiums (Board of the Commonwealth Health Insurance Connector Authority March 2007). The Connector Board weighed the cost of pharmaceutical benefits that would be added to insurance premiums, estimated at 15 to 18 percent of total premiums, against tools to reduce these costs through the design of the drug benefit (Carey 2007). In particular, the Connector Board evaluated the impact of pharmacy benefit management, formulary design, and cost sharing on the amount of the premium and found that cost sharing would have the greatest impact on minimizing costs (Carey 2007). The Connector Board sought to design requirements for drug benefits that would make cost sharing reasonable for consumers at each point that they faced cost sharing: through premiums, deductibles, and copays. Each aspect of defining the MCC required compromise, but the Connector Board applied principles of shared responsibility and balancing affordability with sufficiently comprehensive benefits to design coverage requirements that provided value for consumers subject to the insurance coverage mandate.

In the end, the Connector Board required a fairly generous benefits package with significant restrictions on high-deductible plans. Employers offering insurance have made adjustments to comply with the MCC (Massachusetts Taxpayers Foundation 2009). Setting the minimum standard at this level was possible in Massachusetts in part because the insurance market is dominated by not-for-profit health plans that have traditionally offered a full range of benefits. A commitment to comprehensive insurance may also be reflected in the generally higher health care costs in Massachusetts compared with those of the nation as a whole. States starting with a norm of less generous benefits and/or a significant market share for high-deductible plans will have a more difficult time setting a base level of services as high as Massachusetts's MCC standards.

#### Insurance Regulation

Insurance regulations are a major component of Massachusetts's reforms and expand on the existing regulation of the small group and individual insurance markets. In 1988, Massachusetts was the first state to require college students to have health insurance and has since been joined by New Jersey in this requirement (Maryland Health Care Commission 2009). Massachusetts also was one of the first states to pass rate regulations for the small-group market and is considered one of a handful of states with "tight" controls (Curtis et al. 1999). In 1991, the state prohibited health plans and insurance companies from using health status to set rates and restricted variations in rates based on industry, age, and group size to a ratio of two to one or fewer (Curtis et al. 1999). Later, the state prohibited rate variations based on gender. In the individual market, Blue Cross Blue Shield was traditionally the insurer of last resort. But even though the company did not deny coverage, it tried to protect itself from adverse risk, or people signing up for insurance only when they needed services, by including a 240-day waiting period for nonemergency care and the ability to exclude preexisting conditions for up to three years (Kirk 2000). The Non-Group Health Insurance Act of 1996 instituted "modified-community rating" in the individual market so that premiums could vary based on only age and geography.<sup>4</sup> Rates could vary by age up to a ratio of 2 to 1 and by geographic variation at a rate of 1.5 to 1 (Community Catalyst 2009). This reform also standardized plan offerings in the individual market, and the state reviewed plans and insurers whose costs were two standard deviations above state averages in the broader insurance market. The cost of the plans offered in the individual market, however, ended up being more expensive than that before reform, especially for younger people, and overall enrollment and the success of these reforms were limited (Kirk 2000).

The nature of the insurance risk pool shifts significantly with a coverage mandate. The challenge with guaranteed-issue and community or modified-community rating without a mandate is that it reduces the incentive for healthy people not covered by employer-sponsored insurance to enroll (Kirk 2000). Furthermore, while modified-community rating decreases the cost for people with the greatest risk, it increases costs for people with a low risk. Research shows that state reforms in these areas have led to increases in the number of uninsured (Pauly and Herring 2007). Nationally, only five states (Maine, Massachusetts, New Jersey, New York, and Vermont) have a guaranteed-issue rating, and just seven states (Maine, Massachusetts, New Jersey, New York, Oregon, Vermont, and Washington) have a modified-community rating in the individual market (Barber and Miller 2008). Other states have high-risk pools to separate out people with high costs, enabling them to purchase insurance that would otherwise be unavailable in the market. While most states have a modified-community rating in the small-group market, premiums still may be unaffordable for many, and there is great variation among the states in the cost of insurance (Barber and Miller 2008).

Massachusetts's reform in 2006 merged the individual and smallgroup insurance markets. Projections suggested this would lead to a rate reduction of 15 percent in the nongroup or individual market and an increase of 1 to 1.5 percent in the small-group market (Gorman Actuarial LLC, DeWeese Consulting Inc., and Hinckley, Allen and Tringale LP 2006). Nongroup rate reductions were expected to vary by insurance carrier, with new options available in the merged market for as much as a 50 percent discount. Conversely, increases in some small-group insurance rates were expected to be as high as 4 percent (Gorman Actuarial LLC, DeWeese Consulting Inc., and Hinckley, Allen and Tringale LP 2006). Enrollment in the individual or nongroup market grew considerably after the reform was implemented, covering an additional 41,000 people in 2009, representing 10 percent of the newly covered (Commonwealth Health Insurance Connector Authority 2009b). Enrollment grew both inside and outside the Connector.

Health insurance in Massachusetts has actually become considerably less expensive in the nongroup or individual market and more expensive in the small-group market. Using data from America's Health Insurance Plans (AHIP), Jonathan Gruber found that the average nongroup health insurance premium in the state fell from \$8,537 in 2006 to \$5,143 in 2009, a 40 percent reduction during a period in which premiums for similar plans rose by 14 percent nationally (Gruber 2009). He attributes these gains directly to the merged markets and individual mandate. Since reform, premiums in the small-group market have continued the double-digit rate increases before reform, and it is difficult to distinguish general price increases from what can be attributed to the merger (Office of the Inspector General 2007). The state conducted hearings to help disaggregate the reasons for these premium increases.

Because young adults are more likely to forgo the purchase of health insurance, Massachusetts reform allows more young adults to stay on their parents' insurance and creates a new, young-adult insurance product with fewer benefits at a lower cost. Insurance companies are required to allow young adults to remain covered on a parent's insurance plan for up to two years after the loss of dependent status or until their twentysixth birthday, whichever comes first. However, this does not apply to companies that self-insure because they are exempt from state regulation under the Employee Retirement Income Security Act (ERISA). In 2008, nineteen states made some accommodation to allow young adults to remain on a parent's plan, but it will take national legislation to make this apply universally even within these states (Holahan and Kenney 2008). The Connector also offers a young-adult plan (YAP) for those between the ages of nineteen and twenty-six who are not eligible for subsidized coverage. This is offered through private insurers with premiums that begin at slightly more than \$130 per month. Coverage is less comprehensive than required outside this age group, and plans may exclude prescription drug coverage. Plans include deductibles up to \$2,000 and place a cap on total annual costs of as little as \$50,000 (Commonwealth Health Insurance Connector Authority 2009a).

There are advantages and disadvantages to providing a separate, less comprehensive plan for young adults. Nationally, people in this age group have the highest rate of being uninsured (31 percent compared with 18 percent of the entire nonelderly population) (Schwartz and Schwartz 2008). This age group is also statistically healthier and less likely to believe they need health insurance (Holahan and Kenney 2008). Massachusetts leaned toward providing cheaper, less comprehensive benefits as a way to get this group accustomed to purchasing health insurance. While some consumer advocates opposed these limited benefits, particularly caps on annual expenditures because they significantly reduce insurance protection, there was fairly widespread support in Massachusetts for this approach (Kaiser Daily Health Policy Report 2007).

Massachusetts reform also requires businesses with more than ten employees to establish Section 125 cafeteria plans. (Section 125 plans allow employees to choose, over wages, a range of benefits that do not count as taxable income.) Following this change, even if one's employer does not offer health insurance, an employee can have insurance premiums deducted from his or her wages on a pretax basis, thereby avoiding federal and state payroll taxes. This resulted in some savings for employers as well, because they no longer have to pay their share of payroll taxes on employee-deducted premium payments, which were no longer considered wages. While this entailed some administrative costs for business, these reforms were largely supported (Gabel 2008). Compliance, while not universal, is growing. Between 2007 and 2008, Section 125 plans became increasingly available in all firms, even those not subject to the mandate. Section 125 offerings in firms with three to ten employees increased from 14 to 22 percent (although this was not required for this group); firms with eleven to fifty employees increased from 54 to 72 percent; and firms with more than fifty-one employees increased from 81 to 93 percent (Gabel 2008). Business support for reform remained strong, with just 10 percent of firms reporting that they were "very concerned" about the administrative complexity of this requirement (Gabel 2008).

The coverage expansions and implementation of the individual mandate in Massachusetts was helped by existing insurance market reforms, including the mandate for covering college students and guaranteedissue and modified-community rating in the small-group and individual markets. Building on these reforms, the state merged the small-group and individual markets, with significant success in the individual market and uncertainty in the small-group market. Furthermore, allowing young adults to stay on their parents' insurance plans as well as a cheaper, scaled-down "starter" insurance option for young adults made insurance more accessible for this hard-to-insure population. Section 125 plans made insurance premiums pretax, thus offering considerable savings and further encouraging enrollment.

#### Mandate Enforcement

To enforce the mandate, Massachusetts instituted sanctions for noncompliance, but it also offers a process for exemptions and appeals. In Massachusetts, penalties are enforced through the tax code by the Department of Revenue (DOR). Taxpayers are required to include a Schedule HC indicating their health insurance status with their annual tax returns. The penalty for noncompliance with the mandate in the first year was loss of the state tax's individual deduction, a fine equivalent to \$212. By statue, the second-year penalty was half the cost of an available low-cost plan, but in practice this fine turned out to be significantly less than half the cost of insurance available to most people. While premium costs vary by age, geography, and availability of employer coverage, the Connector Board instituted a more uniform penalty based on the least expensive coverage options available to that individual. This was driven by recognition that it would be inequitable, for example, to penalize older people more because their premiums are higher. After a ninety-day grace period, people are penalized for each month they were not insured in the previous tax year. There are separate penalties for young adults aged twenty-six and younger and for those over twenty-six. The penalty in 2008 for an adult twenty-six years or younger was \$56 a month, or \$672 per year. For an adult over twenty-six years, the penalty was \$76 a month, or \$912 a year. Certificates of exemption can be obtained for reasons of hardship through an appeals process (Commonwealth Health Insurance Connector Authority 2009b).

Compliance with the requirement to have insurance and report it through tax filings has been strong. In December 2007, 4.96 million Massachusetts residents were insured, an increase of 336,000 since June 2006 (Massachusetts Division of Health Care Finance and Policy 2008). The DOR reported that of the 3.93 million adults subject to the mandate who filed health insurance information with their 2007 tax returns, the most recent year for which data are available, 95 percent had health coverage (Massachusetts Department of Revenue 2008). Just 1.4 percent of those filing taxes failed to comply with the health insurance taxreporting requirement (Massachusetts Department of Revenue 2008). Just under 3 percent of filers, or 118,000 people, did not obtain health coverage, although it was considered affordable for them (Massachusetts Department of Revenue 2008). According to DOR data, less than 2 percent of those filing taxes, or about 76,000 people, could not afford insurance, according to the affordability guidelines, and therefore remained uninsured but were not subject to the tax penalty (Massachusetts Department of Revenue 2008).

In the appeals process to exempt from the mandate those people who could demonstrate that health insurance was still unaffordable, of the 118,000 people who did not obtain insurance and were deemed able to afford coverage, 51,000 had income levels and other deductions that caused the loss of the personal income tax exemption to have no effect (Katz 2009). Of the remaining 67,000 subjected to the penalty, 2,460 asked for exemptions, of which 72 percent were granted (Katz 2009). Most of the reviews were conducted by paper and telephone. The higher penalties for the second year have raised both the stakes and the likelihood of a greater number of appeals. The Connector has indicated that it will be flexible and nonpunitive in the appeals process, with the ultimate goal being insurance coverage by affordable health care plans. Detailed data on appeals and waivers granted are not yet available for analysis. A recent survey found that one in five persons remaining uninsured in Massachusetts reported paying the penalty for being uninsured (Long and Stockley 2009).

#### Coverage Gains

Since implementing health reform in Massachusetts, insurance coverage has increased dramatically. It is estimated that coverage expansion, combined with the mandate and robust outreach and enrollment processes, cut in half the number of uninsured working age adults in the first year, from 14 percent to 7 percent<sup>5</sup> (Long 2008). Estimates for the second year indicate that the number of uninsured in the general population dropped further to just 2.6 percent (Long, Cook, and Stockley 2008). More than 400,000 previously uninsured citizens are now insured through private coverage or expanded public coverage options. These efforts led to significant expansion in the state's Medicaid program, in the subsidized Commonwealth Care program, in employer-sponsored insurance, and in the individual insurance market. Table 2 shows that while 68 percent of the newly insured are in publicly subsidized plans (Commonwealth Care and MassHealth), 32 percent of the newly insured obtained insurance through an employer or in the individual nongroup market without direct government subsidy.

Table 2 also shows that enrollment in the new Commonwealth Care program provides coverage for 178,000 enrollees. A plan with no premiums and limited cost sharing is available to people with a family income below 150 percent FPL. Many of these people were transferred from the existing list of people eligible for free care through the uncompensated

Category	Number of People
Commonwealth Care	178,000 (44%)
MassHealth (Medicaid)	99,000 (24%)
Employer Coverage	83,000 (20%)
Nongroup (including Commonwealth Choice)	49,000 (12%)
Total	409,000

TABLE 2
Source of Coverage for Newly Insured since Reform in Massachusetts

*Note:* Figures in parentheses indicate the percentage of newly insured persons since health reform was implemented.

Source: Commonwealth Health Insurance Connector Authority 2009b.

care pool. More than 50,000 people in the Commonwealth Care program with a family income between 150 and 300 percent FPL pay premiums (Massachusetts Department of Revenue 2008).

Massachusetts reform increased enrollment in Medicaid (MassHealth), adding 99,000 people. Most were previously eligible for but not enrolled in this program. Before reform in Massachusetts, a 2004 Massachusetts Health Insurance Survey reported that of the 460,000 uninsured, 106,000 were estimated to be eligible for Medicaid but were not receiving benefits (Romney 2006). Persons were enrolled in Medicaid through significant outreach and enrollment efforts, which included reference to the requirement that people obtain insurance. Massachusetts has a single application for enrollment in any state-subsidized program. The health reform law also includes large grants to community organizations for grassroots outreach and enrollment of hard-to-reach populations.

Enrollment in employer-sponsored insurance has increased by 83,000, or 20 percent of the newly insured. The majority of these people had previously been eligible for coverage through their employer but did not enroll. A major concern with the Massachusetts mandate was the potential for crowd-out, or the movement of people with employer-sponsored insurance into public programs. The first year of health reform showed no evidence of crowd-out, either from a decrease in the number of employers offering health insurance coverage or in the number of workers taking up coverage (Long 2008). The number of employers offering health insurance also rose between 2005 and 2007 from 70 to 72 percent, whereas the national average dropped from 68 to 60 percent

from 2000 to 2007 (Massachusetts Division of Health Care Finance and Policy 2008). Health reform facilitated the uptake in employersponsored plans without the feared crowd-out.

Finally, 49,000 previously uninsured Massachusetts residents opted to purchase insurance in the nongroup or individual market. Insurance reforms and the ability to purchase care through the Commonwealth Choice Program, along with the pressure of the mandate, led to this expansion (Commonwealth Health Insurance Connector Authority 2009b). Like the increase in employer-sponsored insurance, these newly covered individuals do not require government subsidies.

Reform has had the strongest success in expanding coverage for lowerincome adults (adults with a family income less than 300 percent of the FPL), with the uninsured rate for this population dropping from 24 percent in fall 2006 to less than 8 percent in fall 2008 (Long and Stockley 2009). The remaining uninsured adults in Massachusetts are disproportionately young, male, single, and/or healthy-populations that can be difficult to convince to obtain coverage even with a less expensive, scaled-down plan and the ability to stay on a parent's plan longer. Affordability remains a major concern, with 41 percent of the uninsured adults indicating that they had tried unsuccessfully to find coverage that they could afford (Long and Stockley 2009). People with an income just over 300 percent FPL are not eligible for subsidies, and if they do not have access to an employer-sponsored plan, health insurance is not considered affordable so they are not subject to a penalty but still remain uninsured. Generally, premiums rise more quickly than do wages and will continue to be an obstacle for the uninsured in Massachusetts.

#### Conclusions

Massachusetts has been successful in expanding coverage by building on the base of its existing insurance system and requiring more of government, individuals, and business. While health reform was being implemented, the state made a series of interrelated decisions on affordability, coverage, insurance regulation, and enforcement of the new coverage requirement. Unanimous votes on key decisions from the Connector Board usually belied a process of difficult bargaining and negotiation. However, throughout the process, business, labor, consumers, and government officials agreed to compromise and maintain widespread support for reform. Implementation of reform in other states or nationally would start from different and varied coverage and regulatory baselines, although many of the same variables and trade-offs may need to be considered. Our analysis of decisions and the decision-making process provides a number of lessons for national reform.

Given the complexity of defining affordability, Massachusetts considered data from a number of methodologies and input from a range of stakeholders. Affordability is not simply a function of income and the price of insurance. It may require a more difficult calculation of "available" income or income that "should" or "could" be available to purchase health insurance. The price of insurance faced by families with similar incomes also varies tremendously by such things as employer contribution, tax treatment, and whether insurance is purchased in a largergroup, small-group, or individual market. Involving the stakeholders in public forums and developing methods to calculate affordability were important to the acceptance and legitimacy of the standard.

The affordability standard also was created in conjunction with decisions about premium subsidies. It is no coincidence that what people are required to pay for insurance under the Commonwealth Care program is equal to the maximum required under the affordability schedule. No premium is considered affordable for people with family incomes below 150 percent FPL, and affordability mirrors sliding-scale premium supports up to 300 percent FPL. Massachusetts, however, phases out subsidies at 300 percent FPL, creating a subsidy cliff for those with incomes just above that level.

Four lessons can be drawn from the Massachusetts effort to define affordability. First, the process of setting the standard is important, and the stakeholders' input is crucial. Second, affordability decisions need to be made in conjunction with other decisions that impact the availability and price of insurance. Third, no single methodology or study can provide the "right" affordability schedule, in part because of variations in spending patterns and individual circumstances, but also because of variations in individuals' real cost of insurance. Fourth, because of the inevitable variation and uncertainty, it may be important to include a system of exemptions or waivers from a mandate.

In Massachusetts, the Connector Board sought to balance the value of the required benefit package with the affordability impact of more comprehensive benefits. It also attempted to ensure that out-of-pocket costs would not become barriers to care and to avoiding underinsurance. Ultimately, Massachusetts chose a relatively comprehensive set of benefits for the MCC. Although this led a number of employers to upgrade existing offerings, the MCC was largely in line with standard insurance offerings in the state. Other states will start with very different baseline benefits generally available. For example, some states have a high penetration of high-deductible plans; others are dominated by one or two insurers with a particular set of benefits; and still others have a range of insurance products with significant differences in benefit levels. Requiring comprehensive benefits similar to Massachusetts in these states would likely entail requiring many who currently have insurance to change or upgrade their plans in order to comply. Employers would have to consider upgrading plans at great expense. This could ultimately jeopardize broader support for a reform program. Conversely, setting the MCC at the least common denominator plan may leave many without adequate coverage and underinsured.

Most of the contention in Massachusetts about defining insurance benefits came from businesses whose existing coverage did not meet the new standard. The state responded by allowing lifetime benefit caps, extending deadlines for compliance, and creating cheaper "wrap-around" benefits that employers or individuals could add to existing plans, such as prescription drug coverage. Carefully setting priorities is important. The Connector Board compromised on lifetime limits because of the number of plans with these stipulations, but it felt that prescription drug coverage was such a vital part of insurance that it was worth fighting to include in the MCC. Setting a national MCC standard may require similar compromises. It could lead to greater standardization of health plans across the country but also create a range of implementation challenges across the states.

In Massachusetts, a history of insurance reforms helped set the stage for merging the small-group and individual markets, which led to lower premiums and higher enrollment in the individual market. The direct effect on premiums in the small-group market is ambiguous, and more data are necessary to determine the cost implications of the merger on these plans. Efforts to make insurance more affordable and available in the young-adult market have yielded coverage gains, but this group remains uninsured in higher proportions than the rest of the population. A national or state-by-state mandate could make it easier to institute insurance reforms such as a guaranteed-issue and community or modified-community rating, but the states' current regulatory environments will determine how difficult the implementation will be.<sup>6</sup> The closer a state currently is to experience rating in the small-group and individual markets, the more accommodations that may be needed to make insurance affordable for high-risk purchasers.<sup>7</sup>

Finally, Massachusetts implemented penalties for noncompliance with the individual mandate through the tax code. When setting penalties, the state tried to balance the desire to encourage enrollment without being punitive. The state recognized variations in individual circumstances through a lenient system of waivers and exemptions. The level of the penalty dictates whether paying a fine may be considered a viable alternative to obtaining coverage. More research is needed to determine whether higher penalties would lead to greater enrollment and what the best penalty should be. National and state-level reformers will need to evaluate the trade-offs among high sanctions, ease of seeking waivers, and enrollment goals. Increasing penalties over several years in Massachusetts offered a gradual implementation strategy, boosting political viability and public support. Using the income tax system to impose sanctions proved feasible in Massachusetts.

Sustainability of the Massachusetts reform model rests in large part on general public acceptance, continued stakeholder support, and the affordability of premiums. If health care costs continue to grow faster than wages and the general economy, reform may not be sustainable. National or state-by-state implementation of coverage expansions hinges on affordability, subsidies, insurance regulation, and enforcement as well as on the interactions among them. While implementing coverage expansion and an individual mandate in Massachusetts was challenging, the state started with some critical building blocks and based key decisions on this foundation. The nation and most other states start from a different base. This may warrant different decisions ultimately, but they will confront many of the same difficult trade-offs.

#### Endnotes

 Insurance Partnership Program employer benefits vary based on the employer's contribution to an individual, couple, or family plan. Employers covering at least 50 percent of their employees' premiums can receive government payments totaling \$400 a year for individual coverage, \$800 a year for couple coverage, and the maximum benefit of \$1,000 a year for providing family coverage. See http://www.insurancepartnership.org/documents/regs\_ip.pdf (accessed January 8, 2010).

- 2. Before reform, people were eligible for full free care from the uncompensated care pool if their income was below 200 percent of the federal poverty level (FPL) and for partial benefits, up to 400 percent FPL. It also covered medical hardship hospital costs for uninsured people of any income if their medical expenses exceeded 30 percent of their family income (Seifert 2002).
- An affordability schedule describes the dollar amount and percentage of income that an individual, couple, or family could be expected to contribute to purchasing health insurance coverage.
- 4. A modified-community rating restricts the ability to vary the premium price to one or a few factors. An example is allowing the premium price to vary only by age and restricting this variation to a factor of two.
- Since health reform was implemented, initial estimates of the number of uninsured have been disputed as underestimating the total number of uninsured residents before reform (Long et al. 2008).
- 6. Under a community rating, all subscribers in a given location, irrespective of age or health experience, are charged the same premium.
- 7. Under an experience rating, the premiums for an individual or group are based on medical histories, health status, age, or other factors that predict health care spending. Older and potentially sicker individuals or groups pay higher premiums than do younger and potentially healthier individuals or groups.

#### References

- Barber, C., and M. Miller. 2007. Defining Affordability for Massachusetts. How Can Research Inform the Individual Mandate? Boston: Community Catalyst.
- Barber, C., and M. Miller. 2008. A Guide to Protecting Consumers under an Individual Mandate. Boston: Community Catalyst.
- Board of the Commonwealth Health Insurance Connector Authority. January 2007a. *Minimum Creditable Coverage Update*. Boston. Available at https://www.mahealthconnector.org/portal/site/connector/ menuitem.be34eb79b090a7635734db47e6468a0c/?fiShown= default (accessed September 30, 2009).
- Board of the Commonwealth Health Insurance Connector Authority. January 2007b. *Minutes, January 22*. Boston. Available at https:// www.mahealthconnector.org/portal/site/connector/menuitem.be34 eb79b090a7635734db47e6468a0c/?fiShown=default (accessed September 30, 2009).
- Board of the Commonwealth Health Insurance Connector Authority. March 2007. *Minutes, March 20.* Boston. Available at https:// www.mahealthconnector.org/portal/site/connector/menuitem.be34 eb79b090a7635734db47e6468a0c/?fiShown=default (accessed September 30, 2009).
- Board of the Commonwealth Health Insurance Connector Authority. April 2007. *Minutes, April 3*. Boston. Available at https://

www.mahealthconnector.org/portal/site/connector/menuitem.be34 eb79b090a7635734db47e6468a0c/?fiShown=default (accessed September 30, 2009).

- Board of the Commonwealth Health Insurance Connector Authority. January 2008. *Minutes, January 10*. Boston. Available at https:// www.mahealthconnector.org/portal/site/connector/menuitem.be34 eb79b090a7635734db47e6468a0c/?fiShown=default (accessed September 30, 2009).
- Carey, B. 2007. Memo to the Board of Directors, Commonwealth Health Insurance Connector Authority re Prescription Drug Coverage—Alternative Plan Designs. July 10. Boston. Available at https://www.mahealth connector.org/portal/site/connector/menuitem.be34eb79b090a763 5734db47e6468a0c/?fiShown=default (accessed September 30, 2009).
- Commonwealth Health Insurance Connector Authority. 2006. Analyses and Options Regarding Affordability. Boston.
- Commonwealth Health Insurance Connector Authority. 2009a. Brochure for Young Adult Plans. Boston. Available at https://www.mahealth connector.org/portal/binary/com.epicentric.contentmanagement. servlet.ContentDeliveryServlet/FindInsurance/Brochures/YAP.pdf (accessed November 20, 2009).
- Commonwealth Health Insurance Connector Authority. 2009b. Facts and Figures. Boston. Available at https://www.mahealthconnector. org/portal/site/connector/menuitem.d7b34e88a23468a2dbef6f47d 7468a0c?fiShown=default (accessed January 8, 2010).
- Commonwealth Health Insurance Connector Authority. 2009c. *Find Insurance: Individuals and Families, Frequently Asked Questions.* Boston. Available at https://www.mahealthconnector.org/portal/site/con nector/template.PAGE/menuitem.55b6e23ac6627f40dbef6f47d74 68a0c/?javax.portlet.tpst=ab2ef98d75886742e902ac100ce08041& javax.portlet.prp\_ab2ef98d75886742e902ac100ce08041\_viewID= MY\_PORTAL\_VIEW&javaxxs.portlet.begCacheTok=com.vignette. cachetoken&javax.portlet.endCacheTok=com.vignette.cachetoken (accessed January 8, 2010).
- Community Catalyst. 2009. Creating an Exchange: Lessons from Massachusetts. Boston. Available at http://www.communitycatalyst.org/ doc\_store/publications/mass\_exchange\_fact\_sheet.pdf (accessed November 20, 2009).
- Curtis, R., S. Lewis, K. Haugh, and R. Forland. 1999. Health Insurance Reform in the Small Group Market. *Health Affairs* 18(3): 151–60.
- Gabel, J. 2008. After the Mandates: Massachusetts Employers Continue to Support Health Reform as More Firms Offer Coverage. *Health Affairs* 27(6):w566–75.

- Gorman Actuarial LLC, DeWeese Consulting Inc., and Hinckley, Allen and Tringale LP. 2006. *Impact of Merging the Massachusetts Non-Group and Small Group Health Insurance Markets*. Prepared for the Massachusetts Division of Insurance and Market Merger Special Commission. Boston.
- Greater Boston Interfaith Organization. 2007. Mandating Health Insurance: What Is Truly Affordable for Massachusetts Families? Boston.
- Gruber, J. 2007. Evidence on Affordability from Consumer Expenditures and Employee Enrollment in Employer-Sponsored Health Insurance. Boston. Available at https://www.mahealthconnector.org/portal/ binary/com.epicentric.contentmanagement.servlet.ContentDelivery Servlet/About%2520Us/Publications%2520and%2520Reports/ Current/Connector%2520board%2520Gruber%2520April% 25203%252C%25202007/Jon%2520Gruber%2520Affordability %2520Analysis.doc (accessed January 4, 2010).
- Gruber, J. 2009. The House Proposal Lowers Non-Group Premiums. Cambridge: Massachusetts Institute for Technology. Available at http://www.smallbusinessmajority.org/pdfs/Gruber%20House% 20nongroup%20premium%20analysis%2011-2.pdf (accessed January 8, 2010).
- Holahan, J., L. Blumberg, A. Weil, A. Clemans-Cope, M. Buettgens, F. Blavin, and S. Zuckerman. 2005. *Roadmap to Coverage: Synthesis of Findings. Report for the Blue Cross Blue Shield of Massachusetts Foundation*. Boston. Available at http://www.urban.org/UploadedPDF/ 411327\_roadmap\_synthesis.pdf (accessed January 4, 2010).
- Holahan, J., J. Hadley, and L. Blumberg. 2006. Setting a Standard of Affordability for Health Insurance Coverage in Massachusetts. Boston.
- Holahan, J., and G. Kenney. 2008. Health Insurance Coverage of Young Adults: Issues and Broader Considerations. Washington, DC: Urban Institute, June. Available at http://www.rwjf.org/files/research/ uiyoungadults062008.pdf (accessed January 4, 2010).
- Kaiser Daily Health Policy Report. 2007. State Watch: Massachusetts Health Insurance Law Takes Effect. Available at http://www.kaiser network.org/daily\_reports/rep\_index.cfm?DR\_ID=45965 (accessed January 4, 2010).
- Katz, J. 2008. Memo to Connector Board Members Re. Affordability Schedule. April 7. Boston. Available at https://www.mahealthconnector. org/portal/site/connector/menuitem.be34eb79b090a7635734db47 e6468a0c/?fiShown=default (accessed September 30, 2009).
- Katz, J. 2009. Connector Appeals Program. Commonwealth Health Insurance Connector Authority. Presentation, January 15. Boston. Available at https://www.mahealthconnector.org/portal/ site/connector/menuitem.be34eb79b090a7635734db47e6468a0c/ ?fiShown=default (accessed January 28, 2010).

- Kingsdale, J. 2008. 2008 Affordability Schedules. Commonwealth Health Insurance Connector Authority. Presentation, January 10. Boston. Available at http://www.mahealthconnector.org/portal/ site/connector/menuitem.be34eb79b090a7635734db47e6468a0c/? fiShown=default (accessed September 30, 2009).
- Kirk, A. 2000. Riding the Bull: Experience with Individual Market Reform in Washington, Kentucky, and Massachusetts. *Journal of Health Politics, Policy, and Law* 25(1):133-73.
- Long, S.K. 2008. On the Road to Universal Coverage: Impacts of Reform in Massachusetts at One Year. *Health Affairs* 27(4):w270–84.
- Long, S.K., A. Cook, and K. Stockley. 2008. Health Insurance Coverage in Massachusetts: Estimates from the 2008 Massachusetts Health Insurance Survey. Boston: Massachusetts Division of Health Care Finance and Policy, Commonwealth of Massachusetts, and Urban Institute. Available at http://www.mass.gov/?pageID=eohhs2terminal&L=4 &L0=Home&L1=Government&L2=Departments+and+Divisions& L3=Division+of+Health+Care+Finance+%26+Policy&sid=Eeohhs 2&b=terminalcontent&f=dhcfp\_researcher\_resident\_survey&csid= Eeohhs2 (accessed January 4, 2010).
- Long, S.K., and K. Stockley. 2009. Health Reform in Massachusetts: An Update on Coverage and Support for Reform as of Fall 2008. Washington, DC: Urban Institute.
- Long, S.K., S. Zuckerman, T. Triplett, A. Cook, K. Nordahl, T. Siegrist, and C. Wacks. 2008. Estimates of the Uninsured Rate in Massachusetts from Survey Data: Why Are They So Different? Boston: Massachusetts Division of Health Care Finance and Policy. Available at http://www.mass.gov/Eeohhs2/docs/dhcfp/r/ pubs/08/est\_of\_uninsur\_rate.pdf (accessed January 4, 2010).
- Maryland Health Care Commission. 2009. *Health Insurance Coverage among College Students*. Baltimore. Available at http://mhcc.maryland.gov/legislative/hlthins\_college.pdf (accessed January 7, 2010).
- Massachusetts Department of Revenue. 2008. Data on the Individual Mandate and Uninsured Tax Filers Tax Year 2007. Boston. Available at http://www.mass.gov/Ador/docs/dor/News/PressReleases/2008/ 2007\_Demographic\_Data\_Report\_FINAL\_(2).pdf (accessed October 18, 2009).
- Massachusetts Division of Health Care Finance and Policy. 2008. Health Care in Massachusetts: Key Indicators. Boston: Commonwealth of Massachusetts, Executive Office of Health and Human Services. Available at http://www.mass.gov/Eeohhs2/docs/dhcfp/ r/pubs/08/key\_indicators\_0608.pdf (accessed January 4, 2010).
- Massachusetts Division of Health Care Finance and Policy. 2009. Insurance Partnership. Boston. Available at http://www.mass.gov/?

pageID=eohhs2subtopic&L=5&L0=Home&L1=Consumer&L2= Insurance+(including+MassHealth)&L3=Additional+Insurance+ and+Assistance+Programs&L4=Insurance+Partnership&sid= Eeohhs2 (accessed January 4, 2010).

- Massachusetts Medicaid Policy Institute. 2005. *The MassHealth Waiver: Issue Brief (April)*. Available at http://masshealthpolicyforum. brandeis.edu/publications/pdfs/26-Apr05/IssueBrief26.pdf (accessed November 20, 2009).
- Massachusetts Taxpayers Foundation. 2009. Massachusetts Health Reform: The Myth of Uncontrolled Costs. Boston.
- McDonough, J.E., B. Rosman, M. Butt, L. Tucker, and L. Kaplan Howe. 2008. Massachusetts Health Reform Implementation: Major Progress and Future Challenges. *Health Affairs* web exclusive (June):w285–97.
- McDonough, J.E., B. Rosman, F. Phelps, and M. Shannon. 2006. The Third Wave of Massachusetts Health Care Access Reform. *Health Affairs* web exclusive (September):w420–31.
- Meckler, L. 2007. How Ten People Reshaped Massachusetts Health Care. Wall Street Journal, May 30.
- Office of the Inspector General. 2007. Status Report on Issues Related to Health Care Reform Implementation Raised by the Joint Committee on Health Care Financing. Available at http://www.mass.gov/ig/publ/ hcr\_rpt.pdf (accessed January 7, 2010).
- Pauly, M., and B. Herring. 2007. Risk Pooling and Regulation: Policy and Reality in Today's Individual Health Insurance Market. *Health Affairs* 26(3):770–79.
- Romney, M. 2006. Presentation to the Medicaid Commission on Massachusetts Health Care Reform, January 26. Boston.
- Schwartz, K., and T. Schwartz. 2008. Uninsured Young Adults: A Profile and Overview of Coverage Options. Washington DC: Kaiser Commission on Medicaid and the Uninsured.
- Seifert, R. 2002. The Uncompensated Care Pool: Saving the Safety Net. Massachusetts Health Policy Forum Issue Brief. October 23. Available at http://masshealthpolicyforum.brandeis.edu/publications/pdfs/ 16-Oct02/IB%20UncompCarePool%2016.pdf (accessed January 4, 2010).