

Will Health Reform Lead to Job Loss? Evidence from Massachusetts Says No.

Timely Analysis of Immediate Health Policy Issues

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Introduction

In April 2006, Massachusetts enacted an ambitious health care reform bill that resulted in significant gains in insurance coverage, access to and use of care, and the affordability of care for the Massachusetts population as a whole and, especially, for lower-income adults.¹ Given the success of health reform in Massachusetts along these dimensions, many of the key features of the Bay State's initiative were incorporated in national health reform under the 2010 Patient Protection and Affordable Care Act (ACA), including an expansion of public coverage, subsidies for private coverage, a health insurance exchange, insurance market reforms, requirements for employers, and an individual mandate.

Economic theory suggests that when employers are required to offer health insurance coverage or make payments related to a worker, as is required under Massachusetts' 2006 reform and will be required under the ACA, employers will reduce wages and/or other worker compensation over time to cover those new costs. If wages paid by an employer are close to minimum wage or if wages and benefits cannot be altered because of collective bargaining agreements or market pressures, employers may respond by demanding less labor, leading to a reduction in employment. Employment could also fall if workers do not view the increase in insurance coverage as compensation for any reduction in wages, and so reduce their labor supply in response to a reduction in wages. Further, to the extent workers no longer need to remain employed to obtain health insurance coverage, some workers could choose to work fewer hours or retire as a

result of the expanded coverage options under health reform.

There are competing views on the likely impacts of the ACA on employment. Some have argued that the requirement that employers provide insurance coverage to their workers or pay a penalty will lead to significant reductions in employment,² while the Congressional Budget Office³ estimated that the ACA would reduce national employment by only about one-half of 1 percent of the labor force. As it was the template for the ACA, the experiences under health reform in Massachusetts provide an early indication of the potential changes that may be observed under national reform, including changes in employment.

Prior work has shown that employer-sponsored insurance coverage has remained strong in Massachusetts under health reform, despite the recession that began in 2007, with employers continuing to offer coverage to workers and workers continuing to take up that coverage.⁴ However, data on premium trends in the state suggest that employers have scaled back the scope of insurance coverage they provide and have increased cost-sharing for workers, shifting more of the direct costs of coverage on to workers.⁵ Consistent with that, a study of early effects of reform⁶ found that employers in Massachusetts lowered wages to reflect the higher costs of providing insurance coverage under reform. As that study found little difference in employment as a result of that change, workers appear to have valued the increase in health insurance coverage as roughly equivalent to the reduction in wages. This policy brief builds on prior work to examine trends

in employment in Massachusetts through 2010 to assess whether Massachusetts' 2006 reform initiative led to a dampening of employment and, thus, economic growth in the state.

Comparing Provisions for Employers under the Massachusetts Reform and the ACA

Massachusetts' 2006 health reform initiative and the ACA are complex legislative packages that include many elements that may affect the costs to an employer for each worker, including the expansion of dependent coverage up to age 26, health insurance market reforms, and penalties for not offering coverage or for offering coverage that is not affordable, among others.⁷ While there are broad similarities in Massachusetts' 2006 legislation and the ACA, there are important differences.⁸ In Massachusetts, employers with more than 10 full-time equivalent employees (FTEs) are required to contribute a "fair and reasonable" amount toward health insurance premiums for employees. Firms that fail to make "fair and reasonable" contributions face financial penalties of \$295 per FTE per year.

In comparison, the ACA employer penalties apply only to firms with 50 or more FTEs. The penalties for firms that fail to comply with the ACA are potentially larger for some firms and certainly more complex than the relatively modest fine in Massachusetts. Under the ACA, firms that do not offer health insurance and have at least one full-time employee (one who works 30 hours or more a week) receiving a

premium tax credit in the ACA's new health insurance exchange (described below) will face a penalty of \$2,000 for each FTE after the first 30 FTEs. Employers that do offer coverage and have at least one FTE who receives a premium tax credit for coverage in the exchange will be subject to fines that are the lesser of \$3,000 per exchange-enrolled full-time worker or \$2,000 per full-time worker after the first 30 workers. Employees in firms that offer coverage are eligible for premium tax credits if their premium contribution for individual coverage is greater than 9.5 percent of family income, or if the employer contributes less than 60 percent of the actuarial value of the insurance policy.

The ACA also requires the establishment of regulated state purchasing exchanges, modeled after the Connector established in Massachusetts. In Massachusetts, businesses with fewer than 50 FTEs may purchase group plans for their employees through the Connector. The federal reform law sets the size of eligible firms that may purchase coverage through the exchanges to those with fewer than 100 FTEs. The ACA also includes additional employer provisions without parallel in the Massachusetts reforms. For example, the federal law provides tax credits for small businesses that offer coverage to low- and middle-income workers.

Although there are differences in the details, with penalties for firms that fail to comply higher under the ACA than in Massachusetts but fewer firms likely to be affected nationally, the broad similarities between the ACA and Massachusetts' reform suggest that we can expect to see patterns in the response by employers under the ACA similar to those observed under health reform in Massachusetts.

Study Data and Methods

In this analysis, we examine trends in employment over time to assess whether there was a decline in employment in Massachusetts to offset the additional costs to employers of meeting the

requirements under reform—whether by providing coverage or paying a penalty. To provide context for that analysis, we also document the changes in employer-sponsored coverage under health reform in Massachusetts, as that has direct bearing on the costs of reform to employers. Specifically, we compare trends in insurance coverage and employment over 2001 to 2010 in Massachusetts to trends in the rest of the United States as well as to trends in a group of states that were similar to Massachusetts on key dimensions prior to health reform.

The health reform legislation in Massachusetts passed in April 2006, with implementation beginning that summer and continuing over the next two years. Thus, 2001 to early 2006 represents the pre-health reform period, and late 2006 to 2010 represents the post-health reform period in Massachusetts. Complicating the comparisons of the trends over time, there were two recessions over the 2001–2010 period: March–November 2001 and December 2007–June 2009.⁹ Of particular concern, the 2007–2009 recession was the worst economic downturn since the Great Depression. In comparing trends over the Massachusetts post-reform period, we focus on the overall post-reform period (2006–2010) as well as two narrower periods: 2006–2008, which captures the changes under health reform in Massachusetts before the full effects of the recession would have been felt, and 2008–2010, which captures changes under health reform and the effects of the recession.

Data Sources. For this analysis, we need data on health insurance coverage, private-sector employment, and the size of the working-age population in Massachusetts and the rest of the country. For this analysis, we defined the working-age population as civilian noninstitutionalized persons aged 16 and older to be consistent with the definition used by the Bureau of Labor Statistics (BLS).¹⁰ Limiting the analysis to the non-elderly working-age population (i.e., persons 16 to 64) yielded similar results (data not shown).

The data sources for this study were the 2001–2011 Annual Social and Economic (ASEC) Supplements to the Current Population Survey (CPS), fielded each year in March; March 2001–2010 data from the Quarterly Census of Employment and Wages (QCEW); and annual data from the 2001–2010 American Community Survey (ACS).

The CPS, a household survey that provides representative national and state estimates, is the nation's primary data source for tracking monthly employment and labor force trends in the United States. The ASEC Supplement captures information on other outcomes, including health insurance coverage over the preceding calendar year.¹¹ We rely on the 2001–2010 CPS for estimates of the total civilian working-age population (defined as persons aged 16 and older) as of March of each year and reported employment levels for that population group. We rely on the 2002–2011 ASEC Supplements for estimates of health insurance coverage for 2001–2010.¹²

The QCEW is a joint venture between BLS and State Employment Security Agencies and provides information on employment and wages for workers covered by state unemployment insurance.¹³ The QCEW provided aggregate data on the number of employees overall, within specific industries and by firm sizes, for Massachusetts and the rest of the nation. BLS estimates that the QCEW covers 97 percent of all workers on non-farm payrolls nationwide. Excluded from these data are individuals who are self-employed, proprietors, certain farm and domestic workers, unpaid family workers, or covered by the Railroad Unemployment Insurance System. QCEW data are publicly available aggregated to six-digit North American Industry Classification System industry codes for the nation, state and metropolitan area levels. We used information on the number of workers on the payroll for the pay period that includes March 12 in private-sector establishments by state. We used the March estimate to match the timing of population estimates from the ASEC Supplement to the CPS.¹⁴

The ACS, which is conducted by the U.S. Census Bureau, provides annual information on the economic, social, demographic and housing circumstances of U.S. residents. Each year the ACS samples approximately 2.5 percent of U.S. households, yielding data on about 2 million households. This sample size far exceeds that of other national surveys, including the CPS, providing large state-level samples. For this study, the ACS provided estimates of employment by worker and job characteristics, including the age and educational attainment of the worker, and whether the worker's employment was full-time (defined as 35 or more hours per week) or part-time.

Methods

The analysis focuses on trends in health insurance coverage and employment between 2001 and 2010 for Massachusetts, for a group of similar states, and for the rest of the nation (excluding Massachusetts). We measure health insurance coverage as self-reported insurance coverage by persons in the working-age population. We focus on trends in the uninsurance rate over time, as well as trends in type of insurance coverage. Given the evidence of confusion about type of coverage in Massachusetts with the range of coverage options and program names,¹⁵ we focus on employer-sponsored insurance coverage¹⁶ and other types of coverage, which include Medicaid, Medicare, private nongroup coverage, coverage purchased through the Massachusetts health insurance exchange (called the Connector), and other government coverage. We focus our analysis of trends in health insurance coverage on the working-age population age 16 and older (hereafter referred to as the working age population) to parallel our analysis of changes in employment.¹⁷

We measure employment coverage in two ways. Our core measure is the ratio of the total number of employees reported by private firms in the state as part of the QCEW system to the number of working-age persons in the state. This

is a measure of private-sector jobs per potential worker. The second measure of employment is self-reported employment by persons in the working-age population. This is a measure of the share of potential workers who are employed.

We calculated measures both for overall employment and for important subgroups of types of firms and types of workers who would be most likely to be affected if Massachusetts employers had scaled back hiring in response to health reform. With respect to types of firms, we examined employment changes over time by firm size and within the retail trade as well as the accommodation and food services industries. For firm size, we focused on businesses with fewer than 10 workers and with 10 to 49 workers, given provisions in the health care reform law related to similar firm sizes, as compared to businesses with 50 to 499 workers and 500 or more workers. With respect to type of workers, we examined employment among lower-skilled workers for whom health insurance coverage would likely represent a substantial share of the compensation package. Specifically, we focused on workers whose educational attainment is a high school degree or less and workers under age 26. To capture potential changes in hours worked in response to health reform, we also examined trends in full-time and part-time work over time.

In order to place the trends in insurance coverage and employment in Massachusetts in the context of broader secular trends, we compared the experiences in Massachusetts over time to the experiences of a group of similar states (defined below) and to the experiences of all other states in the nation (all states except Massachusetts). We used cluster analysis to identify "similar states" in terms of overall employment levels and trends in employment levels prior to the implementation of Massachusetts' health reform based on data for 2004 to 2006.¹⁸ The cluster analysis identified Delaware, Minnesota, Nebraska, and Wisconsin as the states that were most similar to Massachusetts along these dimensions in

the pre-reform period. We also present the trends for the nation excluding Massachusetts as another frame of reference for understanding changes over time in Massachusetts relative to the rest of the nation.

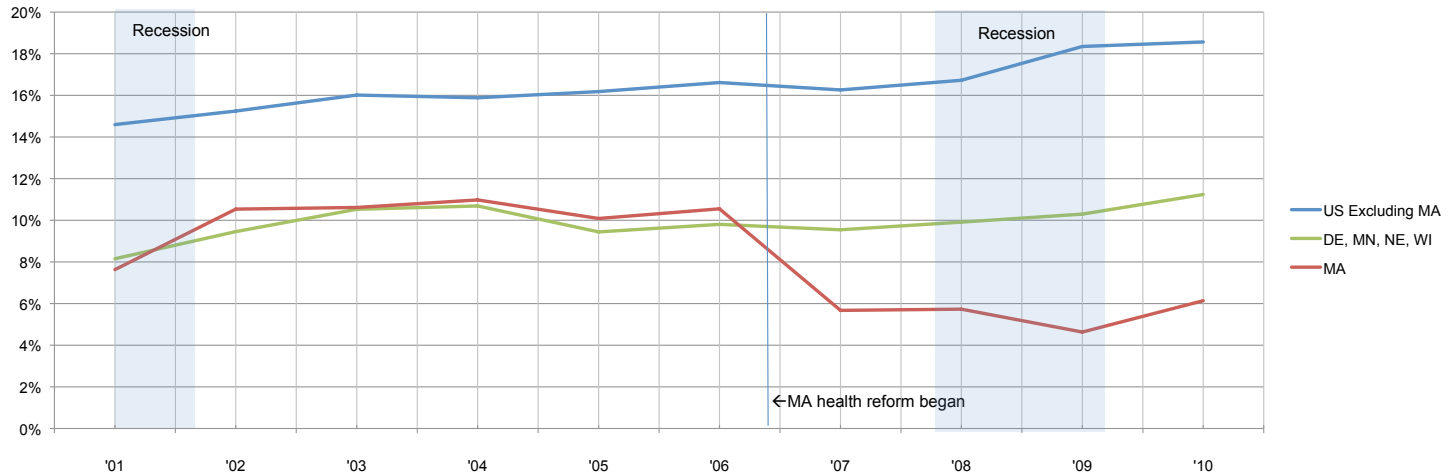
Trends in Health Insurance Coverage

The overall decline in uninsurance in Massachusetts under health reform is well documented across a number of state and national surveys.¹⁹ In Figure 1, we focus on the changes in uninsurance for the working-age population, comparing uninsurance in Massachusetts between 2001 and 2010 to the trend in the four states with similar trends in employment prior to health reform in Massachusetts (hereafter the comparison states), and to trends in the rest of the nation excluding Massachusetts (hereafter the rest of the nation) for individuals aged 16 and older.

As shown, there was a strong drop in uninsurance among working-age people in Massachusetts following the implementation of health reform in late 2006 and 2007, from more than 10 percent uninsured over the 2002–2006 period to less than 6 percent in 2008. While there has been some erosion of that decline with the recession that began in December 2007, Massachusetts has done quite well in maintaining the early gains in insurance coverage under reform. The uninsurance rate in Massachusetts has remained between 4.5 and 6.5 percent since 2007.

Prior to Massachusetts' health reform initiative, the level of uninsurance in the four comparison states matched that in Massachusetts quite closely. However, as uninsurance dropped in Massachusetts under health reform, uninsurance in the comparison states remained relatively constant between 2006 and 2008, before increasing between 2008 and 2010. When we look more broadly at all states except Massachusetts, we see that for the rest of the nation the uninsurance rate was much higher than in Massachusetts prior to reform and has continued to trend upward, reaching 18.6 percent in 2010.

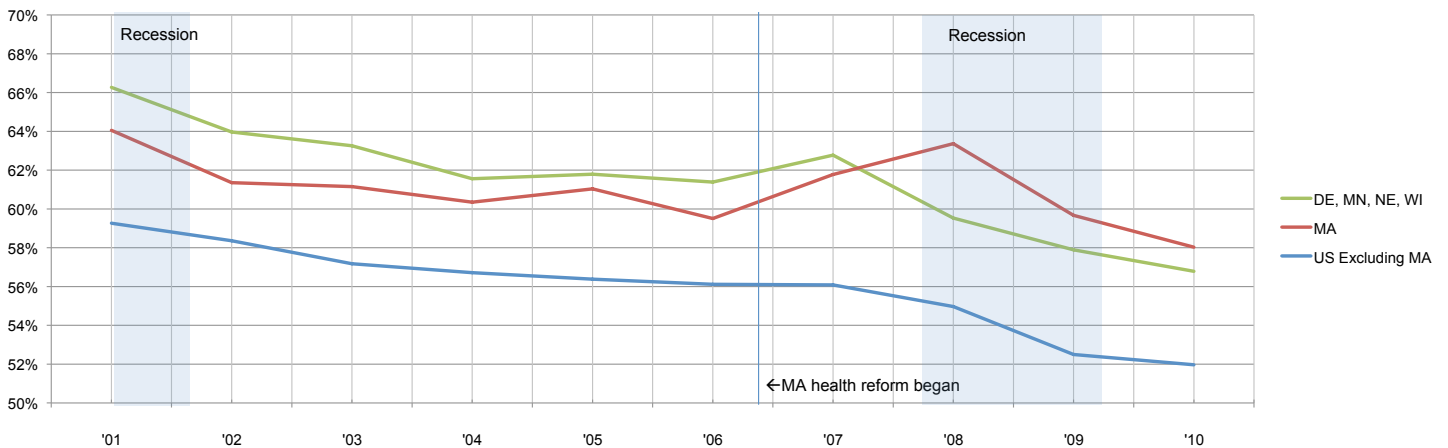
Figure 1: Uninsurance Among the Working-Age Population in Massachusetts and the Rest of the Nation, 2001–2010



Source: Urban Institute analysis of data from the 2002–2011 Annual Social and Economic Supplements to the Current Population Survey (CPS).

Note: Delaware, Minnesota, Nebraska, and Wisconsin were the states identified as most similar to Massachusetts in employment over the 2004–2006 period based on cluster analysis.

Figure 2: Employer-Sponsored Insurance Among the Working-Age Population in Massachusetts and the Rest of the Nation, 2001–2010



Source: Urban Institute analysis of data from the 2002–2011 Annual Social and Economic Supplements to the Current Population Survey (CPS).

Note: Delaware, Minnesota, Nebraska, and Wisconsin were the states identified as most similar to Massachusetts in employment over the 2004–2006 period based on cluster analysis.

An important part of the initial increase in coverage under health reform in Massachusetts was employer-sponsored insurance, which rose from 59.5 percent of all working-age individuals just prior to health reform in 2006 to 63.4 percent in 2008 (Figure 2). By contrast, employer-sponsored coverage fell in the four comparison states (from 61.4 percent in 2006 to 59.5 percent in 2008) and in the rest of the nation (from 56.1 percent in 2006 to 55.0 percent in 2008).

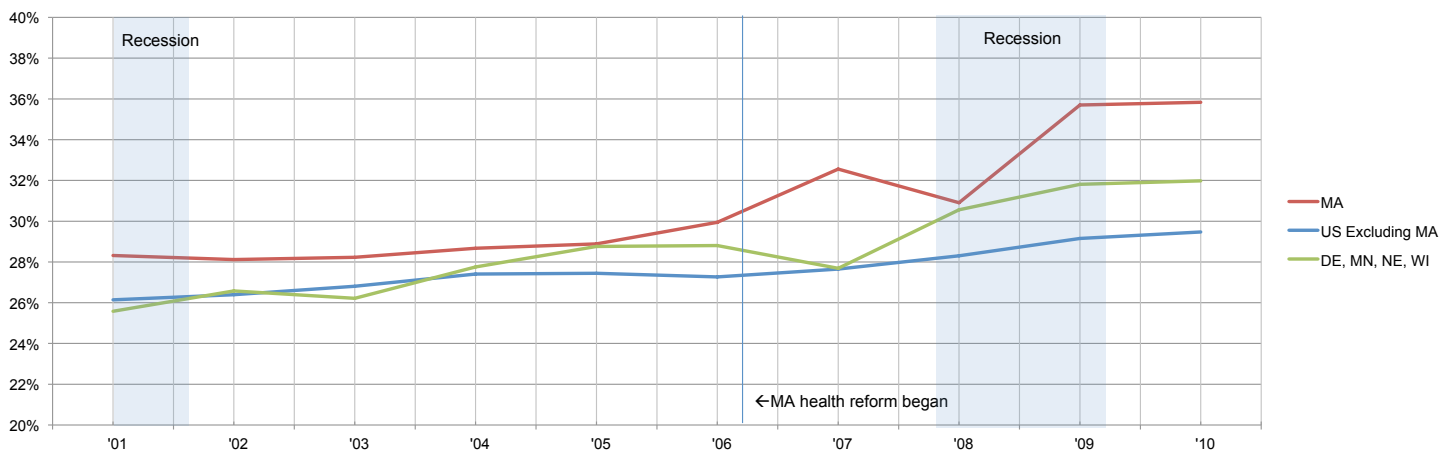
Between 2008 and 2010, Massachusetts, the four comparison states, and the

rest of the nation all experienced sharp drops in employer-sponsored coverage, reflecting the impacts of the recession. However, it would appear that health reform mitigated the effects of the recession in Massachusetts on employer-sponsored coverage to some extent, as the level of employer-sponsored coverage in Massachusetts, which was below that of the four comparison states prior to health reform, moved above the level in those states after health reform and has remained at a higher level. Consistent with that difference, the gap in

employer-sponsored coverage between Massachusetts and the rest of the nation that existed prior to health reform has widened, growing from 3.4 percentage points in 2006 to 6.1 percentage points in 2010.

While employer-sponsored coverage increased as a result of the Massachusetts health reform initiative, increases in Medicaid, the State Children's Health Insurance Program, and subsidized and unsubsidized coverage obtained through Massachusetts' health insurance exchange and other sources also contributed to reductions in

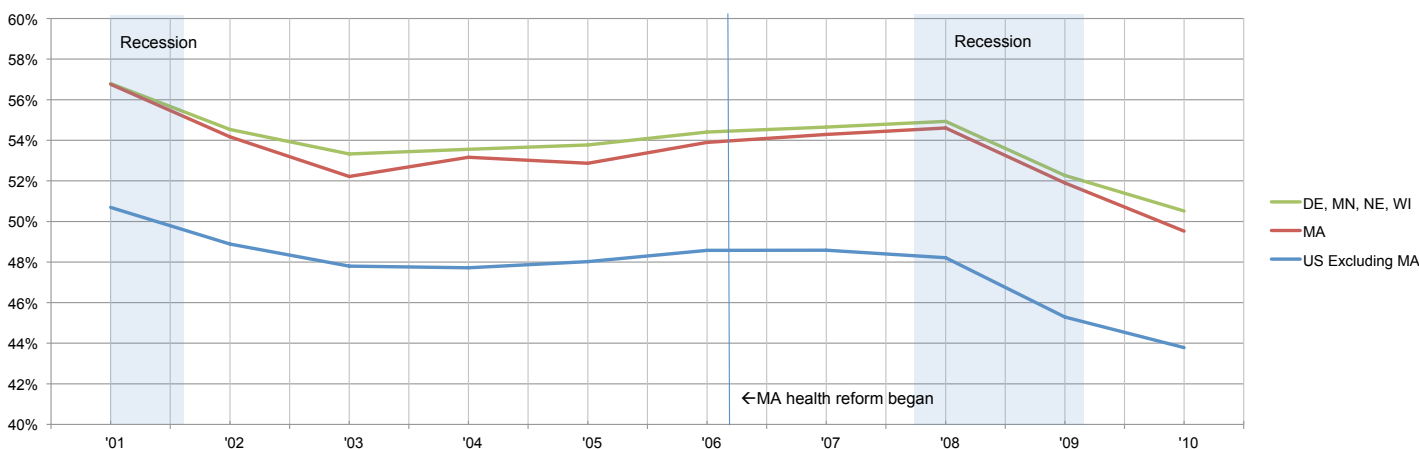
Figure 3: Other Insurance Coverage Among the Working-Age Population in Massachusetts and the Rest of the Nation, 2001–2010



Source: Urban Institute analysis of data from the 2002–2011 Annual Social and Economic Supplements to the Current Population Survey (CPS).

Note: Delaware, Minnesota, Nebraska, and Wisconsin were the states identified as most similar to Massachusetts in employment over the 2004–2006 period based on cluster analysis.

Figure 4: Ratio of Private-Sector Employment to the Working-Age Population in Massachusetts and the Rest of the Nation, 2001–2010



Source: Urban Institute analysis of data from the 2001–2010 Quarterly Census of Employment and Wages and the 2001–2010 Annual Social and Economic Supplements to the Current Population Survey (CPS).

Note: Delaware, Minnesota, Nebraska, and Wisconsin were the states identified as most similar to Massachusetts in employment over the 2004–2006 period based on cluster analysis.

uninsurance. As mentioned earlier, we combine these “other coverage” types into one group because of concerns regarding how public coverage and coverage obtained through the exchange was reported on the CPS. As shown in Figure 3, the level of “other coverage” was generally higher in Massachusetts than in the four comparison states and the rest of the nation prior to 2006 and increased much more rapidly in Massachusetts after reform, particularly during the 2007–2009 recession. This likely reflects the additional support offered by the expansion of coverage options in Massachusetts to those

who lost employment (and employer-sponsored insurance) during the recession, as well as the impacts of the individual mandate on individual’s coverage decisions.

Trends in Private-Sector Employment

Private-sector employment in Massachusetts and the rest of the nation dropped sharply over two periods between 2001 and 2010, corresponding to the economic recessions that began in early 2001 and late 2007 (Figure 4). The trend in private-sector employment

in Massachusetts mirrors that of the four comparison states quite closely, although Massachusetts appears to have had a somewhat greater private-sector job loss following both the 2001 and 2007–2009 recessions. The trend in private-sector employment for the rest of the nation, although at a much lower level of employment, is generally similar to that of Massachusetts and the comparison states over the 2001–2010 period.

Focusing more narrowly on the period following the implementation of health reform in Massachusetts, we see that private-sector employment in

Table 1: Ratio of Private-Sector Employment by Firm Size to the Working-Age Population in Massachusetts and the Rest of the Nation, 2001–2010

Firm Size	State(s)	Ratio by Year										Percentage Point Change By Time Period			
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2001–2006	2006–2008	2008–2010	2006–2010
0-9 Employees	MA	7.8%	7.8%	7.7%	7.9%	7.9%	8.1%	8.0%	8.1%	7.8%	7.4%	0.2	0.0	-0.6	-0.6
	DE, MN, NE, and WI	7.4%	7.4%	7.3%	7.3%	7.3%	7.5%	7.4%	7.3%	7.1%	7.0%	0.1	-0.2	-0.3	-0.5
	US Excluding MA	7.2%	7.2%	7.2%	7.2%	7.3%	7.3%	7.3%	7.3%	7.1%	7.0%	0.1	0.0	-0.3	-0.4
10-49 Employees	MA	14.8%	14.7%	14.4%	14.8%	14.7%	14.9%	15.0%	14.9%	14.2%	13.6%	0.1	0.0	-1.3	-1.4
	DE, MN, NE, and WI	15.4%	15.3%	15.0%	15.3%	15.3%	15.4%	15.3%	15.4%	15.0%	14.5%	0.0	0.0	-0.9	-0.9
	US Excluding MA	13.8%	13.7%	13.5%	13.6%	13.7%	13.8%	13.9%	13.8%	13.2%	12.8%	0.0	0.0	-1.1	-1.1
50-499 Employees	MA	22.9%	21.2%	20.1%	20.6%	20.3%	20.7%	20.9%	21.2%	19.7%	18.8%	-2.2	0.5	-2.4	-1.9
	DE, MN, NE, and WI	22.8%	21.6%	21.2%	21.2%	21.5%	21.7%	22.0%	22.2%	20.8%	20.1%	-1.1	0.5	-2.1	-1.6
	US Excluding MA	----	19.1%	18.6%	18.6%	18.8%	19.1%	19.1%	19.0%	17.5%	16.9%	----	-0.1	-2.1	-2.2
500+ Employees	MA	11.2%	10.5%	10.1%	9.9%	9.9%	10.2%	10.4%	10.5%	10.2%	9.7%	-1.0	0.3	-0.8	-0.5
	DE, MN, NE, and WI	11.1%	10.3%	9.8%	9.7%	9.7%	9.7%	9.9%	10.0%	9.4%	8.9%	-1.4	0.3	-1.1	-0.8
	US Excluding MA	----	8.9%	8.5%	8.3%	8.2%	8.3%	8.2%	8.0%	7.5%	7.1%	----	-0.2	-0.9	-1.2

Source: Urban Institute analysis of data from the 2001–2010 Quarterly Census of Employment and Wages and the 2001–2010 Annual Social and Economic Supplements to the Current Population Survey (CPS).

Note: Delaware, Minnesota, Nebraska, and Wisconsin were the states identified as most similar to Massachusetts in employment over the 2004–2006 period based on cluster analysis.

Massachusetts and the four comparison states increased slightly (up to roughly 55 percent) between 2006 and 2008, before falling rapidly between 2008 and 2010. When we compare the trends in private-sector employment over the full 2006–2010 post-health reform period, we find a net decline in the private-sector employment to working-age population ratio of 4.4 percentage points in Massachusetts, as compared to a decline of 3.9 percentage points in the four comparison states, and a decline of 4.8 percentage points in the rest of the nation. The consistency of the trends in private-sector employment ratios in Massachusetts, the four comparison states, and the rest of the nation, particularly following both the 2001 and 2007–2009 recessions, suggest that the health reform law in Massachusetts had little negative impact on private-sector employment in the state.

Trends in Employment by Firm Size and Industry

The overall trend in private-sector employment could mask important differences in the impacts of the health reform across different types of firms. For example, one might expect that the costs of providing health insurance coverage would be more of an issue for smaller firms, which were less likely to offer coverage to workers prior to

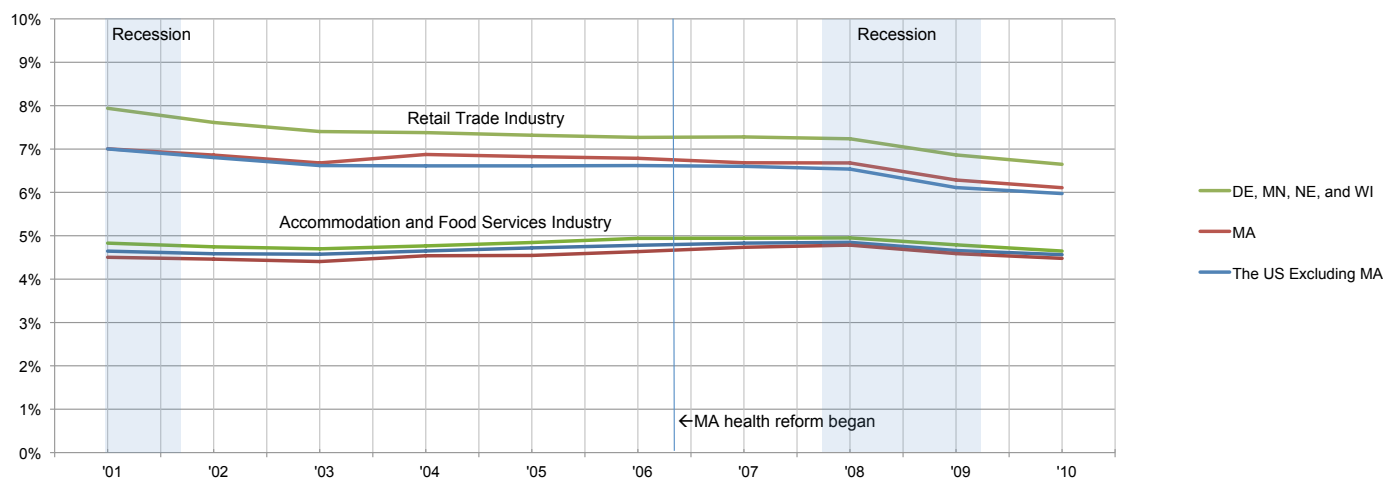
health reform, and firms in industries with large shares of low-wage workers, such as retail trade or accommodation and food service. We examine patterns in employment for different types of firms to test for negative impacts of the law on more vulnerable firms.

Trends by Firm Size. Table 1 summarizes trends over time in the employment to working-age population ratio for four groups of firms: firms with fewer than 10 employees, with 10 to 49 employees, with 50 to 499 employees, and with 500 or more employees. As mentioned previously, firms with 10 or fewer employees were exempt from penalties for not providing “fair and reasonable” contributions to employees’ health insurance coverage, and as such were unaffected by that aspect of the Massachusetts health reform law.

Looking across the private-sector employment ratios by firm size, we see little difference in the trends in employment in Massachusetts relative to in the four comparison states and in the rest of the nation following the implementation of health reform in Massachusetts. As was true for overall private-sector employment, trends in private-sector employment by firm size in Massachusetts have been quite similar to those in the four comparison states and the rest of the nation between 2006 and 2010.

- **Firms with fewer than 10 employees:** Private-sector employment ratios in very small firms remained relatively constant between 2006 and 2008 for Massachusetts, the four comparison states, and the rest of the nation. With the worsening of the recession, Massachusetts, the four comparison states, and the rest of the nation saw small declines (roughly 0.5 percentage points) in the share of employment in these firms.
- **Firms with 10 to 49 employees:** The patterns were similar for somewhat larger firms, with the employment to working-age population ratio relatively stable between 2006 and 2008, and then dropping over the 2008–2010 period across Massachusetts and the two groups of comparison states. Altogether, between 2006 and 2010, the employment share for these firms dropped 1.4 percentage points in Massachusetts, a bit more than the 0.9 percentage point drop for the four comparison states and the 1.1 percentage point drop for the rest of the nation.
- **Firms with 50 to 499 employees:** Employment in medium-sized firms relative to the working-age population increased slightly (up 0.5 percentage points) in Massachusetts and the four comparison states between 2006

Figure 5: Ratio of Private-Sector Employment by Industry to the Working-Age Population in Massachusetts and the Rest of the Nation, 2001–2010



Source: Urban Institute analysis of data from the 2001–2010 Quarterly Census of Employment and Wages and the 2001–2010 Annual Social and Economic Supplements to the Current Population Survey (CPS).
 Note: Delaware, Minnesota, Nebraska, and Wisconsin were the states identified as most similar to Massachusetts in employment over the 2004–2006 period based on cluster analysis.

and 2008, while the ratio for the rest of the nation remained relatively constant. However, as with smaller firms, employment in medium-sized firms declined in both Massachusetts and the rest of the nation between 2008 and 2010. Overall, between 2006 and 2010, the employment ratio for these firms fell 1.9 percentage points in Massachusetts, as compared to 1.6 percentage points in the four comparison states and 2.2 percentage points in the rest of the nation.

- Firms with 500 or more employees:** The employment to working-age population ratio increased a bit between 2006 and 2008 for large firms in Massachusetts and the four comparison states (up 0.3 percentage points), while the rate for the rest of the nation fell slightly (down 0.2 percentage points). Between 2008 and 2010, the ratio fell for Massachusetts and the state groups, leading to an overall decline between 2006 and 2010 of 0.5 percentage points for Massachusetts, as compared to a decline of 0.8 percentage points in the four comparison states and 1.2 percentage points in the rest of the nation.

Trends by Industry. Two industries that have large numbers of low-wage workers

and low rates of offering employer-sponsored coverage are the retail trade industry and the accommodations and food services industry. Employment in retail trade as a share of the working-age population remained relatively constant between 2006 and 2008, before dropping between 2008 and 2010 in Massachusetts and the rest of the nation (Figure 5). Overall, the employment ratio for retail trade fell by 0.7 percentage points between 2006 and 2010 in Massachusetts, as compared to a drop of 0.6 percentage points in the four comparison states and in the rest of the nation.

The pattern for employment in accommodation and food services relative to the working-age population was even more stable. Between 2006 and 2008, the employment ratio for these industries increased slightly, by 0.1 percentage points in Massachusetts and in the rest of the nation, before falling between 2008 and 2010. Between 2006 and 2010, the ratio of employment in accommodation and food services relative to the working-age population fell by 0.2 percentage points for both Massachusetts and the rest of the nation, and by 0.3 percentage points in the four comparison states.

Again, the trends in the ratio of private-sector employment by industry in

Massachusetts were quite similar to those in the nation as a whole.

Trends in Employment by Worker Characteristics

When we switch perspectives to focus on employment by worker characteristics rather than firm characteristics, we also find broad consistency in the trends over time for Massachusetts and the rest of the nation since 2006. This holds true overall for the working-age population and for subgroups of that population who would be particularly vulnerable to a decision by employers to cut back on hiring due to health reform—lower-skilled workers (defined as those with at most a high school education) and younger workers (defined as those under age 26).

As shown in Table 2, the share of the working-age population reporting employment increased by 1.7 percentage points in Massachusetts between 2006 and 2008, as compared to 1.3 percentage points in the four comparison states and 0.9 percentage points in the rest of the nation. With the worsening of the recession in 2008 and 2009, employment dropped across the country, so that the net change between 2006 and 2010 was a drop in employment of 2.5 percentage points in Massachusetts, 2.7 percentage

Table 2: Share of Working-Age Population Employed in Massachusetts and the Rest of the Nation, by Worker Characteristics, 2001–2010

Category	State(s)	Ratio by Year										Percentage Point Change By Time Period			
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2001–2006	2006–2008	2008–2010	2006–2010
Total	MA	65.5%	63.9%	63.0%	64.3%	63.6%	64.2%	64.2%	65.9%	63.1%	61.7%	-1.3	1.7	-4.2	-2.5
	DE, MN, NE, and WI	67.8%	66.9%	66.4%	66.4%	66.8%	67.2%	66.9%	68.5%	65.7%	64.5%	-0.6	1.3	-4.0	-2.7
	US Excluding MA	61.8%	61.1%	60.8%	60.9%	61.2%	61.7%	61.6%	62.6%	59.6%	58.2%	-0.1	0.9	-4.4	-3.5
Aged 16-25 Years Old (Any Education Level)	MA	65.8%	59.4%	58.2%	58.7%	59.5%	56.7%	55.8%	58.7%	52.8%	51.3%	-9.1	2.0	-7.4	-5.4
	DE, MN, NE, and WI	68.8%	66.6%	66.3%	65.1%	66.5%	64.3%	64.4%	65.7%	62.2%	59.1%	-4.5	1.4	-6.6	-5.2
	US Excluding MA	58.3%	57.1%	56.0%	56.1%	56.3%	55.5%	54.8%	55.4%	50.7%	48.3%	-2.8	-0.1	-7.1	-7.2
No More Than High School Education (Aged 16+)	MA	53.8%	50.7%	50.5%	50.6%	51.3%	51.8%	50.6%	52.7%	48.4%	47.8%	-2.0	0.9	-4.9	-4.0
	DE, MN, NE, and WI	57.4%	56.5%	56.0%	55.0%	56.1%	56.0%	55.9%	57.0%	53.6%	51.9%	-1.4	1.0	-5.1	-4.1
	US Excluding MA	51.9%	51.0%	50.6%	50.7%	50.8%	51.5%	51.3%	51.5%	48.0%	46.4%	-0.4	0.0	-5.1	-5.1

Source: Urban Institute analysis of data from the 2001–2010 American Community Survey.

Note: Delaware, Minnesota, Nebraska, and Wisconsin were the states identified as most similar to Massachusetts in employment over the 2004–2006 period based on cluster analysis.

Table 3: Share of Working-Age Population Employed in Massachusetts and the Rest of the Nation, by Full-Time and Part-Time Employment, 2001–2010

Category	State(s)	Ratio by Year										Percentage Point Change By Time Period			
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2001–2006	2006–2008	2008–2010	2006–2010
Full-Time Employed (35 or more hours/week)	MA	47.0%	45.4%	44.3%	45.7%	44.6%	44.8%	44.9%	45.7%	43.1%	42.0%	-2.2	0.9	-3.7	-2.8
	DE, MN, NE, and WI	47.9%	47.0%	46.0%	45.8%	46.2%	46.5%	46.9%	48.0%	44.9%	43.8%	-1.4	1.5	-4.2	-2.7
	US Excluding MA	45.8%	44.9%	44.4%	44.2%	44.4%	44.8%	44.8%	45.4%	42.4%	41.2%	-1.0	0.6	-4.2	-3.6
Part-Time Employed (Fewer than 35 hours/week)	MA	12.3%	12.4%	12.3%	12.0%	12.6%	13.1%	13.1%	13.9%	14.0%	14.0%	0.8	0.8	0.1	0.9
	DE, MN, NE, and WI	13.1%	12.9%	13.3%	13.5%	13.5%	13.8%	13.3%	14.0%	14.6%	14.7%	0.7	0.2	0.7	0.9
	US Excluding MA	9.8%	10.0%	10.1%	10.1%	10.2%	10.4%	10.4%	11.0%	11.3%	11.2%	0.6	0.6	0.2	0.8
Self-Employed	MA	6.2%	6.1%	6.4%	6.6%	6.3%	6.3%	6.1%	6.3%	5.9%	5.7%	0.1	0.0	-0.6	-0.6
	DE, MN, NE, and WI	6.9%	7.0%	7.1%	7.1%	7.1%	6.9%	6.7%	6.4%	6.2%	6.0%	0.0	-0.5	-0.4	-0.9
	US Excluding MA	6.2%	6.2%	6.4%	6.6%	6.5%	6.5%	6.4%	6.2%	5.9%	5.7%	0.3	-0.3	-0.5	-0.8

Source: Urban Institute analysis of data from the 2001–2010 American Community Survey.

Note: Delaware, Minnesota, Nebraska, and Wisconsin were the states identified as most similar to Massachusetts in employment over the 2004–2006 period based on cluster analysis.

points in the four comparison states, and 3.5 percentage points in the rest of the nation.

When we look at the changes between 2006 and 2010 in employment for young workers, a group more likely to lose employment if health reform led employers to scale back hiring, we see similar patterns. For the most part, employment increased between 2006 and 2008, before falling between 2008 and 2010. The net effect for the 2006 to 2010 period was employment down 5.4, 5.2, and 7.2 percentage points, respectively, for Massachusetts, the four comparison states, and the rest of the nation. For lower-skilled workers, there was a similar increase in employment between 2006 and 2008, followed by a drop between 2008 and 2010. Overall, the drop in employment for workers

with no more than a high school education between 2006 and 2010 was 4.0, 4.1, and 5.1 percentage points, respectively, for Massachusetts, the four comparison states, and the rest of the nation. Thus, there is no evidence that younger and lower-skilled workers have been more likely to lose employment under health reform in Massachusetts relative to trends in the rest of the nation.

Trends in Employment by Job Characteristics

While we find no evidence that health reform in Massachusetts led to a reduction in employment, it is possible that employers cut back hours rather than positions in response to health reform. Table 3 compares the share of the working-age population in full-time

and part-time positions over time in Massachusetts and other states. As with employment in general, the trends in full-time and part-time employment in Massachusetts and other states were similar between 2006 and 2010. In Massachusetts and the comparison states, the share of working-age adults reporting full-time employment increased between 2006 and 2008, before dropping between 2008 and 2010. Overall, between 2006 and 2010, full-time employment dropped 2.8 percentage points in Massachusetts, as compared to a drop of 2.7 percentage points in the four comparison states and 3.6 percentage points in the rest of the nation. At the same time, part-time employment increased 0.9 percentage points in both Massachusetts and the four comparison states and

0.8 percentage points in the rest of the nation. There is no evidence of a disproportionate shift toward part-time work in Massachusetts under health reform relative to trends in the rest of the nation.

Discussion

Massachusetts has achieved its goal of near-universal health insurance coverage under its 2006 health reform initiative, with no indication of negative job consequences relative to other states as a result of health reform. The recent recession, which began in December 2007, and the financial crisis

that followed, have clearly taken a toll on economic growth in Massachusetts and the rest of the nation. However, employment trends in Massachusetts immediately after health reform was implemented (2006 to 2008) and over the period of the recession (2008 to 2010) closely mirrored those of the four states that had similar employment patterns to Massachusetts prior to health reform. Further, Massachusetts, which started out with a higher share of the working-age population employed than the rest of the nation prior to health reform, continued to have a much higher employment share in 2010. Thus, there is no evidence of a more pronounced

decline in overall employment in Massachusetts than in the rest of the nation over the 2006–2010 period, nor is there evidence of a more pronounced decline among the small firms, industries, and workers, where such declines would be predicted if health reform had dampened economic growth in the state. Although there are differences in the details between the Massachusetts health reform and the ACA, there are broad similarities that indicate that the impacts could be roughly similar under the ACA. The evidence from Massachusetts would suggest that national health reform does not imply job loss and stymied economic growth.

Endnotes

- 1 See for example, Long SK. "On the Road to Universal Coverage: Impacts of Reform in Massachusetts at One Year." *Health Affairs*, 27(4): 270-284, 2008; Zhu J, Brawarsky P, Lipsitz S, et al. "Massachusetts Health Reform and Disparities in Coverage, Access and Health Status." *Journal of General Internal Medicine*, 25(12): 1356-1362, 2010; Tinsley L, Andrews B and Hawk H. "Short-Term Effects of Health-Care Coverage Legislation—Massachusetts, 2008." *Morbidity and Mortality Weekly Report*, 59(9): 262-267, March 2010; Clark CR, Soukup J, Govindarajulu U, et al. "Lack of Access Due to Costs Remains a Problem for Some in Massachusetts Despite the State's Health Reforms." *Health Affairs*, 30(2): 247-255, 2011; Long SK, Stockley K and Dahlen H. "Massachusetts Health Reforms: Uninsurance Remains Low, Self-Reported Health Status Improves as State Prepares to Tackle Costs." *Health Affairs*, 31: 444-451, 2012.
- 2 Chow MJ and Phillips BD. "Small Business Effects of a National Employer Healthcare Mandate." Nashville, TN: NFIB Research Foundation, January 26, 2009. Available at http://www.nfib.com/Portals/0/PDF/AllUsers/NFIBStudy_HealthcareMandate.pdf.
- 3 Elmendorf D. "Economic Effects of the March Health Legislation." Presentation at the Schaeffer Center of the University of Southern California, October 22, 2010. Available at <http://www.cbo.gov/publication/21907>.
- 4 Gabel JR, Whitmore H and Pickreign J. "Report from Massachusetts: Employers Largely Support Health Care Reform, and Few Signs of Crowd-Out Appear." *Health Affairs*, 27(1): w13-w23, January 2008; Division of Health Care Finance and Policy. "Key Indicators: Quarterly Enrollment Update, June 2011 Edition." 2012. Available at <http://www.mass.gov/eohhs/docs/dhcfp/r/pubs/12/2011-june-key-indicators.pdf>; Long, Stockley and Dahlen 2012.
- 5 Division of Health Care Finance and Policy. *Massachusetts Health Care Cost Trends Premiums and Expenditures*. Boston, MA: Commonwealth of Massachusetts, Executive Office of Health and Human Services, 2012. Available at <http://www.mass.gov/eohhs/docs/dhcfp/cost-trend-docs/cost-trends-docs-2012/premiums-and-expenditures.pdf>.
- 6 Kolstad JT and Kowalski AE. "Mandate-Based Health Reform and the Labor Market: Evidence from the Massachusetts Reform." NBER Working Paper No. w17933. March 2012. Available at Social Science Research Network: <http://ssrn.com/abstract=2025309>.
- 7 For detailed information on the ACA provisions, see the Henry J. Kaiser Family Foundation. *Implementation Timeline*. Available at <http://healthreform.kff.org/timeline.aspx>.
- 8 Seifert R and Cohen A. *Re-forming Reform: What the Patient Protection and Affordable Care Act Means for Massachusetts*. Boston, MA: Blue Cross Blue Shield of Massachusetts Foundation, 2010. Available at: http://masshealthpolicyforum.brandeis.edu/forums/Documents/IssueBrief_ReportFINAL.pdf.
- 9 For details on the timing of economic recessions, see National Bureau of Economic Research. *US Business Cycle Expansions and Contractions* at <http://www.nber.org/cycles.html>.
- 10 BLS defines the working age population as civilian non-institutionalized persons ages 16 and older (see Bureau of Labor Statistics. Table 4-1 Working-age population in "International Comparisons of Annual Labor Force Statistics, Adjusted to U.S. Concepts, 10 Countries, 1970-2010". Available at <http://www.mass.gov/eohhs/docs/dhcfp/cost-trend-docs/cost-trends-docs-2012/premiums-and-expenditures.pdf>.
- 11 There is debate over whether the CPS is measuring the number of uninsured for an entire year (as intended) or whether responses more closely reflect the number of uninsured at a point in time (State Health Access Data Assistance Center and Robert Wood Johnson Foundation. "Comparing Federal Government Surveys that Count Uninsured People in America." 2008. Available at http://www.rwjf.org/files/research/082608shadac_census.pdf). There is also a concern that the CPS understates Medicaid/CHIP enrollment and thus may overstate the number of uninsured (see Call KT, Davidson G, Sommers AS, et al. "Uncovering the Missing Medicaid Cases and Assessing Their Bias for Estimates of the Uninsured." *Inquiry*, 38(4): 396-408, Winter 2001/2002; Davern M, Klerman JA, Ziegenfuss J, et al. "A Partially Corrected Estimate of Medicaid Enrollment and Uninsurance: Results from an Imputational Model Developed off Linked Survey and Administrative Data." *Journal of Economic and Social Measurement*, 34(4): 219-40, 2009). As it is unlikely that these reporting problems are changing substantially over time, an analysis of changes in coverage over time should be unaffected by these measurement problems.
- 12 Although the ACS provides a measure of health insurance coverage at a point in time and much larger sample sizes than the CPS, the insurance measure is only available since 2008.
- 13 For more information on the Census of Employment and Wages, see <http://www.bls.gov/cew/>.
- 14 While the health insurance questions on the March ASEC refer to health insurance in the past year, estimates of the working-age population obtained in March of a given year reflect that period. We chose to use the March population data since the ASEC is fielded in March.
- 15 Long SK and Stockley K. "Sustaining Health Reform in a Recession: An Update on Massachusetts as of Fall 2009." *Health Affairs*, 29(6): 1234-1241, 2010.
- 16 For this analysis, we include Tricare/CHAMPUS/CHAMPVA/military health care in with employer-sponsored coverage.
- 17 As noted above, the BLS defines the labor force as the noninstitutionalized civilian working-age population. Therefore we produced employment estimates using this as the denominator. Our results were not sensitive to the choice of the denominator. We conducted the analysis for those under age 65 and found consistent results.
- 18 The specific measures used in the cluster analysis were the ratio of private-sector employment to the working-age population in 2006 and the change in this ratio from 2004 to 2006.
- 19 For a summary based on recent data, see Long SK and Phadera L. "Estimates of Health Insurance Coverage in Massachusetts from the Massachusetts Health Insurance Survey: An Update for 2010." Washington, DC: The Urban Institute, 2011.

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