

# WHO GAINED *the* MOST UNDER HEALTH REFORM *in* MASSACHUSETTS?

*Massachusetts Health Reform Survey*

## *Policy Brief*

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*M*assachusetts' health reform legislation contains many elements, including Medicaid expansions, subsidized private insurance coverage for lower-income adults (defined as those with family income less than 300 percent of the federal poverty level (FPL)), and the creation of a purchasing pool for workers in small firms and individuals without access to employer-sponsored insurance (ESI) (table 1). The state's health reform initiative also includes expanded coverage options for young adults, insurance market reforms, an individual mandate that requires that adults have health insurance if they have access to an affordable health plan, and requirements for employers.

We know from earlier work that Massachusetts' health reform effort led to a substantial drop in uninsurance in Massachusetts in roughly the first year after implementation—falling from 13 to 7 percent for working-age adults aged 18 to 64 between fall 2006 and fall 2007. Not surprising given the focus of many elements of health reform on lower-income adults, those with lower incomes reported greater increases in coverage than those with higher incomes. Uninsurance for adults with family income less than 300 percent of poverty dropped by almost 11 percentage points, while the decline among higher-income adults (those with family income at 300 percent of poverty or more) was about 2 percentage points (Long 2008). This policy brief expands on that analysis to consider variations in the impacts of health reform on insurance coverage across different population groups in the state. Specifically, it examines differences in insurance coverage by demographic characteristics (e.g., age, race/ethnicity, and gender), health status, employment, and geography.

## {DATA AND METHODS}

The analysis uses two rounds of interviews with adults age 18 to 64 years old, conducted in fall 2006, just prior to the implementation of many of the key elements of reform, and fall 2007, approximately a year after the reform efforts began.<sup>1</sup> In the analyses reported here, we compare working-age adults (18 to 64) in the period following the implementation of health reform (fall 2007) to a similar sample of adults in the period just prior to the implementation of key elements of reform (fall 2006).<sup>2</sup> Since Massachusetts' health reform initiative was not fully implemented by fall 2007, this provides an interim assessment of the impacts of health reform.

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<sup>1</sup>Information on the survey is provided at <http://www.urban.org/publications/411649.html>.

<sup>2</sup>The fall 2006 sample was being fielded as the CommCare program was beginning for adults with incomes under 100 percent of the FPL. Enrollment in that program started slowly and was relatively low in fall 2006.

{TABLE 1} Key Components of Chapter 58 (An Act Providing Access to Affordable, Quality and Accountable Health Care) and the Populations Targeted by the Policy Change

Key Components	Children	Adults		
		<150% FPL	150-300% FPL	>300% FPL
Expansion of MassHealth to children up to 300% FPL	X			
Expansion of MassHealth Insurance Partnership Program, which provides insurance subsidies and employer tax credits to workers in small firms to 300% FPL		X	X	
Increase in enrollment caps for MassHealth programs for long-term unemployed adults (eligible up to 100% FPL), disabled working adults (eligible at any income level) and persons with HIV (eligible up to 200% FPL)		X	X	X (limited)
Restoration of dental, vision and other MassHealth benefits to adults		X	X	X (limited)
Creation of new MassHealth wellness benefit / incentive program	X	X	X	X (limited)
Increase in hospital and physician rates under MassHealth	X	X	X	X (limited)
Creation of new Commonwealth Care Health Insurance Program which provides subsidized insurance for adults up to 300% FPL who are not eligible for Masshealth and do not have access to employer-sponsored insurance coverage		X	X	
Creation of new Commonwealth Health Insurance Connector Authority, which provides purchasing vehicle for individuals without access to employer-sponsored insurance and small employers via Commonwealth Choice (<51)				X
Creation of new Young Adult products for 19 up to 26 year olds who do not have access to employer-sponsored insurance		X	X	X
Extend dependent coverage rules up to 26 years of age or two years after loss of IRS dependent status, whichever is earlier		X	X	X
Requirement that employers with 11+ employees offer access to Section 125 plan or face potential of a “free rider surcharge” if employees use substantial amounts of care through the Health Care Safety Net Trust Fund (formerly that Uncompensated Care Pool)		X	X	X
Requirement that employers must make a “fair and reasonable” contribution towards the cost of health insurance or pay a “fair share” assessment of \$295 /employee		X	X	X
Merger of non-group and small group markets	X	X	X	X
Requirement that all adults 18 and older to have health insurance if it is affordable (“individual mandate”)		X	X	X
Creation of new standards for Minimum Credible Coverage for health plans in the state	X	X	X	X

Source: Exhibit 1 in Long, SK “On the Road to Universal Coverage: Impacts of Reform in Massachusetts at One Year” Health Affairs, Web Exclusive, June 3, 2008.

Under this “pre-post” framework, any differences in outcomes between the two periods are attributed to the state’s reform efforts. The primary risk in this type of analysis is that there are other factors, beyond health reform, that changed over the same period (e.g., an economic downturn) (Mohr 1995). These confounding changes, if they affected the outcomes of interest, would bias the estimates of the impacts of the state’s reform efforts reported here. Available data suggest that the Massachusetts economy was fairly stable from fall 2006 to fall 2007.<sup>3</sup>

In making comparisons across time, we control for differences in the samples of adults in fall 2006 and fall 2007 using multivariate regression models. The models include measures of the characteristics of the adult and his or her family and characteristics of the local health care market and economy in each year, where “local” is based on the individual’s county of residence. For simplicity in comparing impact estimates across population subgroups, we estimate linear probability regression models, controlling for the complex design of the sample using the survey estimation procedures (“svy” command) in Stata 10 (StataCorp 2007). Both unadjusted impacts and regression-adjusted impacts are reported, where the unadjusted impacts are the simple differences between the mean outcome in the fall 2006 and the mean outcome in fall 2007. The focus is on the regression-adjusted differences in presenting the results.

## FINDINGS

Consistent with the decline in uninsurance for the overall working-age adult population in Massachusetts between Fall 2006 and Fall 2007, there were significant drops in uninsurance across all of the population subgroups considered, including groups defined by age, gender, race/ethnicity, health status, employment and geography (figure 1). For completeness, we also include estimates of the impacts of health reform by family income, which were reported in the earlier analysis (Long 2008).

The greatest gains in insurance coverage under health reform (as reflected by the largest drops in uninsurance) were reported by lower-income adults (described above) and younger adults (table 2). Among adults age 18 to 34, uninsurance fell by almost 11 percentage points, compared to a drop of about 4 percentage points for older adults age 35 to 64. While this study cannot separate the effects of the different elements of health reform in the state, there were several provisions that were targeted at young adults age 18 to 26. These include an expansion of eligibility for dependent coverage and the creation of new “Young Adult Plans” (table 1).

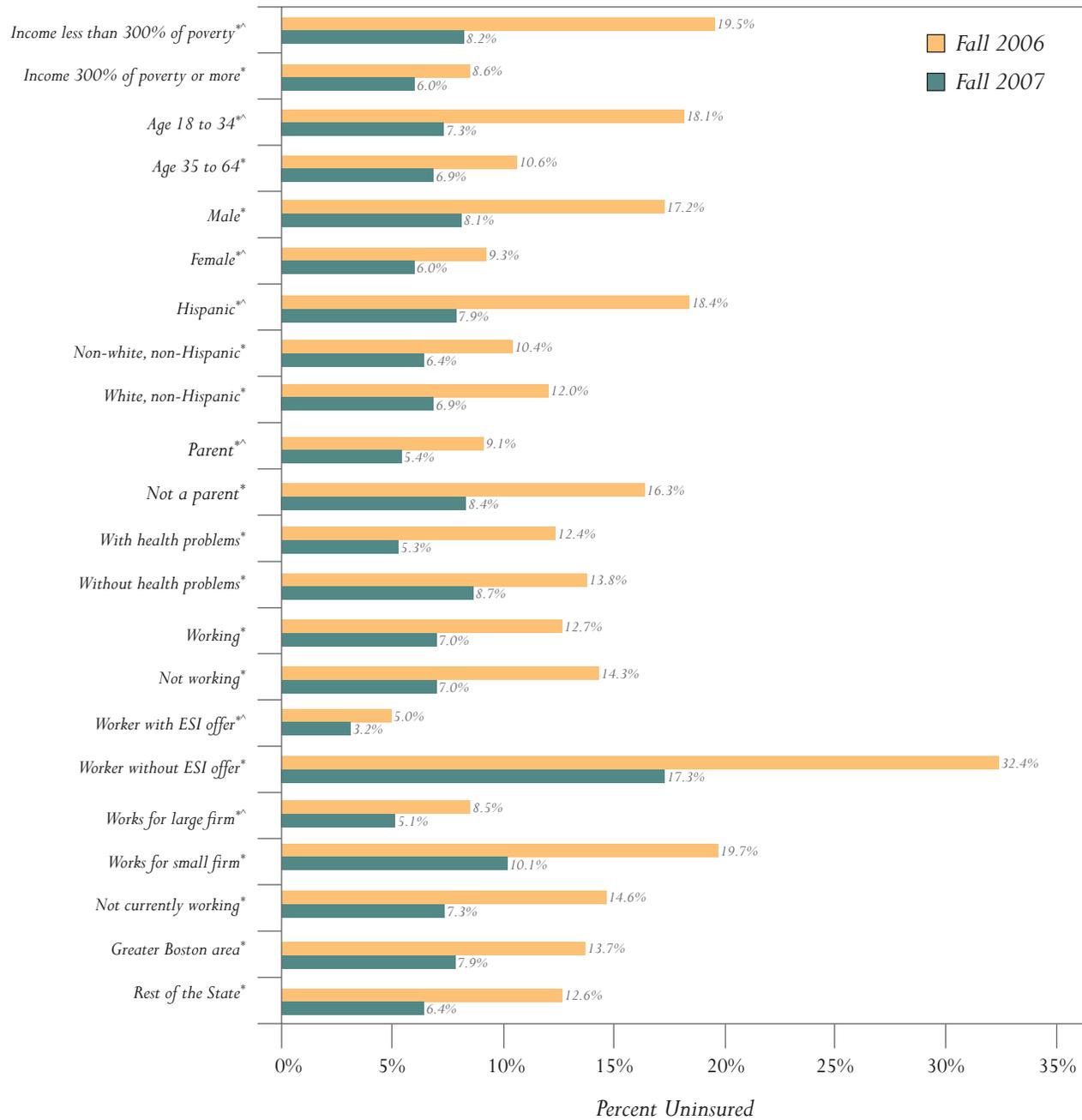
Looking across the population subgroups, the reductions in uninsurance tended to be largest for the subgroups that started out with higher levels of uninsurance. For example, uninsurance among males fell by about 9 percentage points (from about 18 to 9 percent) compared to a drop of 3 percentage points for females (from about 9 to 6 percent). Similarly, uninsurance dropped more for adults in racial and ethnic minority groups, particularly Hispanic adults, than for white, non-Hispanic adults (11 percentage points for Hispanic adults versus 5 percentage points for white, non-Hispanic adults, respectively). It also dropped more for adults without children than for parents (8 percentage points versus 4 percentage points, respectively). In contrast, although uninsurance fell a bit more for adults reporting health problems than for those without such problems (7 percentage points versus 5 percentage points, respectively), the difference in the decline in uninsurance for those population subgroups was not statistically significant.

When we look at the impact of health reform by work status, we find similar declines in uninsurance for adults who were working and those who were not working (roughly 6 to 7 percentage points). However, among working adults, larger declines in uninsurance were reported by workers in small firms (down about 10 percentage points) than those in larger firms (down about 3 percentage points). Several provisions of Massachusetts’ health reform initiative are targeted to workers in small firms (e.g., the expansion of the MassHealth Insurance Partnership Program and access to CommChoice). Further, the CommCare program is available to those who do not have access to employer-sponsored insurance coverage, which is more likely to be the case for workers in small firms. Consistent with that, uninsurance dropped substantially among workers without an ESI offer (down 15 percentage points).

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<sup>3</sup>The share of working-age adults in Massachusetts who were employed was stable at 64 percent in both fall 2006 and fall 2007 (and into spring 2008). Data are available at [http://lmi2.detma.org/Lmi/lmi\\_lur\\_a.asp](http://lmi2.detma.org/Lmi/lmi_lur_a.asp). Further, the Federal Reserve’s “Beige Book,” which provides an assessment of local economic conditions, reported that the economy for the Boston region was generally stable in 2007. See Federal Reserve Board. “The Beige Book: Federal Reserve Districts: First District—Boston.” November 28, 2007. <http://www.federalreserve.gov/FOMC/BEIGEBOOK/2007/20071128/1.htm>. Additional information on the limitations of the study design is provided in Long (2008).

{FIGURE 1} Impact of Health Reform on the Uninsurance Rate for Adults 18 to 64, by Population Subgroups



\* Fall 2007 is significantly different from Fall 2006 at the .05 level, two-tailed test.

<sup>^^</sup> Estimate for the fall 2007-fall 2006 difference for this subgroup is significantly different from the estimate for the comparison subgroup at the .05 level, two-tailed test (see Table 2).

Note: The estimates reported here are derived from the regression model outlined in Table 2.

{TABLE 2} Impact of Health Reform on the Uninsurance Rate for Adults 18 to 64, by Population Subgroups

	Unadjusted Impact			Regression-adjusted Impact
	Fall 2006	Fall 2007	Simple Difference	
<i>All Adults</i>	13.0%	7.1%	-5.8***	-5.6***
<b>Family Income<sup>#</sup></b>				
<i>Less than 300% of poverty</i>	23.8%	12.9%	-10.9***^^	-11.4***^^
<i>300% of poverty or more</i>	5.2%	2.9%	-2.3***	-2.5***
<b>Age</b>				
<i>Age 18 to 34</i>	22.9%	12.5%	-10.4***^^	-10.8***^^
<i>Age 35 to 64</i>	8.1%	4.3%	-3.8***	-3.7***
<b>Gender</b>				
<i>Male</i>	17.5%	8.6%	-8.9***^^	-9.0***^^
<i>Female</i>	8.8%	5.7%	-3.1***	-3.3***
<b>Race/ethnicity</b>				
<i>Non-White, non-Hispanic</i>	11.9%	7.9%	-4.1***	-4.0***
<i>Hispanic</i>	26.8%	12.6%	-14.2***^^	-10.6***^^
<i>White, non-Hispanic</i>	11.1%	6.3%	-4.8***	-5.2***
<b>Parent status</b>				
<i>Parent of one or more children under 18</i>	7.8%	4.5%	-3.3***^^	-3.7***^^
<i>Not a parent of one or more children under 18</i>	14.3%	9.3%	-5.0***	-7.9***
<b>Health status</b>				
<i>With reported health problems</i>	12.0%	5.5%	-6.5***	-7.1***
<i>Without reported health problems</i>	14.0%	8.8%	-5.2***	-5.1***
<b>Work status</b>				
<i>Currently working</i>	11.9%	6.4%	-5.5***	-5.7***
<i>Not currently working</i>	15.9%	9.2%	-6.7***	-7.3***
<b>Among those who are working, ESI offer status</b>				
<i>With an ESI offer</i>	3.0%	1.5%	-1.5***^^	-1.8%***^^
<i>Without an ESI offer</i>	35.0%	19.6%	-15.4***	-15.1%***
<b>Firm size</b>				
<i>Works for firm with 51 or more employees</i>	6.7%	3.7%	-3.0***	-3.4***^
<i>Works for firm with less than 50 employees</i>	21.0%	11.3%	-9.7***^	-9.6***
<i>Not currently working</i>	15.9%	9.2%	-6.7***	-7.3***
<b>Region of the state</b>				
<i>Greater Boston area</i>	11.2%	5.6%	-5.6***	-5.8***
<i>Rest of the state</i>	14.3%	8.3%	-6.0***	-6.2***

Source: 2006 and 2007 Massachusetts Health Reform Surveys, N=5945

Note: The regression-adjusted impacts are derived from regression models that control for age, gender, race/ethnicity, citizenship, marital status, parent status, education, literacy, employment, firm size, health status, disability status, whether the individual has one or more chronic conditions, family income, region in the state, and the following county characteristics: unemployment rate, number of physicians per 1000 population, number of hospital beds per 1000 population.

<sup>#</sup> The regression-adjusted estimate reported here differs from that in earlier work because of the way we estimated the models. In the earlier work, we estimated separate models for each subgroup; here we estimate a single regression model that allows for differences between the subgroups.

\* (\*\*) (\*\*\*) Difference is significantly different from zero at the .10 (.05) (.01) level, two-tailed test.

^ (^\*) (^\*\*) Estimate of the difference for this subgroup is significantly different from the estimate for the comparison subgroup (in bold) at the .10 (.05) (.01) level, two-tailed test.

Finally, we find no significant differences in the impacts of health reform in the greater Boston area (which includes Middlesex, Suffolk and Norfolk counties) and the remainder of the state.<sup>4</sup> Uninsurance was down by about 6 percentage points for adults across the two broad areas of the state between fall 2006 and fall 2007.

***The Remaining Uninsured.*** Despite the greater gains in insurance coverage among younger adults, males, and racial and ethnic minorities, among others, those adults continued to comprise a disproportionate share of uninsured adults in Massachusetts (table 3). Adults who were uninsured in fall 2007 were more likely than insured adults to be under age 35, to be male, to be non-white or Hispanic, and to be single. They were also more likely to be noncitizens and to have low levels of educational attainment.<sup>5</sup>

Uninsured adults were also more likely than insured adults to not be working in fall 2007. Among those who were working, uninsured adults were less likely to be working full-time and more likely to be working for small firms than were adults with insurance coverage. Uninsured adults were also much more likely to have incomes under 300 percent of poverty (77 percent of uninsured adults versus 40 percent of insured adults). As reported in Long (2008), most of those uninsured in fall 2007 had considered obtaining coverage through MassHealth, CommCare, or CommChoice, with many reporting that they were not eligible for that coverage. Eighty percent of uninsured adults reported that it would be difficult to come up with the funds needed to obtain health insurance in fall 2007.

## DISCUSSION

The expansion in health insurance coverage in Massachusetts in roughly the first year following the implementation of health reform reached across population groups in the state. Uninsurance fell among men and women, adults of different ages and different racial and ethnic backgrounds, worker and nonworkers, parents and childless adults, and adults in the greater Boston area and those in the rest of the state. Particularly strong gains are reported for adults who are the target populations for key elements of health reform, including lower-income adults, young adults, and adults working in firms with 50 or fewer employees. Nevertheless, insurance coverage still lagged behind for many in those groups in fall 2007. As a result, moving closer to universal coverage in the state will require expanding coverage to populations that traditionally have been difficult to cover, including young, male, single, and healthy adults. It remains to be seen whether the individual mandate, which went into effect after the fall 2007 survey was completed, has led to expanded coverage for those populations. Another round of the survey, planned for fall 2008, will address this issue as part of the ongoing evaluation of health reform in Massachusetts.

## REFERENCES

- Long, S. K. 2008. "On the Road to Universal Coverage: Impacts of Reform in Massachusetts at One Year." *Health Affairs*, web exclusive, 27(4): w270–w284.
- Mohr, L. B. 1995. *Impact Analysis for Program Evaluation*, 2nd ed. Thousand Oaks, CA: Sage Publications.
- StataCorp. 2007. *Stata Statistical Software: Release 10*. College Station, TX: StataCorp LP.

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<sup>4</sup>Unfortunately, we are not able to examine changes in uninsurance across smaller areas within the state.

<sup>5</sup>The survey does not attempt to determine whether noncitizens are undocumented immigrants.

{TABLE 3} Characteristics of Insured and Uninsured Adults in Fall 2007

	<i>Insured</i>	<i>Uninsured</i>	<i>Simple Difference</i>
<b>Age (%)</b>			
18 to 25 years	14.5%	35.0%	0.204***
26 to 34 years	18.0%	24.7%	0.066**
35 to 49 years	39.4%	26.7%	-0.128***
50 to 64 years	28.0%	13.6%	-0.145***
<b>Female (%)</b>	52.0%	41.1%	-0.110***
<b>Race/ethnicity (%)</b>			
White, non-Hispanic	79.4%	69.8%	-0.098***
Black, non-Hispanic	6.0%	8.5%	0.024
Hispanic	6.0%	11.7%	0.057***
<b>Citizenship (%)</b>			
U.S. born citizen	83.8%	80.1%	-0.037
Foreign born citizen	9.7%	9.0%	-0.007
Non-citizen	6.5%	10.9%	0.044*
<b>Marital status (%)</b>			
Married	60.0%	26.6%	-0.334***
Living with a partner	7.5%	19.9%	0.124***
Widowed, divorced, separated	10.1%	10.8%	0.007
Never married	22.5%	42.8%	0.203***
<b>Any children aged 18 or younger in family (%)</b>			
Yes	45.1%	27.7%	-0.174***
No	54.9%	72.3%	0.174***
<b>Educational attainment (%)</b>			
Less than high school	6.5%	15.2%	0.087***
High school graduate	50.3%	69.5%	0.192***
College graduate	43.2%	15.3%	-0.279***
<b>Employed (%)</b>			
Working full time (>35 hours)	54.1%	40.8%	-0.133***
Working part time	21.2%	27.0%	0.058*
Not working	24.5%	32.2%	0.076***
<b>Among those who are employed, firm size (%)</b>			
Self-employed	11.0%	25.3%	0.143***
Less than 51 workers	24.1%	40.4%	0.163***
51 workers or more	64.9%	34.3%	-0.306***
<b>Family income (%)</b>			
Less than 100% of FPL	14.9%	22.7%	0.078***
100 to 299% of FPL	25.3%	54.2%	0.289***
300 to 499% of FPL	23.4%	17.9%	-0.056**
500% of FPL or more	36.4%	5.2%	-0.312***
<b>Current health status (%)</b>			
Very good or excellent	62.0%	56.0%	-0.060**
Good	26.2%	29.5%	0.032
Fair or poor	11.8%	14.5%	0.028
<b>Has work limitation (%)</b>	16.8%	14.5%	-0.023
<b>Has a chronic health condition or problem (%)</b>	49.4%	36.2%	-0.133***
<b>Region of the State (%)</b>			
Greater Boston area	43.4%	33.3%	-0.101**
Rest of state	56.6%	66.7%	0.101**
<b>Sample Size</b>	2536	401	

Source: 2007 Massachusetts Health Reform Survey

\* (\*\*) (\*\*\*) Difference is significantly different from zero at the .10 (.05) (.01) level, two-tailed test.