Estimates of Health Insurance Coverage in Massachusetts from the Massachusetts Health Insurance Survey: An Update for 2010

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Introduction

Massachusetts enacted landmark health care reform legislation in April 2006 with the goal of achieving near universal insurance coverage. The law, based on shared individual, employer, and government responsibilities, incorporates Medicaid expansions (called MassHealth in Massachusetts), subsidized private insurance coverage, insurance market reforms, a new purchasing pool, requirements for employers, and an individual mandate.1 Based on the 2009 Massachusetts Health Insurance Survey (MHIS), the overall uninsurance rate in the state was estimated to be 2.7%.² This policy brief provides an update on the estimates of the uninsurance rate in Massachusetts as of Spring 2010. The primary data source for this work is the 2008, 2009, and 2010 MHIS. We also present uninsurance estimates based on other surveys fielded in Massachusetts as a comparison to the estimates from the MHIS.
The Massachusetts Health Insurance Survey and Other Surveys in Massachusetts

Massachusetts Health Insurance Survey

The MHIS provides information on health insurance coverage and access to and use of health care for the non-institutionalized population in Massachusetts. A general overview of the MHIS is provided below; more detailed information is available at www.mass.gov/dhcfp.

In order to ensure that the survey covers nearly all residents of Massachusetts (including households without a landline telephone), a dual sample frame was employed, combining a random-digit-dial (RDD) landline telephone sample with an address-based sample. The survey, which is available in English, Spanish, and Portuguese, is conducted via telephone, web, and mail. It takes, on average, about 19 minutes to complete.

In the survey, an adult member of the household responds to questions about health insurance coverage and demographic information for all members of the household. More detailed socioeconomic characteristics and health care information are collected for one randomly selected household member (referred to as the target person in the household) and other members of his or her family who are residing in the household. The tabulations reported here are based on the household target person.

The 2010 survey was fielded between March and June. Surveys were completed with 4,478 Massachusetts households. The margin of error due to sampling at the 95% confidence interval is +/- 1.7 percentage points for estimates based on the full sample. Estimates for subgroups of the total population, as they are based on smaller sample sizes, will have a larger margin of error. The response rate was 49% for the RDD-sample and 37% for the address-based sample, for a combined response rate of 40%. The address-based sample provides more complete coverage of the Massachusetts population by capturing households without landline telephones (which are largely cell phone-only households).
Other Massachusetts Surveys

Beyond the MHIS, estimates of the uninsurance rate in Massachusetts are available from a number of different surveys. These include several national surveys that are conducted annually: the U.S. Census Bureau’s Current Population Survey (CPS); the Centers for Disease Control and Prevention’s (CDC) Behavioral Risk Factor Surveillance System (BRFSS), conducted by the Massachusetts Department of Public Health in Massachusetts; the CDC’s National Health Interview Survey (NHIS); and, from 2008, the Census Bureau’s American Community Survey (ACS); as well as the Massachusetts Health Reform Survey (MHRS). The latter, which is funded by the Blue Cross Blue Shield of Massachusetts Foundation, has been conducted every year since 2006.

A number of studies have compared the relative strengths and weaknesses of the national surveys for estimating state uninsurance rates in general, while a recent DHCFP policy brief focused more specifically on the issues in estimating uninsurance rates in Massachusetts using national surveys, the MHIS, and the MHRS. DHCFP revised the MHIS in 2008 to address many of the limitations of other surveys (including an earlier version of the MHIS) in estimating uninsurance rates in Massachusetts. Key changes included expanding the survey to include all residential households (not just those with a landline telephone) and modifying the survey instrument to capture more of the health insurance and health care options in the state.
Uninsurance in Massachusetts

In 2010, the uninsurance rate in Massachusetts was estimated to be 1.9% (95% CI: ± 0.5 percentage points). This represents a significant decline from 2008 and 2009, when the uninsurance was at 2.6% (95% CI: ±0.8 percentage points) and 2.7% (95% CI: ± 0.6 percentage points), respectively (Figure 1). The drop was largely due to a decrease in uninsurance among children. The uninsurance rate for children in 2010 (defined as persons less than age 19) was estimated to be less than 1% [0.2% (95% CI: ± 0.4 percentage points)], which is significantly lower than last year’s estimate of 1.9% (95% CI: ± 1.2 percentage points).

Although uninsurance was higher among non-elderly adults than others in the state, at 2.9% (95% CI: ± 0.8 percentage points) in 2010, that level was not significantly different than the uninsurance rate for non-elderly adults in 2008 and 2009, when the rate was at 3.7% (95% CI: ± 1.1 percentage points) and 3.5% (95% CI: ± 0.7 percentage points), respectively. Despite the economic downturn, there was no evidence of a loss of insurance coverage among working-age adults in Massachusetts. There is considerable consistency in the uninsurance rate from 2008 to 2010 for non-elderly adults by family income level, work status, and education (Figure 2). The one exception is non-elderly adults with family income less than 300% of federal poverty level (FPL), where the uninsurance rate fell from 8.2% to 5.7% between 2008 and 2010.

Figure 1: Uninsurance Rate in Massachusetts, 2008 to 2010

* (**) (***) Estimate is significantly different from the prior year at the .10 (.05) (.01) level, two-tailed test.
# (###) (###) The 2010 estimate is significantly different from the 2008 estimate at the .10 (.05) (.01) level, two-tailed test.
The minimal impact of the economic downturn on insurance coverage for non-elderly adults between 2008 and 2010 (Figure 2) is not necessarily surprising. Not all workers with employer-sponsored insurance (ESI) coverage who lose their jobs become uninsured immediately. Some will temporarily extend their ESI coverage,9 others will obtain coverage through a spouse or directly purchase coverage on their own, and others will enroll in public programs. Similarly, the impact of the economic downturn on employers offering coverage will lag, as employers typically first search for ways to reduce costs rather than eliminating coverage altogether.

Figure 2: Uninsurance Rate in Massachusetts for Non-elderly Adults, by Economic Circumstances, 2008 to 2010

# (#) (###) The 2010 estimate is significantly different from the 2008 estimate at the .10 (.05) (.01) level, two-tailed test.
As shown in Figure 3, there was a shift in coverage type over time, with Medicare and public and other coverage increasing, while employer-sponsored insurance fell between 2009 and 2010. For the overall population, employer-sponsored coverage fell from 67.0 percent in 2009 to 65.1 percent in 2010. That loss of coverage was more than offset by the gains in Medicare (from 15.3% to 16.4%) and public or other coverage (from 15.0% to 16.6%).

Figure 3: Type of Insurance Coverage in Massachusetts, 2008 to 2010

Note: Insurance coverage is based on the hierarchy: Medicare, employer-sponsored insurance, public or other coverage.
* (**) (***) Estimate is significantly different from the prior year at the .10 (.05) (.01) level, two-tailed test.
# (##) (###) The 2010 estimate is significantly different from the 2008 estimate at the .10 (.05) (.01) level, two-tailed test.
Comparing Uninsurance Estimates from the MHIS to Other Surveys

There are no estimates of the uninsurance rate in Massachusetts for 2010 from any other surveys; however, the uninsurance estimates from the MHIS in 2009 can be compared to estimates from other surveys for that year. As shown in Figure 4, estimates of the uninsurance rate in 2009 in Massachusetts from the MHIS were generally lower than those obtained from most other surveys. For the total population, this comparison is currently limited to the ACS, CPS, and NHIS where estimates of the uninsurance rate ranged from 3.7% to 4.4%, as compared to 2.7% in the MHIS.

For non-elderly adults, where there are more data sources available for comparison, the estimates of the uninsurance rate ranged from 3.4% to 5.9%, with the MHIS at 3.5%. (One factor that will create some small differences in the latter estimates: The MHIS defines non-elderly adults as persons ages 19 to 64, while the other surveys include 18 year-olds in the non-elderly adult category.)

Figure 4: Comparison of Estimates of the Uninsurance Rate in Massachusetts from the MHIS and Other Surveys, 2009

Differences in estimates of the uninsurance rate across surveys are not unusual as surveys differ on many dimensions including the questions that are asked, survey design and fielding strategies, data processing, and survey time frames. In addition, surveys are based on samples of the Massachusetts population, which, by definition, are subject to error. Consequently, different surveys cannot be expected to yield identical estimates of the uninsurance rate. As is true for 2009, a range of estimates of the uninsurance rate in Massachusetts have been reported from the different surveys in earlier years, as shown in Figure 5 for the overall population and in Figure 6 for non-elderly adults.

Over time, estimates of the uninsurance rate based on the CPS have tended to be higher than those of other surveys in Massachusetts. This pattern is consistent with studies for other states, which generally find uninsurance estimates higher in the CPS than in state-specific surveys. A key difference between the CPS and the other surveys reported here is in the insurance question that is used. The CPS, which is fielded in March of each year, asks about insurance coverage over the prior calendar year, while the other surveys ask about insurance coverage at the time of the survey. However, the available evidence suggests that respondents are not reporting coverage for the prior calendar year accurately in the CPS, raising questions about the appropriate interpretation of the insurance measure in the CPS.

Figure 5: Trends in Uninsurance for All Ages in Massachusetts from the MHIS and Other Surveys, 2006 to 2010

While the specific estimate of the change in uninsurance between 2006 and 2009 varies depending on the survey, all of the available surveys show evidence of a substantial drop in uninsurance in Massachusetts since health reform began in 2006. For the overall population, the CPS shows a drop of 6 percentage points in the uninsurance rate from 2006, while the NHIS shows a drop of 4 percentage points over the same period. For non-elderly adults, the estimate of the drop in the uninsurance rate ranges from 5 percentage points (BRFSS) to 8 percentage points (MHRS and CPS), with the NHIS showing a 5 percentage point drop.

These findings stand in contrast to trends in the nation as a whole, where the uninsurance remained at high levels and increased slightly between 2006 and 2009 (Figure 7 and 8). The NHIS shows an increase in the overall uninsurance rate from 14.8% in 2006 to 15.4% in 2009, while the increase in the CPS was from 15.8% to 16.7% over the period. Consistent with the trends for the overall US population, both the NHIS and the CPS show increases in the uninsurance rate for non-elderly adults between 2006 and 2009, with the NHIS showing an increase from 19.8% to 21.2% and the CPS from 20.2% to 22.3%.
Figure 7: Trends in Uninsurance for All Ages in the United States and Massachusetts from National Survey Data, 2006 to 2009


Figure 8: Trends in Uninsurance for Non-elderly Adults in the United States and Massachusetts from National Survey Data, 2006 to 2009

Discussion

Massachusetts is now in the beginning of the fifth year of its ambitious health reform initiative, with evidence of strong and continued gains in insurance coverage from the MHIS and the other surveys that have been conducted in Massachusetts. The 2010 MHIS shows uninsurance in Massachusetts at a historically low level—1.9% for the overall population. The rate is 0.2% for children, and 2.9% for non-elderly adults. The findings from the MHIS from 2008 to 2010 suggest that public coverage (including Medicare) have offset the loss of employer-sponsored coverage associated with the economic downturn.

Estimates of the 2010 uninsurance rate in Massachusetts from other sources will not be available until 2011. However, estimates of the uninsurance rate for 2009 are generally similar in the MHIS and other available surveys, with the MHIS tending to be somewhat lower than estimates from other surveys. While the specific value of the estimate of the uninsurance rate for Massachusetts varies across data sources, national surveys (the CPS, the NHIS, and the ACS) show the uninsurance rate in Massachusetts below that of the other 49 states and the District of Columbia.
Endnotes

1 A detailed description of the elements of Massachusetts' health reform initiative is provided elsewhere, see, for example, J.E. McDonough et al. “The Third Wave of Massachusetts Health Care Access Reform.” Health Affairs 25 (2006): w420-w431 (published on-line 14 September 2006; 10.1377/hlthaff.25.w420).


4 While most households are single-family households, some households include multiple families and/or families and unrelated individuals.

5 This is the same months as the 2009 MHIS but bit earlier than the 2008 MHIS, which was fielded between June and August.

6 For an overview of work on this issue, see www.shadac.org/category/topic/measures-insurance-coverage.

7 Long, SK, S Zuckerman, T Triplett, A Cook, K Nordahl, T Siegrist, and C Wacks. “Estimates of the Uninsurance Rate in Massachusetts from Survey Data: Why Are They So Different?” Massachusetts Division of Health Care Finance and Policy, August 28, 2008. www.mass.gov/dhcfp This policy brief did not include information on the NHIS and ACS. The NHIS (http://www.cdc.gov/nchs/nhis.htm) provides a representative sample of the civilian, non-institutionalized population in the U.S., with representative samples drawn from every state. While the survey is not designed to produce direct state-specific estimates, the sample designs of the surveys provide representative samples for large states, including Massachusetts. The ACS (www.census.gov/acs/www/) is part of the Census Bureau's reengineered decennial census program, collecting information every year instead of every ten years. It is a mail survey that collects and produces population and housing information. A question on health insurance coverage was added in 2008. The ACS is designed to provide annual information for the nation, 50 states and the District of Columbia, congressional district and counties, and places and metropolitan areas with populations of 65,000 or more, as well as data for smaller areas using multiple years of data.

8 The economic downturn should have little impact on the insurance coverage of the elderly since nearly all are covered by Medicare.

9 In an effort to provide support for continuing employer-sponsored coverage in the recession, the American Recovery and Reinvestment Act of 2009 (ARRA) provides for premium reductions under the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA). Eligible individuals pay 35 percent of their COBRA premiums, with the remaining 65 percent is reimbursed to the coverage provider through a tax credit. See http://www.dol.gov/esa/cobra.html for additional information on this program. In addition to that program, Massachusetts' Medical Security Program (MSP) provides assistance paying COBRA premiums or transitional private insurance coverage for newly unemployed workers collecting unemployment benefits.


