REACHING THE REMAINING UNINSURED IN MASSACHUSETTS: CHALLENGES AND OPPORTUNITIES

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EXECUTIVE SUMMARY

While Massachusetts has the lowest uninsurance rate in the nation following its 2006 health reform initiative, some residents of the state continue to go without health insurance coverage. Their lack of insurance places them at financial risk and, when they forgo needed care to avoid those costs, at risk for poor health outcomes. This analysis examines the circumstances of non-elderly uninsured persons in the state during the 2008–2010 period and suggests several strategies for reaching out to the remaining uninsured. In particular, the study finds that efforts targeted at specific groups of individuals and geographic areas could help to further expand insurance coverage in Massachusetts now and under the Affordable Care Act (ACA).

Key findings include:

- The remaining uninsured are disproportionately younger, male, Hispanic, and non-citizens.
- Many of the uninsured have low levels of educational attainment and limited English proficiency.
- The majority (59.2 percent) of the uninsured were working, including 34.9 percent who were
 working full-time. However, less than one-third of those uninsured workers had access to
 employer-sponsored insurance (ESI). Of those who did have access to ESI, most did not take
 up that offer of coverage because of cost. Overall, the cost of coverage was the most common
 reason given for being uninsured.
- Uninsured adults are more likely than insured adults to have difficulty getting a doctor's appointment and to have problems accessing primary care. They are also more likely to use the emergency department for non-emergency care.
- Uninsured adults are more likely than insured adults to have medical debt of \$10,000 or more and to have trouble paying other bills.
- To a large extent, uninsured adults and children are concentrated in a subset of communities.

Suggested outreach strategies include:

- Outreach efforts that target specific groups of uninsured individuals, including younger adults, males, and Hispanics.
- Efforts that address literacy and language issues.
- Efforts that reach out to low-income uninsured workers who, because of an offer of ESI, are not currently eligible for Commonwealth Care but appear likely to be eligible for Medicaid as part of the ACA expansion.
- Efforts outside the health care system, because many uninsured do not have a usual source of care.
- Efforts that target specific communities across the state that have higher concentrations of uninsured adults and children.

Since nearly all of the uninsured are in families whose incomes are below 400 percent of the poverty level and since the majority are citizens, most will likely be eligible for Medicaid or subsidized coverage under the ACA, and many may be eligible for MassHealth or Commonwealth Care now. By combining geographic targeting with population targeting, there is the potential for particularly effective outreach efforts that focus on the needs of uninsured individuals within at-risk communities. The potential gains of expanding insurance coverage among the remaining uninsured are substantial, as doing so offers the possibility of more timely and affordable health care for what is often a vulnerable population, with much of the cost of the expansion funded with federal dollars.

INTRODUCTION

In 2006, Massachusetts enacted an ambitious health care reform initiative, titled An Act Providing Access to Affordable, Quality, Accountable Health Care, in a push toward near-universal coverage. Since implementation of this reform, uninsurance in Massachusetts has declined significantly and is well below that of the nation as a whole—3.9 percent for Massachusetts in 2011, as compared with 15.1 percent for the nation.^{1,2} Massachusetts's low uninsurance rate reflects the effects of the individual mandate and expanded coverage options under reform, together with an ongoing effort to provide the remaining uninsured with affordable coverage, particularly employer-sponsored insurance (ESI). Since 2006, Massachusetts has invested more than \$20 million in a statewide outreach and enrollment effort that has included both public and private initiatives.^{3,4}

Massachusetts residents are once again facing changes in the available health insurance options, as implementation of national health reform begins under the federal Patient Protection and Affordable Care Act (ACA) of 2010. The ACA, which relied on the Massachusetts reform as a template, utilizes Medicaid expansions, subsidies for private insurance, health insurance exchanges, insurance market reforms, requirements for employers, and an individual coverage mandate, among other changes, in a push for expanded health insurance coverage for the nation. While there are many similarities between the Massachusetts health reform and the ACA, there are also important differences. For example, although both include a requirement for individuals to obtain health insurance if affordable coverage is available to them, the ACA requires this of all persons while the Massachusetts law requires it only of adults. Furthermore, while both require employers above a certain size to offer coverage to their employees or face penalties, the specifics of the requirements, which size employers they apply to, and the severity of the penalties differ. And although both expand Medicaid coverage and subsidize coverage for low-income populations to help make insurance more affordable, the specifics here differ as well.⁵ Of particular relevance to the uninsured, the ACA expands Medicaid eligibility to nearly all persons with family incomes up to 138 percent of the federal poverty level (FPL)⁶ and provides subsidies for private coverage for those with incomes up to 400 percent of the FPL. Continued outreach and enrollment efforts will

¹ Cohen, R., and M. Martinez. 2012. "Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, 2011." Available at: http://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201206.pdf. Accessed October 4, 2012.

² These estimates rely on the National Health Interview Survey rather than Massachusetts surveys to provide a national comparison to estimates for Massachusetts.

Raymond, A.G. 2012. "Business Community Participation in Health Reform: The Massachusetts Experience." Boston, MA: Community Catalyst. Available at: http://www.communitycatalyst.org/doc_store/publications/biz-community-health-reform_ma-experience.pdf. Accessed October 4, 2012.

⁴ Stoll, B. 2012. "Effective Education, Outreach, and Enrollment Approaches for Populations Newly Eligible for Health Coverage." Boston, MA: Blue Cross Blue Shield of Massachusetts Foundation. Health Reform Toolkit Series. Available at: http://www.rwjf.org/files/research/74070mass.pdf. Accessed September 2, 2012.

For a comparison of the ACA and the 2006 Massachusetts legislation, see Seifert, R.W., and A.P. Cohen. 2011. "Re-forming Reform: What the Patient Protection and Affordable Care Act Means for Massachusetts." Boston, MA: Blue Cross Blue Shield of Massachusetts Foundation. Available at: http://masshealthpolicyforum.brandeis.edu/forums/Documents/IssueBrief_ReportFINAL.pdf. Accessed September 2, 2012.

⁶ The ACA establishes an eligibility standard of family income up to 133 percent of FPL for Medicaid for non-elderly adults, with a 5 percent income disregard.

be needed to explain the new coverage options available as the state moves forward with implementation of the ACA.

This brief focuses on those lacking health insurance coverage in Massachusetts after the 2006 reform initiative, examining their insurance status over time and highlighting the difficulties they face in accessing and affording health care. We also consider the potential impacts of changes being introduced in the state under the ACA.

Prior research on the uninsured in Massachusetts has focused on demographic and socioeconomic characteristics and, to a more limited extent given the paucity of available data, health care access and affordability. We update those analyses here using combined data from the 2008 to 2010 Massachusetts Health Reform Survey (MHRS), providing a larger sample of uninsured adults in the state than is available from any single year. Since the MHRS provides data for new cross-sectional samples each year, the combined 2008–2010 sample provides an average of the characteristics of the state's population over that period. To place the findings for Massachusetts in the context of the rest of the country, we use the 2010 American Community Survey (ACS) to compare uninsured persons (adults and children) in Massachusetts with uninsured in the nation as a whole. We also use geographic data from the ACS to map the distribution of the uninsured across communities in Massachusetts. A description of the data sources and methods is provided in the technical appendix.

Given that nearly all elderly persons are covered by the Medicare program, our focus here is on uninsured children and non-elderly adults in the state. We report on uninsured children using the ACS and uninsured non-elderly adults using the ACS and the MHRS. We begin with the analysis based on the MHRS, which provides data on insurance coverage at the time of the survey and over the year prior to the survey for non-elderly adults in the state. The ACS is limited to insurance coverage at the time of the survey.

⁷ Long, S.K., L. Phadera, and V. Lynch. 2010. "Massachusetts Health Reform in 2008: Who Are the Remaining Uninsured Adults?" Minneapolis, MN: State Health Access Reform Evaluation (August). Available at: http://www.rwjf.org/files/research/67248. MassReform2008UninsuredBrief.pdf. Accessed October 4, 2012.

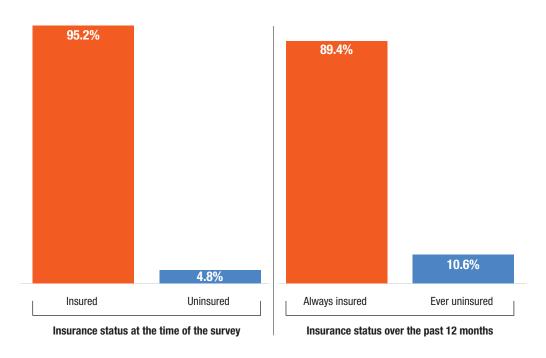
⁸ Long, S.K., K. Stockley, and H. Dahlen. 2012. "Health Reform in Massachusetts as of Fall 2010: Getting Ready for the Affordable Care Act and Addressing Affordability." Boston, MA: Blue Cross Blue Shield of Massachusetts Foundation. Available at: http://www.urban.org/UploadedPDF/412491-Health-Reform-in-Massachusetts-as-of-Fall-2010.pdf. Accessed October 4, 2012.

⁹ We rely on the MHRS rather than the Massachusetts Health Insurance Survey (MHIS) because of its greater depth of information on insurance coverage, health care access and use, and health care affordability, as well as its oversample of uninsured persons.

WHO ARE THE UNINSURED NON-ELDERLY ADULTS IN MASSACHUSETTS?

Over the 2008–2010 period, nearly all (95.2 percent) of non-elderly adults in Massachusetts were insured at the time they were surveyed, and most (89.4 percent) were insured for the full year prior to the survey (Figure 1).¹⁰ Only 10.6 percent of the adults had some period of uninsurance over the past year. Among those who were uninsured at the time of the survey, about half had been uninsured for less than a year (hereafter referred to as "short-term uninsured") and half were uninsured for a year or more (hereafter "long-term uninsured") (data not shown).

FIGURE 1: HEALTH INSURANCE COVERAGE AMONG NON-ELDERLY ADULTS AGED 19 TO 64 IN MASSACHUSETTS, 2008–2010



Source: 2008–2010 Massachusetts Health Reform Survey (MHRS).

¹⁰ In each of the MHRS survey years (2008, 2009, and 2010), individuals were asked about their current circumstances (i.e., as of the interview date) and their circumstances over the year prior to the interview.

TABLE 1: CHARACTERISTICS OF INSURED AND UNINSURED NON-ELDERLY ADULTS 19 TO 64 IN MASSACHUSETTS, 2008-2010

	ALL N	ON-ELDERLY ADU	ILTS	NON-ELDERLY AD	OULTS WHO WER	
	ALWAYS INSURED OVER THE YEAR	EVER UNINSURED OVER THE YEAR	DIFFERENCE	UNINSURED FOR LESS THAN ONE YEAR	UNINSURED FOR ONE YEAR OR MORE	DIFFERENCE
NUMBER (WEIGHTED)	3,566,667	424,597		94,605	96,688	
AGE (%)						
19 to 25 years	11.9	30.9	-18.9***	37.9	32.8	5.1
26 to 34 years	17.2	22.6	-5.4***	16.9	20.2	-3.3
35 to 49 years	38.4	28.9	9.6***	26.0	27.9	-1.9
50 to 64 years	32.4	17.7	14.8***	19.1	19.1	0.0
RACE/ETHNICITY (%)						
White, non-Hispanic	81.2	67.7	13.5***	75.3	72.1	3.3
Hispanic	6.9	14.1	-7.2***	7.9	14.2	-6.3**
Other or multiple races, non-Hispanic	11.8	18.1	-6.3***	16.7	13.7	3.1
SEX (%)						
Female	52.8	37.5	15.3***	37.8	20.9	16.9***
Male	47.2	62.5	-15.3***	62.2	79.1	-16.9***
CITIZENSHIP STATUS (%)						
Citizen	94.6	90.1	4.5***	92.8	84.6	8.1**
Not a citizen	5.4	9.9	-4.5***	7.2	15.4	-8.1**
MARITAL STATUS (%)						
Married	60.4	31.1	29.2***	32.7	22.8	9.9**
Lives with partner	6.8	13.1	-6.3***	8.7	13.3	-4.5*
Widowed, divorced, separated	11.7	11.8	-0.1	10.0	15.0	-5.0*
Never married	21.2	43.9	-22.8***	48.6	48.9	-0.3
CHILD UNDER 19 PRESENT IN FA	MILY (%)					
Yes	44.9	29.4	15.5***	29.3	22.6	6.7*
No	55.1	70.6	-15.5***	70.7	77.4	-6.7*
EDUCATIONAL ATTAINMENT (%)						
Less than high school	5.2	8.3	-3.1***	6.5	15.1	-8.7***
High school graduate or some college	46.1	68.7	-22.6***	68.7	65.1	3.6
College graduate	48.7	23.1	25.6***	24.8	19.7	5.1
WORK STATUS (%)						
Working full time	53.4	34.9	18.5***	30.9	42.4	-11.5**
Working part time	19.5	24.3	-4.8**	26.2	23.0	3.2
Not working	27.1	40.8	-13.7***	42.9	34.6	8.3*
EMPLOYED IN A FIRM WITH FEWER THAN 51 EMPLOYEES (%)	15.1	21.2	-6.1***	24.8	26.2	-1.4

continued

TABLE 1: (continued) CHARACTERISTICS OF INSURED AND UNINSURED NON-ELDERLY ADULTS 19 TO 64 IN MASSACHUSETTS, 2008-2010

	ALL NO	ON-ELDERLY ADU	LTS	NON-ELDERLY AD AT THE T	ULTS WHO WER	
	ALWAYS INSURED OVER THE YEAR	EVER UNINSURED OVER THE YEAR	DIFFERENCE	UNINSURED FOR LESS THAN ONE YEAR	UNINSURED FOR ONE YEAR OR MORE	DIFFERENCE
HEALTH STATUS (%)						
Very good or excellent	64.9	57.3	7.6***	57.9	49.1	8.8*
Good	22.6	26.4	-3.8*	27.9	31.4	-3.5
Fair or poor	12.4	16.3	-3.8**	14.1	19.4	-5.3
HAS A CHRONIC CONDITION OR IS PREGNANT (%)	53.1	45.3	7.8***	47.8	39.1	8.7*
HAS A WORK LIMITATION	17.8	19.5	-1.6	16.3	20.1	-3.9
FAMILY INCOME RELATIVE TO T	HE FEDERAL POVER	TY LEVEL (FPL) (9	%)			
Less than 100%	13.1	24.9	-11.8***	22.4	30.2	-7.8*
100 to 149%	7.4	17.4	-10.1***	18.1	13.8	4.3
150 to 199%	6.6	14.0	-7.4***	16.2	15.6	0.6
200 to 299%	11.2	16.2	-5.0***	17.8	18.9	-1.1
300 to 399%	10.8	10.9	-0.1	9.3	10.1	-0.8
400% or more	50.9	16.5	34.4***	16.1	11.3	4.8
SAMPLE SIZE	8,559	1,626		562	547	

Source: Urban Institute analysis of combined 2008-2010 Massachusetts Health Reform Survey (MHRS). Note: FPL is federal poverty level. Family is defined as the health insurance unit (HIU).

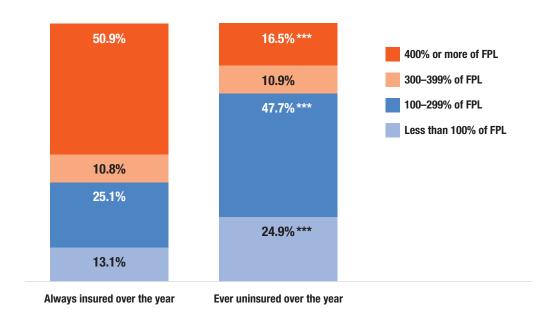
Characteristics of the Uninsured Adults. As a group, the adults in Massachusetts who were ever uninsured or were uninsured at the time of the survey in 2008–2010 were quite different from the group with health insurance coverage. For example, the uninsured adults were much more likely to be younger, male, and single and to have a lower income than those with full-year insurance coverage (Table 1). Almost twice as many of the uninsured adults were living below the FPL (24.9 versus 13.1 percent), and almost twice as many had incomes between one and three times the FPL (47.7 versus 25.1 percent) (Figure 2). Relatively few of the uninsured adults had incomes at or above 400 percent of the FPL (16.5 percent). Thus most of the uninsured are likely to become eligible for Medicaid if their income is low enough or for subsidies for private coverage under the ACA if they do not have an affordable ESI offer. (The latter appears to be the case for many low-income workers, as discussed below.) In addition, it is likely that many may already be eligible for Medicaid or Commonwealth Care, pointing to a further need for outreach now.

Consistent with their lower incomes, the adults who were uninsured over the year reported lower educational attainment (23.1 versus 48.7 percent with a college degree) and less employment than those insured for the full year (34.9 versus 53.4 percent working full-time). However, the majority of the uninsured, like the majority of the insured, were working (59.2 and 72.9 percent,

^{*(**)(***)} Significantly different from zero at the .10 (.05) (.01) level, two-tailed test.

respectively). The uninsured were also more likely to report being in fair or poor health than were insured adults (16.3 versus 12.4 percent).

FIGURE 2: FAMILY INCOME RELATIVE TO THE FEDERAL POVERTY LEVEL FOR INSURED AND UNINSURED NON-ELDERLY ADULTS AGED 19 TO 64 IN MASSACHUSETTS, 2008–2010



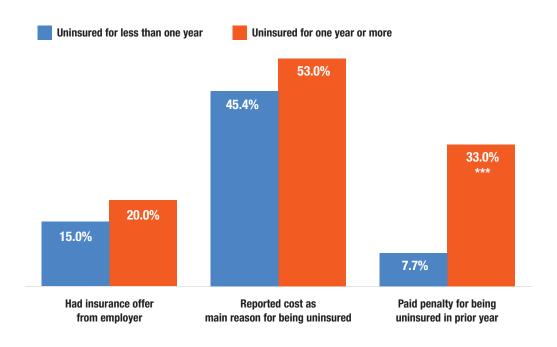
Source: 2008–2010 Massachusetts Health Reform Survey (MHRS). Note: FPL is the federal poverty level.

When we look within the uninsured population in Massachusetts at those who have been uninsured for a year or more as compared with those with a shorter period of uninsurance, we find significant differences that generally mirror those between uninsured and insured adults. Because of small sample sizes for this part of the analysis, we are only able to detect relatively large differences between short-term and long-term uninsured adults with confidence. For example, the long-term uninsured adults were much more likely to be male and unmarried and to have lower incomes and lower levels of educational attainment. However, the long-term uninsured were much more likely than the short-term uninsured to be employed full-time (42.4 versus 30.9 percent). Relatively few of the short- and long-term uninsured had access to employer-sponsored insurance (15.0 versus 20.0, respectively) (Figure 3). Of those with family income below 300 percent of the FPL, 20.5 percent of the long-term uninsured adults received an ESI offer, as compared with 16.4 percent of the short-term uninsured (data not shown). This difference is not statistically significant. Note that access to coverage through an employer would make these individuals ineligible for Commonwealth Care; however, many of those with incomes below 138 percent of the FPL would become eligible for Medicaid under the ACA.

^{* (**) (***)} Significantly different from short-term uninsured adults at the .10 (.05) (.01) level, two-tailed test.

The majority of the short- and long-term uninsured with an ESI offer reported that they did not take up that offer because of cost (data not shown), and in both groups, cost was the most common reason cited for being uninsured. One-third (33.0 percent) of the long-term uninsured reported that they had paid the penalty required under the individual mandate for not having coverage in Massachusetts, as compared with 7.7 percent of the short-term uninsured. Uninsured individuals with income below 150 percent of the FPL, a group that includes more than 40 percent of the uninsured in the sample, are not required to pay the penalty, and other individuals can apply for an exemption to the penalty. The state also provides a three-month grace period in which an individual can be uninsured without a penalty.

FIGURE 3: EMPLOYER OFFER OF INSURANCE, REASON FOR UNINSURANCE, AND PAYMENT OF PENALTY FOR BEING UNINSURED AMONG NON-ELDERLY ADULTS AGED 19 TO 64 WHO WERE UNINSURED AT THE TIME OF THE SURVEY IN MASSACHUSETTS, 2008–2010



 $Source: 2008-2010 \ Massachusetts \ Health \ Reform \ Survey \ (MHRS).$

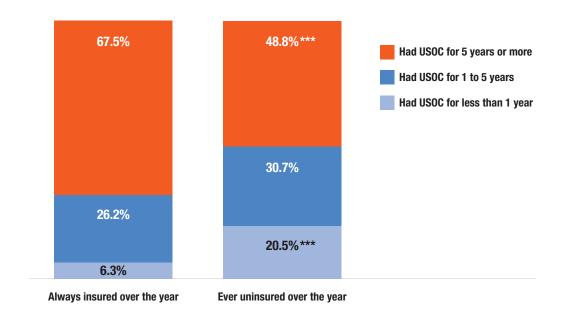
^{* (**) (***)} Significantly different from short-term uninsured adults at the .10 (.05) (.01) level, two-tailed test.

¹¹ This is roughly consistent with data from the Massachusetts Health Connector and Department of Revenue for 2009, the midpoint for our sample period, which reports that 53 percent of uninsured tax filers, a subset of uninsured adults in the state, had family income below 150 percent of the FPL. For more information, see Massachusetts Health Connector and the Department of Revenue. 2011. "Data of the Individual Mandate: Tax Year 2009." Boston, MA: Massachusetts Health Connector and the Department of Revenue. Available at: http://www.mass.gov/dor/docs/dor/health-care/2011/2009-health-care-report.pdf. Accessed October 4, 2012.

Finally, the long-term uninsured were also more likely to be non-citizens than were adults uninsured for less than a year (15.4 percent vs. 7.2 percent), probably reflecting the more limited coverage options for some non-citizens. Undocumented immigrants, in particular, are ineligible for coverage under MassHealth or Commonwealth Care. However, the majority of the uninsured, including the majority of the long-term uninsured, are citizens and legal immigrants, and will likely be eligible for the coverage expansions under the ACA.

Connections to the Health Care System. Despite their somewhat poorer health status (and implied greater need for care), uninsured non-elderly adults reported more limited connections to the health care system than did those with full-year insurance coverage (Table 2). For example, the uninsured adults were less likely to have a usual source of care that they saw when they needed care or advice about their health (68.1 versus 93.5 percent), and those who did have a usual source of care were less likely to rely on a doctor's office (62.2 versus 81.6 percent) and more likely to rely on a community health center (23.2 versus 9.1 percent). Furthermore, the uninsured who reported having a usual source of care were much less likely than their insured counterparts to have a long-term relationship with that provider (Figure 4). This suggests that even the uninsured with a usual source of care are more weakly connected to the health care system and have less reliable relationships with providers than do insured adults.

FIGURE 4: LENGTH OF RELATIONSHIP WITH USUAL SOURCE OF CARE FOR INSURED AND UNINSURED NON-ELDERLY ADULTS AGED 19 TO 64 IN MASSACHUSETTS WHO HAD A USUAL SOURCE OF CARE, 2008–2010



Source: 2008–2010 Massachusetts Health Reform Survey (MHRS).

Note: USOC is usual source of care.

^{* (**) (***)} Significantly different from short-term uninsured adults at the .10 (.05) (.01) level, two-tailed test.

¹² The MHRS does not collect the information needed to determine legal immigration status for non-citizens.

This lack of connection with the health care system was most pronounced for those who were uninsured for a year or more. Particularly noteworthy is that long-term uninsured adults were much less likely than the short-term uninsured to have a usual source of care (40.3 versus 71.8 percent) (Table 2).

TABLE 2: USUAL SOURCE OF CARE AND CARE COORDINATION FOR INSURED AND UNINSURED NON-ELDERLY ADULTS 19 TO 64 IN MASSACHUSETTS, 2008-2010

	ALL NO	N-ELDERLY ADU	ILTS		NON-ELDERLY ADULTS WHO WERE UNINSURE At the time of the survey			
	ALWAYS INSURED OVER THE YEAR	EVER UNINSURED OVER THE YEAR	DIFFERENCE	UNINSURED FOR LESS THAN ONE YEAR	UNINSURED FOR ONE YEAR OR MORE	DIFFERENCE		
NUMBER (WEIGHTED)	3,566,667	424,597		94,605	96,688			
HAS A USUAL SOURCE OF HEALTH CARE (EXCLUDING THE EMERGENCY DEPARTMENT) (%)	93.5	68.1	25.4***	71.8	40.3	31.5***		
AMONG THOSE WITH USUAL SOU	JRCE OF CARE, SITE	OF CARE (%)						
Doctor's office or private clinic	81.6	62.2	19.3***	62.4	44.1	18.2***		
Community health center or public clinic	9.1	23.2	-14.1***	24.2	36.9	-12.7*		
Hospital outpatient department	6.4	8.7	-2.3*	7.2	8.8	-1.6		
Other/missing site of care	2.9	5.8	-2.9***	6.3	10.2	-3.9		
AMONG THOSE WITH USUAL SOL	JRCE OF CARE, LEN	GTH OF RELATION	NSHIP (%)					
Less than 1 year	6.3	20.5	-14.2***	4.5	11.4	-6.9		
1 to less than 3 years	13.2	16.8	-3.6	33.2	17.4	15.8		
3 to less than 5 years	13.0	13.9	-0.9	11.7	7.9	3.8		
5 years or more	67.5	48.8	18.7***	50.6	63.3	-12.6		
AMONG THOSE WITH USUAL SOL	JRCE OF CARE, REA	SON GO TO THAT	PROVIDER (%)					
Location is convenient +	73.4	77.1	-3.7	81.8	74.6	7.2		
Hours are convenient +	57.0	63.4	-6.5	70.5	68.0	2.5		
Costs less than other places ⁺	15.9	37.0	-21.1***	43.3	54.4	-11.1		
Easier to get an appoint- ment than other places ⁺	48.7	61.4	-12.7***	69.2	58.9	10.2		
Offers services beyond medical care +	11.0	15.6	-4.6	17.0	18.0	-1.0		
Quality of care is better than other places †	70.8	61.5	9.4	51.8	54.7	-2.9		
SAMPLE SIZE	8559	1626		562	547			

 $Source: Urban\ Institute\ analysis\ of\ combined\ 2008-2010\ Massachusetts\ Health\ Reform\ Survey\ (MHRS).$

^{*(**)(***)} Significantly different from zero at the .10 (.05) (.01) level, two-tailed test.

[†] This measure was not available in 2008 or 2009, so the estimates reported here only include 2010.

Health Care Access and Barriers to Care. As would be expected given their weaker connections to the health care system and lack of insurance coverage, uninsured adults were less likely to use health care services than insured adults and, among the uninsured adults, the long-term uninsured were less likely to use care than were the short-term uninsured (Table 3). For example, 86.9 percent of insured adults reported a visit to a general doctor over the past year, as compared with 62.6 percent of uninsured adults. The difference was even greater among the uninsured adults: only 31.8 percent of the long-term uninsured reported a doctor's visit, as compared with 76.3 percent of those uninsured for less than a year. Large gaps in use were reported between insured and uninsured adults and between long-term and short-term uninsured adults on all of the measures examined, with one exception. There was no difference in the share of insured and uninsured adults with an inpatient stay over the past year.

TABLE 3: OUTPATIENT, INPATIENT, AND PRESCRIPTION DRUG USE OVER THE PAST 12 MONTHS FOR INSURED AND UNINSURED NON-ELDERLY ADULTS 19 TO 64 IN MASSACHUSETTS, 2008-2010

	ALL N	ON-ELDERLY ADU	ILTS	NON-ELDERLY AD	OULTS WHO WER	
	ALWAYS INSURED OVER THE YEAR	EVER Uninsured Over the Year	DIFFERENCE	UNINSURED FOR LESS THAN ONE YEAR	UNINSURED FOR ONE YEAR OR MORE	DIFFERENCE
NUMBER (WEIGHTED)	3,566,667	424,597		94,605	96,688	
ANY HEALTH CARE VISIT (%)	97.7	84.6	13.1***	90.6	64.3	26.3***
Any general doctor or specialist visit	90.5	67.7	22.7***	76.3	31.8	44.5***
Any general doctor visit	86.9	62.6	24.4***	70.2	27.2	43.0***
Visit for preventive care	79.6	53.6	26.0***	62.8	18.9	43.9***
 Multiple doctor visits 	60.7	41.3	19.4***	50.1	12.4	37.7***
 Any specialist visit 	56.0	34.2	21.8***	34.7	11.1	23.6***
Any visits to a nurse practitioner, physician assistant, or midwife in place of a general doctor +	37.1	26.6	10.6***	31.7	10.0	21.8***
Any dental care visit	77.7	47.5	30.2***	47.3	28.5	18.8***
Any hospital stay (excluding to have a baby)	10.3	10.2	0.1	10.4	4.3	6.0**
Took any prescription drugs	60.8	40.0	20.8***	42.4	21.1	21.4***
AMONG THOSE WHO USED CARE, SHARE RATING QUALITY OF CARE AS VERY GOOD OR EXCELLENT (%)	71.6	42.8	28.7***	44.1	33.7	10.5
SAMPLE SIZE	8,559	1,626		562	547	

Source: Urban Institute analysis of combined 2008-2010 Massachusetts Health Reform Survey (MHRS).

^{*(**)(***)} Significantly different from zero at the .10 (.05) (.01) level, two-tailed test.

[†] This measure was not available in 2008 and 2009, so the estimates reported here only include 2010.

TABLE 4: PROBLEMS OBTAINING CARE AND UNMET NEED FOR CARE OVER THE PAST 12 MONTHS FOR INSURED AND UNINSURED NON-ELDERLY ADULTS 19 TO 64 IN MASSACHUSETTS, 2008-2010

	ALL N	ON-ELDERLY ADU	ILTS	NON-ELDERLY AD	OULTS WHO WER	
	ALWAYS INSURED OVER THE YEAR	EVER Uninsured Over the Year	DIFFERENCE	UNINSURED FOR LESS THAN ONE YEAR	UNINSURED FOR ONE YEAR OR MORE	DIFFERENCE
NUMBER (WEIGHTED)	3,566,667	424,597		94,605	96,688	
HAD PROBLEMS GETTING CARE (%)	20.8	37.1	-16.2***	38.7	21.5	17.2***
Told by doctor's office or clinic they were not accepting new patients	13.7	22.4	-8.7***	20.6	13.8	6.8*
Told by doctor's office or clinic they were not accepting insurance type +	10.5	25.2	-14.8***	22.6	12.0	10.6**
Had to change to a new provider because of a change in insurance	7.1	19.5	-12.4***	20.4	9.9	10.5**
AMONG THOSE WITH PROBLEM	S GETTING CARE, P	ROBLEMS WERE	WITH: (%)			
Primary care	64.8	72.0	-7.2**	78.0	87.8	-9.8
Speciality care	45.4	43.2	2.3	35.2	27.3	8.0
DID NOT GET NEEDED CARE FOR ANY REASON (%)	18.9	43.6	-24.7***	44.6	43.7	8.0
Doctor care	4.3	19.5	-15.2***	20.7	25.7	-5.0
Specialist care	4.8	15.7	-10.9***	16.8	14.7	2.0
Medical tests, treatment, or follow-up care	5.4	19.0	-13.6***	21.7	16.2	5.5
Preventive care screening	3.7	15.4	-11.7***	14.8	18.7	-4.0
Prescription drugs	5.3	14.6	-9.4***	16.7	10.0	6.7***
Dental care	8.9	26.3	-17.4***	27.1	26.9	0.2
SAMPLE SIZE	8,559	1,626		562	547	

Source: Urban Institute analysis of 2008-2010 Massachusetts Health Reform Survey (MHRS).

Likely contributing to their lower levels of use, more than one-third of the uninsured adults (37.1 percent) reported problems obtaining care over the past year, well above the 20.8 percent of insured adults reporting such problems (Table 4). Uninsured adults were more likely than insured adults to report being told that a doctor's office or clinic was not accepting new patients (22.4 versus 13.7 percent) or not accepting patients with their insurance type (for those with coverage) or not accepting patients lacking coverage (for those who were uninsured) (25.2 versus 10.5 percent), as well as to report that they had had to change providers because of a change in their insurance (19.5 versus 7.1 percent). Further, among those adults with problems getting care, the uninsured adults were more likely than insured adults to report problems with primary care

^{*(**)(***)} Significantly different from zero at the .10 (.05) (.01) level, two-tailed test.

⁺ Insurance type includes lack of coverage.

access (72.0 versus 64.8 percent); there was no difference in the proportions of insured and uninsured adults reporting problems obtaining specialty care. Additionally, of those who did report a health care visit, the uninsured were 28.7 percentage points less likely than the insured to rate the quality of that care as very good or excellent.

Perhaps not surprising given that they experienced a disruption in their insurance coverage over the year, those who were uninsured for less than one year reported more problems obtaining care than did the long-term uninsured (38.7 versus 21.5 percent). In particular, those who had lost coverage over the year were more likely to report being told by a doctor's office or clinic that they weren't accepting patients with their insurance type (or lack of coverage) and that they had had to change providers because of a change in insurance.

Consistent with their lower levels of health care use and greater problems obtaining care, uninsured adults were more likely to go without needed care than were insured adults (Table 4). Altogether, 43.6 percent of the uninsured adults reported going without some type of needed care over the past year, as compared with 18.9 percent of insured adults. Reported levels of unmet need among uninsured adults were higher for all of the types of care examined, with the gap ranging from 9.4 percentage points for prescription drugs to 15.2 percentage points for a doctor's care.

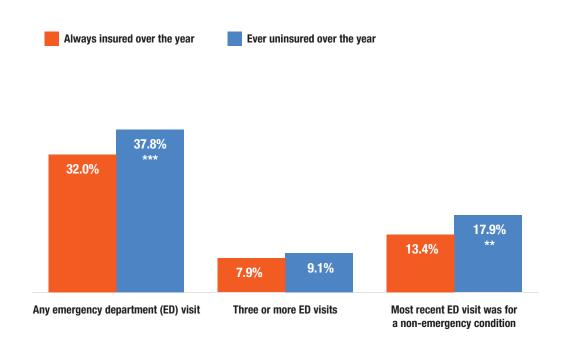
Perhaps reflecting their poorer health care access and use, uninsured adults were more likely to have had an emergency department visit in the past year overall and particularly for a condition that they thought could have been treated by a regular doctor if one had been available (Figure 5). Some 37.8 percent of uninsured adults reported an emergency department visit in the past year, with 17.9 percent reporting that their most recent visit was for a non-emergency condition.¹³ This compares with 32.0 percent and 13.4 percent, respectively, for insured adults.¹⁴

The adults who were uninsured for a year or more were less likely than the short-term uninsured to have visited an emergency department in the year prior to the survey (29.3 versus 39.2 percent) (data not shown). However, roughly equal shares (17 and 18 percent, respectively) of the short- and long-term uninsured reported that their most recent emergency department visit was for a non-emergency condition (data not shown).

¹³ A non-emergency condition is one that the respondent thought could have been treated by a regular doctor if one had been available.

¹⁴ Overall, Massachusetts has a relatively high level of emergency department use, with 481 visits per 1,000 people in 2010, as compared with 411 visits for the nation as a whole (http://www.statehealthfacts.org/comparetable.jsp?ind=388&cat=8&sub=217&yr=138&typ=1&sort=a).

FIGURE 5: EMERGENCY DEPARTMENT USE IN THE PAST YEAR BY INSURED AND UNINSURED NON-ELDERLY ADULTS AGED 19 TO 64 IN MASSACHUSETTS, 2008–2010



Source: 2008-2010 Massachusetts Health Reform Survey (MHRS).

Note: A non-emergency condition is one that the respondent thought could have been treated by a regular doctor if one had been available.

Health Care Costs and Affordability of Care. One objective of health insurance coverage is to provide protection from the financial burden of high health care costs. Without that protection, uninsured adults are at financial risk and, if they forgo needed care to avoid those costs, at health risk. As shown in Table 5, uninsured adults in Massachusetts were more likely than insured adults to face both financial and health risks because of the cost of health care. For example, uninsured adults were more likely to report going without needed health care because of the cost than were adults who were always insured over the year (32.1 versus 9.8 percent), with greater unmet need because of cost reported by uninsured adults for all of the types of care examined (Figure 6). Uninsured adults were also more likely to report problems paying medical bills (36.4 versus 15.9 percent), medical debt (29.0 versus 19.0 percent), and high spending on out-of-pocket health care costs (11.8 versus 5.3 percent spending 10 percent or more of family income on health care). Of particular concern, more than one in 10 (13.4 percent) of the uninsured reported medical debt of \$10,000 or more, compared with 4.0 percent of those with insurance coverage. Finally, uninsured adults were more likely to have problems paying other bills than were insured adults (44.4 versus 22.6 percent), reflecting the broad economic challenges faced by the uninsured.

^{* (**) (***)} Significantly different from insured adults at the .10 (.05) (.01) level, two-tailed test.

TABLE 5: UNMET NEED FOR CARE DUE TO COSTS AND HEALTH CARE SPENDING FOR INSURED AND UNINSURED NON-ELDERLY ADULTS 19 TO 64 IN MASSACHUSETTS, 2008-2010

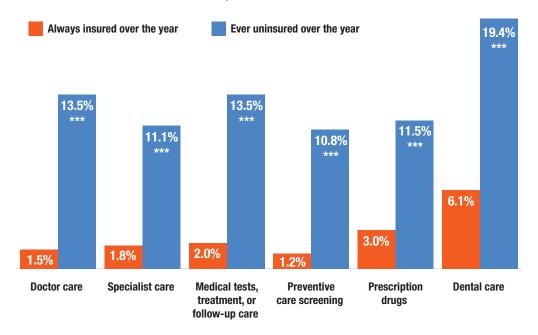
	ALL NON-ELDERLY ADULTS NON-ELDERLY ADULTS AT THE TIME OF THE SURVE					
	ALWAYS INSURED OVER THE YEAR	EVER UNINSURED OVER THE YEAR	DIFFERENCE	UNINSURED FOR LESS THAN ONE YEAR	UNINSURED FOR ONE YEAR OR MORE	DIFFERENCE
NUMBER (WEIGHTED)	3,566,667	424,597		94,605	96,688	
DID NOT GET NEEDED CARE DUE TO COST OF CARE (%)	9.8	32.1	-22.2***	37.3	38.5	-1.2
Doctor care	1.5	13.5	-12.0***	16.4	22.6	-6.3
Specialist care	1.8	11.1	-9.3***	13.2	12.7	0.6
Medical tests, treatment, or follow-up care	2.0	13.5	-11.5***	15.6	13.8	1.8
Preventive care screening	1.2	10.8	-9.6***	12.5	15.7	-3.2
Prescription drugs	3.0	11.5	-8.5***	14.8	8.4	6.4**
Dental care	6.1	19.4	-13.4***	22.1	23.9	-1.8
OUT-OF-POCKET HEALTH CARE SI PAST 12 MONTHS RELATIVE TO F						
At 5% or more of family income for those below 600% of the federal poverty level (FPL) +	16.2	23.8	-7.7**	18.2	19.9	-1.6
At 10% or more of family income for those below 600% of FPL +	5.3	11.8	-6.4***	6.7	10.6	-3.9
HAD PROBLEMS PAYING MEDICAL BILLS IN PAST 12 MONTHS (%)	15.9	36.4	-20.5***	40.1	31.0	9.1
HAVE MEDICAL BILLS THAT ARE PAYING OFF OVER TIME (%)	19.0	29.0	-10.0***	33.2	25.6	7.5
AMONG THOSE PAYING MEDICAL AMOUNT OF MEDICAL DEBT (%)	BILLS OVER TIME,					
Less than \$2,000	59.6	52.5	7.1	50.8	56.2	-5.4
\$2,000 to \$9,999	36.4	34.1	2.3	37.7	32.5	5.2
\$10,000 or more	4.0	13.4	-9.4***	11.5	11.3	0.2
HAD PROBLEMS PAYING OTHER BILLS IN PAST 12 MONTHS (%)	22.6	44.4	-21.8***	48.8	34.9	14.0**
SAMPLE SIZE	8,559	1,626		562	547	

Source: Urban Institute analysis of 2008-2010 Massachusetts Health Reform Survey (MHRS).

*(**)(***) Significantly different from zero at the .10 (.05) (.01) level, two-tailed test.

† The out-of-pocket spending measure is limited to adults with family income less than 600% of the federal poverty level, and is based on data from the 2010 MHRS.

FIGURE 6: TYPES OF UNMET CARE BECAUSE OF COST FOR INSURED AND UNINSURED NON-ELDERLY ADULTS AGED 19 TO 64 IN MASSACHUSETTS, 2008–2010



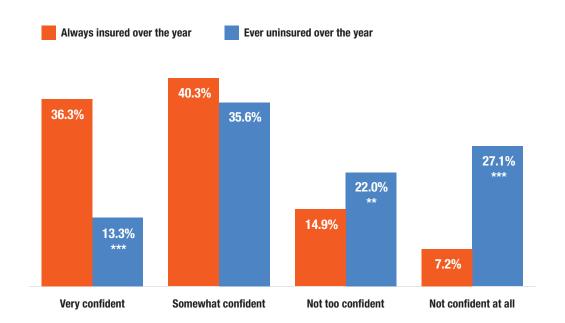
Source: 2008-2010 Massachusetts Health Reform Survey (MHRS).

Among uninsured adults, we find little difference in unmet need because of the cost or in the burden of health care spending by length of time uninsured (Table 5). The two significant differences that we do see suggest a greater burden for the uninsured adults who lost their insurance within the last year, perhaps reflecting the challenges of finding ways to obtain affordable care during a period of transition (which might include changes in employment or family structure in addition to a loss of insurance). There may be gaps in access as the newly uninsured learn about the care options available under the state's health care safety net.

Uninsured adults were much less confident of their ability to afford health care in the coming year than were insured adults. Only 13.3 percent of the uninsured were "very confident" of their ability to afford health care, as compared with 36.3 percent of insured adults. At the same time, 27.1 percent of the uninsured reported being "not confident at all" about their ability to afford care, while only 7.2 percent of insured adults had so little confidence in the future (Figure 7).

^{* (**)} Significantly different from insured adults at the .10 (.05) (.01) level, two-tailed test.

FIGURE 7: CONFIDENCE IN ABILITY TO AFFORD HEALTH CARE IN THE COMING YEAR AMONG INSURED AND UNINSURED NON-ELDERLY ADULTS AGED 19 TO 64 IN MASSACHUSETTS, 2010



Source: 2010 Massachusetts Health Reform Survey (MHRS). This measure was not available in the 2008 or 2009 MHRS. * (***) Significantly different from insured adults at the .10 (.05) (.01) level, two-tailed test.

HOW DO UNINSURED NON-ELDERLY ADULTS AND CHILDREN IN MASSACHUSETTS COMPARE WITH THE UNINSURED IN THE REST OF THE NATION?

In this section we compare non-elderly adults and children in Massachusetts with the rest of the nation using the American Community Survey (ACS). We begin with non-elderly adults (Table 6).

TABLE 6: CHARACTERISTICS OF NON-ELDERLY ADULTS 19 TO 64 IN MASSACHUSETTS AND THE REST OF THE NATION, 2010

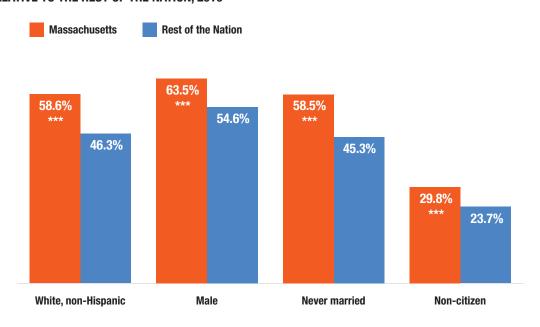
,		MASSACHUSETTS	REST OF NATION	DIFFERENCE
NUMBER (WEIGHTED)		4,096,000	182,417,000	
SEX (%)	Female	51.4	51.1	0.3***
	Male	48.6	48.9	-0.3***
AGE (%)	19 to 26 years	18.2	18.0	0.2*
	27 to 44 years	37.7	38.7	-1.0***
	45 to 64 years	44.1	43.3	0.8***
RACE/	White, non-Hispanic	76.8	64.4	12.4***
ETHNICITY (%)	Black, non-Hispanic	6.1	12.1	-6.0***
	Other or multiple races, non-Hispanic	8.1	7.7	0.4***
	Hispanic	9.1	15.8	-6.7***
CITIZENSHIP	Citizen	89.6	90.1	-0.5**
STATUS (%)	Not a citizen	10.4	9.9	0.5**
ADULT SPEAKS ENGLISH	VELL OR VERY WELL (%)	95.3	94.4	0.9***
ANY ADULT IN THE HOUSE	HOLD SPEAKS ENGLISH WELL OR VERY WELL (%)	97.9	97.4	0.5***
MARITAL	Married	49.8	52.6	-2.8***
STATUS (%)	Widowed, divorced, separated	14.0	16.2	-2.2***
	Never married	36.3	31.2	5.1***
CHILD UNDER 19	Yes	32.3	33.9	-1.6***
PRESENT IN FAMILY (%)	No	67.7	66.1	1.6***
HIGHEST	Less than high school	8.1	12.3	-4.2***
EDUCATIONAL ATTAINMENT (%)	High school degree/Some college	52.6	60.3	-7.7***
ATTAINMENT (70)	College graduate	39.3	27.4	11.9***
CURRENT	Not working	53.5	53.5	0.0
EMPLOYMENT STATUS (%)	Working part time	19.7	16.3	3.4***
Ciril 60 (70)	Working full time	26.8	30.2	-3.4***
FAMILY INCOME	At or below 138%	22.7	28.0	-5.3***
RELATIVE TO THE FEDERAL	139 to 199%	7.7	10.5	-2.8***
POVERTY	200 to 299%	11.9	14.7	-2.8***
LEVEL (FPL) (%)	300 to 399%	11.9	12.2	-0.3
	400% or more	45.9	34.6	11.3***
LIVING IN A	Yes	91.2	77.8	13.4***
METROPOLITAN AREA (%)	No	1.8	15.4	-13.6***
AILA (70)	Not identifiable	7.0	6.8	0.2**
SAMPLE SIZE		39,733	1,796,679	

Source: 2010 American Community Survey (ACS), data from Integrated Public Use Microdata Series (IPUMS) USA. Note: Family is defined as the health insurance unit (HIU).

^{*(**)(***)} Significantly different from zero at the .10 (.05) (.01) level, two-tailed test.

The population of non-elderly adults in Massachusetts differs from the population in other states on many dimensions, although the magnitude of some of those differences is small (Table 6).¹⁵ Areas in which there are more substantial differences are race/ethnicity, with more non-elderly adults in Massachusetts being white and non-Hispanic than is the case in the rest of the nation (76.8 versus 64.4 percent), and educational attainment, with Massachusetts adults being more likely to be college graduates (39.3 versus 27.4 percent). Massachusetts adults also tended to have higher incomes. Nearly half (45.9 percent) of non-elderly adults in Massachusetts had family incomes of 400 percent of the FPL or more, as compared with 34.6 percent of their counterparts in the rest of the nation. Finally, Massachusetts adults were more likely to live in a metropolitan area than were adults elsewhere in the nation (91.2 versus 77.8 percent).

FIGURE 8: CHARACTERISTICS OF UNINSURED NON-ELDERLY ADULTS AGED 19 TO 64 IN MASSACHUSETTS RELATIVE TO THE REST OF THE NATION, 2010



Source: 2010 American Community Survey (ACS). Note: *(**) (***) Significantly different from adults in the rest of the nation at the .10 (.05) (.01) level, two-tailed test.

Looking within the uninsured populations in Massachusetts and the rest of the nation, we also find significant differences, with many mirroring the differences in the overall populations (Table 7). For example, uninsured non-elderly adults in Massachusetts were more likely than uninsured adults in the nation as a whole to be non-Hispanic whites (58.6 versus 46.3 percent), male (63.5 versus 54.6 percent), never married (58.5 versus 45.3 percent), and non-citizens (29.8 versus 23.7 percent) (Figure 8). This last point probably reflects the expanded opportunities for coverage for citizens under reform in Massachusetts that has left the remaining uninsured in the state more likely to be non-citizens.

¹⁵ The statistical significance of relatively small differences reflects the very large sample sizes in the ACS, with nearly 40,000 observations for Massachusetts and 1.8 million for the rest of the nation.

TABLE 7: CHARACTERISTICS OF UNINSURED NON-ELDERLY ADULTS 19 TO 64 IN MASSACHUSETTS AND THE REST OF THE NATION, 2010

		MASSACHUSETTS	REST OF NATION	DIFFERENCE
NUMBER (WEIGHTED)		254,000	39,864,000	
SEX (%)	Female	36.5	45.4	-8.9***
	Male	63.5	54.6	8.9***
AGE (%)	19 to 26 years	28.8	26.9	1.9*
	27 to 44 years	41.4	42.5	-1.1
	45 to 64 years	29.8	30.5	-0.7
RACE/	White, non-Hispanic	58.6	46.3	12.3***
ETHNICITY (%)	Black, non-Hispanic	10.2	14.4	-4.2***
	Other or multiple races, non-Hispanic	9.0	7.8	1.2
	Hispanic	22.2	31.5	-9.3***
CITIZENSHIP	Citizen	70.2	76.3	-6.1***
STATUS (%)	Not a citizen	29.8	23.7	6.1***
ADULT SPEAKS ENGLISH \	WELL OR VERY WELL (%)	84.4	84.7	-0.3
ANY ADULT IN THE HOUSE	HOLD SPEAKS ENGLISH WELL OR VERY WELL (%)	92.3	92.2	0.1
MARITAL STATUS (9/)	Married	25.2	35.2	-10.0***
STATUS (%)	Widowed, divorced, separated	16.3	19.5	-3.2***
	Never married	58.5	45.3	13.2***
CHILD UNDER 19	Yes	15.9	28.3	-12.4***
PRESENT IN FAMILY (%)	No	84.1	71.7	12.4***
HIGHEST	Less than high school	18.0	25.7	-7.7***
EDUCATIONAL ATTAINMENT (%)	High school degree/Some college	66.1	63.7	2.4*
(/-/	College graduate	16.0	10.6	5.4***
CURRENT	Not working	38.5	36.8	1.7
EMPLOYMENT STATUS (%)	Working part time	22.3	21.4	0.9
	Working full time	39.2	41.7	-2.5
FAMILY INCOME	At or below 138%	44.3	54.2	-9.9***
RELATIVE TO THE FEDERAL	139 to 199%	15.9	17.0	-1.1
POVERTY	200 to 299%	17.4	14.8	2.6**
LEVEL (FPL) (%)	300 to 399%	10.2	6.6	3.6***
	400% or more	12.2	7.4	4.8***
LIVING IN A	Yes	91.8	77.6	14.2***
METROPOLITAN AREA (%)	No	1.6	16.1	-14.5***
7.11.11.7.7(70)	Not identifiable	6.6	6.3	0.3
SAMPLE SIZE		1,900	331,588	

Source: 2010 American Community Survey (ACS), data from Integrated Public Use Microdata Series (IPUMS) USA. Note: Insurance coverage is defined as of the time of the survey. Family is defined as the health insurance unit (HIU). *(**)(***) Significantly different from zero at the .10 (.05) (.01) level, two-tailed test.

TABLE 8: CHARACTERISTICS OF UNINSURED CHILDREN 0 TO 18 IN MASSACHUSETTS AND THE REST OF THE NATION, 2010

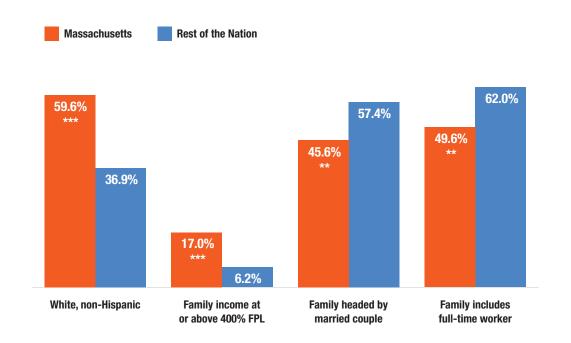
		MASSACHUSETTS	REST OF NATION	DIFFERENCE
NUMBER (WEIGHTED)		23,000	6,655,000	
SEX (%)	Female	49.0	48.6	0.4
	Male	51.0	51.4	-0.4
AGE (%)	Less than 7 years	24.9	27.4	-2.5
	7 to 12 years	27.4	29.8	-2.4
	13 to 18 years	47.7	42.9	4.8
RACE/	White, non-Hispanic	59.6	36.9	22.7***
ETHNICITY (%)	Black, non-Hispanic	7.8	12.8	-5.0*
	Other or multiple races, non-Hispanic	14.7	9.4	5.3
	Hispanic	17.9	40.9	-23.0***
CITIZENSHIP	Citizen	86.3	85.5	0.8
STATUS (%)	Not a citizen	13.7	14.5	-0.8
CITIZENSHIP	Any citizen	83.2	76.0	7.2**
STATUS OF PARENTS (%)	Not a citizen	4.1	14.7	-10.6***
TAILLY 13 (70)	Does not live with parents	12.7	9.3	3.4
ANY ADULT IN THE HOUSE	HOLD SPEAKS ENGLISH WELL OR VERY WELL (%)	85.9	88.2	-2.3
MARITAL STATUS	Married	45.6	57.4	-11.8**
OF PARENTS (%)	Widowed, divorced, separated	19.6	18.0	1.6
	Never married	22.0	15.3	6.7*
	Does not live with parents	12.7	9.3	3.4
HIGHEST EDUCATIONAL	Less than high school	15.9	27.8	-11.9***
ATTAINMENT OF ADULTS IN FAMILY (%)	High school graduate/Some college	62.9	59.2	3.7
ADOLIO INTAMILI (70)	College graduate	21.2	13.0	8.2*
CURRENT EMPLOYMENT	Any full-time workers in family	49.6	62.0	-12.4**
STATUS OF ADULTS IN FAMILY (%)	Only part-time workers in family	29.9	15.7	14.2**
ile i Ainici (70)	No workers in family	20.5	22.3	-1.8
FAMILY INCOME	At or below 138%	49.8	55.0	-5.2
RELATIVE TO THE FEDERAL POVERTY	139 to 199%	11.6	16.7	-5.1*
LEVEL (FPL) (%)	200 to 299%	15.1	15.4	-0.3
	300 to 399%	6.5	6.7	-0.2
	400% or more	17.0	6.2	10.8***
LIVING IN A	Yes	89.5	77.2	12.3***
METROPOLITAN AREA (%)	No	0.5	16.2	-15.7***
ANEA (70)	Not identifiable	10.0	6.6	3.4
SAMPLE SIZE		208	55,621	

Source: 2010 American Community Survey (ACS), data from Integrated Public Use Microdata Series (IPUMS) USA. Note: Insurance coverage is defined as of the time of the survey. Family is defined as the health insurance unit (HIU). *(**)(***) Significantly different from zero at the .10 (.05) (.01) level, two-tailed test.

Uninsured children in Massachusetts also differ from uninsured children in the rest of the nation on many dimensions, although the groups were similar in terms of age, gender, and citizenship status (Table 8). Like uninsured adults, uninsured children in Massachusetts were more likely to be non-Hispanic whites (59.6 versus 36.9 percent) and more likely to come from higher-income

families. The share of uninsured children in families with incomes at or above 400 percent of the FPL was 17.0 percent in Massachusetts, compared with 6.2 percent in the rest of the nation. However, uninsured children in Massachusetts were less likely to live in a family headed by a married couple (45.6 versus 57.4 percent) and, perhaps partly reflecting that difference, less likely to live with a family member who works full-time (49.6 versus 62.0 percent).

FIGURE 9: CHARACTERISTICS OF UNINSURED CHILDREN AGED 0 TO 18 IN MASSACHUSETTS RELATIVE TO THE REST OF THE NATION, 2010



Source: 2010 American Community Survey (ACS).

Note: FPL is the federal poverty level.

^{* (**) (***)} Significantly different from children in the rest of the nation at the .10 (.05) (.01) level, two-tailed test.

WHERE DO THE UNINSURED CHILDREN AND NON-ELDERLY ADULTS IN MASSACHUSETTS LIVE?

Uninsured individuals live in communities across Massachusetts, although there are areas of higher levels of uninsurance. As shown in Figure 10, communities (as defined by the U.S. Census Bureau's PUMAs¹⁶) with relatively high levels of uninsurance for children (3 percent or more) were rare and largely outside the Greater Boston area in 2010, with pockets in the Metro West, western, and southeastern areas of the state. In contrast, relatively high uninsurance for non-elderly adults (8 percent or more) in the state in 2010 was concentrated in the Greater Boston area and in pockets across the state, including areas around Lowell and Springfield and in the southeastern part of the state.

Tabulations for the 2008–2010 period for places in Massachusetts (as defined by the Census Bureau) show wide variation in the uninsurance rate across the state (Appendix Table 1). The uninsurance rate for children ranged from 0 to 6.1 percent across places in the state, while the rate for adults ranged from 1.4 to 15.9 percent.¹⁷ Table 9 shows the places with the highest average levels of uninsurance for children and non-elderly adults over the 2008–2010 period. The five places with the highest rates of uninsurance for children were Revere (4.0 percent), Beverly (4.6 percent), Marlborough (4.9 percent), Framingham (4.9 percent), and Burlington (6.1 percent). For adults, the five places with the highest rates of uninsurance were New Bedford (11.2 percent), Lawrence (12.8 percent), Chelsea (14.3 percent), Revere (14.5 percent), and Everett (15.9 percent).

Roughly similar patterns are shown when we focus on the numbers of uninsured children and non-elderly adults across the communities in the state, as opposed to the uninsurance rate (Figure 11). In the figure, where each PUMA represents approximately 100,000 residents, darker areas represent greater numbers of uninsured persons. As with the uninsurance rate, the number of uninsured varied widely across places in the state, ranging from 0 to 1,659 for children and from 233 to 31,473 for non-elderly adults (Appendix Table 1). Figure 11 shows the places with the highest numbers of uninsured children and non-elderly adults in the state over the 2008—2010 period. The five places with the largest numbers of uninsured children were Lynn (538), New Bedford (599), Brockton (657), Framingham (688), and Boston (1,659). For adults, the five places with the largest numbers of uninsured were New Bedford (6,415), Lowell (6,422), Worcester (7,630), Springfield (8,792), and Boston (31,473).

Outreach strategies that target the communities with the largest numbers of uninsured individuals would be one way to reach more of the uninsured in the state, including some of the most

¹⁶ Public Use Microdata Areas, or PUMAs, are the smallest geographic unit available for individual-level data in the ACS. PUMAs, which are designed to contain approximately 100,000 residents, are based on counties, subsets of counties (in urban areas), and combinations of counties (in more rural areas). There are 52 PUMAs in Massachusetts. More information on the geographic data available from the ACS is provided in the technical appendix.

¹⁷ The age breaks used by the Census Bureau for these data differ slightly from those used in the rest of the paper: children are defined as aged 0 to 17 and non-elderly adults as aged 18 to 64.

disadvantaged (Table 11, see page 28). Focusing on the one-third of PUMAs in the state with the largest numbers of uninsured, we find that the uninsured in those communities are more likely to be non-white and Hispanic (56.5 versus 26.2 percent), more likely to be non-citizens (38.4 versus 18.5 percent), and more likely to have language barriers (22.9 versus 7.6 percent lacking an adult in the family who speaks English well) than are the uninsured in other communities in the state. The uninsured in the high-uninsured communities are also more likely to face literacy barriers, as 20.7 percent live in families all of whose members have less than high school educational attainment, as compared with 11.7 percent for the uninsured in the rest of the state. Not surprisingly, family income among the uninsured is also lower in those communities, with almost half (48.0 percent) of the uninsured at or below 138 percent of the FPL, as compared with 41.5 percent in other Massachusetts communities.

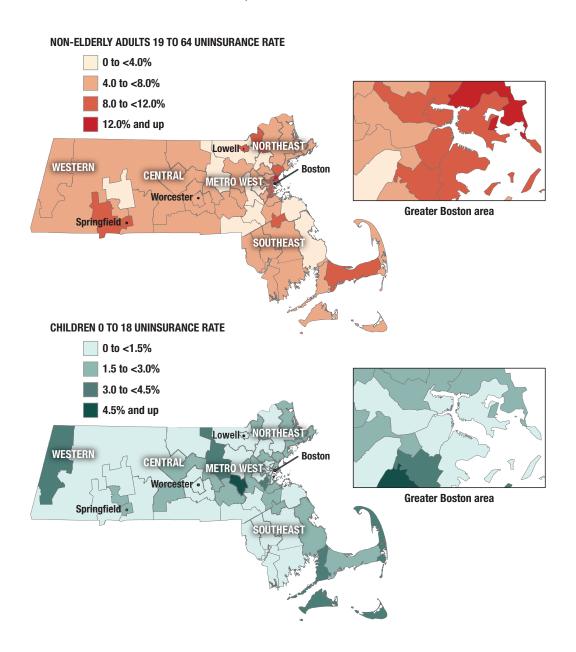
TABLE 9: PLACES IN MASSACHUSETTS WITH THE HIGHEST UNINSURANCE RATES FOR CHILDREN 0 TO 17 AND NON-ELDERLY ADULTS 18 TO 64, 2008-2010

PLACES WITH HIGHEST UNINSURANCE RATE FOR CHILDREN 0 TO 17				PLACES WITH HIGHEST UNINSURANCE RATE FOR NON-ELDERLY ADULTS 18 TO 64				
PLACES IN MASSACHUSETTS	TOTAL Popula- Tion	UNINSUR- ANCE RATE	NUMBER OF UNIN- SURED	PLACES IN MASSACHUSETTS	TOTAL Popula- Tion	UNINSUR- ANCE RATE	NUMBER OF UNIN- SURED	
Lynn (City)	21,817	2.5%	538	Salem (City)	28,038	6.9%	1,929	
Franklin (City)	9,149	2.5%	233	Boston (City)	443,356	7.1%	31,473	
New Bedford (City)	23,020	2.6%	599	Fall River (City)	55,852	7.1%	3,985	
Brockton (City)	24,019	2.7%	657	Waltham (City)	45,653	7.2%	3,279	
Pittsfield (City)	9,121	2.8%	255	Somerville (City)	59,329	7.5%	4,474	
Braintree (City)	7,942	2.9%	233	West Springfield (City)	17,812	7.9%	1,399	
Wilmington (CDP)	5,707	3.0%	170	Leominster (City)	25,181	8.2%	2,069	
Quincy (City)	14,463	3.0%	432	Lowell (City)	69,912	9.2%	6,422	
Salem (City)	8,080	3.2%	261	Springfield (City)	94,716	9.3%	8,792	
Norwood (CDP)	5,601	3.3%	184	Malden (City)	40,125	9.3%	3,728	
Malden (City)	11,767	3.3%	388	Framingham (CDP)	44,076	9.4%	4,164	
West Springfield (City)	5,991	3.3%	198	Milford (CDP)	15,950	10.1%	1,617	
Saugus (CDP)	5,584	3.3%	187	Barnstable (City)	26,746	10.4%	2,779	
Barnstable (City)	9,042	3.7%	334	Brockton (City)	58,881	10.4%	6,135	
Milford (CDP)	6,351	3.8%	242	Lynn (City)	57,467	11.1%	6,375	
Revere (City)	11,038	4.0%	446	New Bedford (City)	57,041	11.2%	6,415	
Beverly (City)	7,517	4.6%	346	Lawrence (City)	46,757	12.8%	6,002	
Marlborough (City)	7,986	4.9%	389	Chelsea (City)	22,099	14.3%	3,153	
Framingham (CDP)	13,900	4.9%	688	Revere (City)	32,606	14.5%	4,738	
Burlington (CDP)	5,399	6.1%	331	Everett (City)	27,015	15.9%	4,284	

Source: 2008-2010 American Community Survey (ACS) 3-Year Estimates from American FactFinder.

Notes: While the 2008-2010 American Community Survey (ACS) data generally reflect the December 2009 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas, in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities. Census designated places (CDPs) are delineated for each decennial census as the statistical counterparts of incorporated places. CDPs are delineated to provide data for settled concentrations of population that are identifiable by name but are not legally incorporated under the laws of the state in which they are located. The boundaries usually are defined in cooperation with local or tribal officials. See Appendix Table 1 for information on all places in Massachusetts.

FIGURE 10: UNINSURANCE RATES FOR NON-ELDERLY ADULTS AND CHILDREN ACROSS COMMUNITIES IN MASSACHUSETTS, 2010



Source: 2010 American Community Survey (ACS), data from Integrated Public Use Microdata Series (IPUMS) USA.

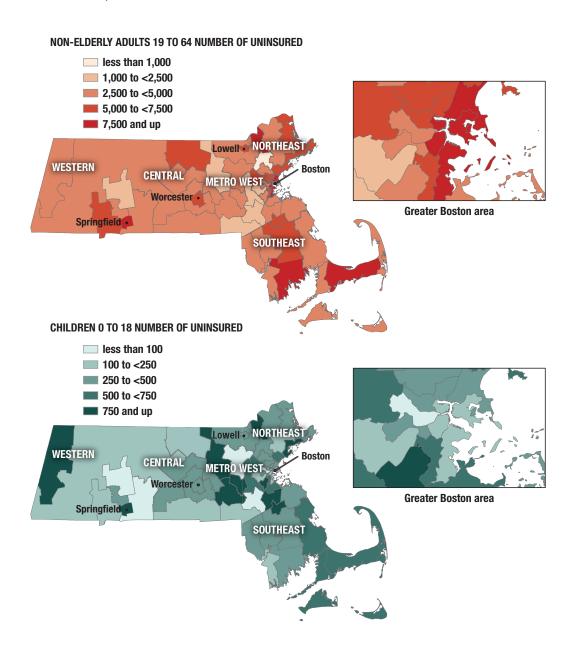
TABLE 10: PLACES IN MASSACHUSETTS WITH THE HIGHEST NUMBERS OF UNINSURED CHILDREN 0 TO 17 AND NON-ELDERLY ADULTS 18 TO 64, 2008-2010

PLACES WITH HIGHEST NUMBER OF UNINSURED CHILDREN 0 TO 17				PLACES WITH HIGHEST NUMBER OF Uninsured Non-Elderly Adults 18 to 64				
PLACES IN MASSACHUSETTS	TOTAL Popula- Tion	UNINSUR- ANCE RATE	NUMBER OF UNIN- SURED	PLACES IN MASSACHUSETTS	TOTAL Popula- Tion	UNINSUR- ANCE RATE	NUMBER OF UNIN- SURED	
Pittsfield (City)	9,121	2.8%	255	Haverhill (City)	38,550	6.2%	2,397	
Taunton (City)	12,117	2.1%	257	Cambridge (City)	78,648	3.4%	2,661	
Salem (City)	8,080	3.2%	261	Barnstable (City)	26,746	10.4%	2,779	
Lowell (City)	24,642	1.1%	271	Chelsea (City)	22,099	14.3%	3,153	
Burlington (CDP)	5,399	6.1%	331	Waltham (City)	45,653	7.2%	3,279	
Barnstable (City)	9,042	3.7%	334	Malden (City)	40,125	9.3%	3,728	
Worcester (City)	38,651	0.9%	341	Fall River (City)	55,852	7.1%	3,985	
Beverly (City)	7,517	4.6%	346	Framingham (CDP)	44,076	9.4%	4,164	
Malden (City)	11,767	3.3%	388	Everett (City)	27,015	15.9%	4,284	
Marlborough (City)	7,986	4.9%	389	Quincy (City)	63,061	6.8%	4,319	
Quincy (City)	14,463	3.0%	432	Somerville (City)	59,329	7.5%	4,474	
Springfield (City)	41,744	1.1%	440	Revere (City)	32,606	14.5%	4,738	
Revere (City)	11,038	4.0%	446	Lawrence (City)	46,757	12.8%	6,002	
Fall River (City)	19,167	2.4%	457	Brockton (City)	58,881	10.4%	6,135	
Lawrence (City)	22,004	2.2%	493	Lynn (City)	57,467	11.1%	6,375	
Lynn (City)	21,817	2.5%	538	New Bedford (City)	57,041	11.2%	6,415	
New Bedford (City)	23,020	2.6%	599	Lowell (City)	69,912	9.2%	6,422	
Brockton (City)	24,019	2.7%	657	Worcester (City)	119,257	6.4%	7,630	
Framingham (CDP)	13,900	4.9%	688	Springfield (City)	94,716	9.3%	8,792	
Boston (City)	101,911	1.6%	1,659	Boston (City)	443,356	7.1%	31,473	

Source: 2008-2010 American Community Survey (ACS) 3-Year Estimates from American FactFinder.

Notes: While the 2008-2010 American Community Survey (ACS) data generally reflect the December 2009 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas, in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities. Census designated places (CDPs) are delineated for each decennial census as the statistical counterparts of incorporated places. CDPs are delineated to provide data for settled concentrations of population that are identifiable by name but are not legally incorporated under the laws of the state in which they are located. The boundaries usually are defined in cooperation with local or tribal officials. See Appendix Table 1 for information on all places in Massachusetts..

FIGURE 11: NUMBER OF UNINSURED NON-ELDERLY ADULTS AND CHILDREN ACROSS COMMUNITIES IN MASSACHUSETTS, 2010



Source: 2010 American Community Survey (ACS), data from Integrated Public Use Microdata Series (IPUMS) USA.

TABLE 11: CHARACTERISTICS OF UNINSURED PERSONS AGED 0 TO 64 IN MASSACHUSETTS IN COMMUNITIES WITH HIGH LEVELS OF UNINSURANCE, 2010

NUMBER (WEIGHTED)	139,000		
	00.0	138,000	
SEX (%) Female	36.0	39.0	-3.0
Male	64.0	61.0	3.0
AGE (%) 0 to 18 years	6.3	10.5	-4.2***
19 to 26 years	29.1	23.7	5.4*
27 to 44 years	40.1	35.7	4.4*
45 to 64 years	24.5	30.1	-5.6*
RACE/ White, non-Hispanic	43.5	73.8	-30.3***
ETHNICITY (%) Black, non-Hispanic	13.0	7.0	6.0***
Other or multiple races, non-Hispanic	8.7	10.3	-1.6
Hispanic	34.8	8.9	25.9***
CITIZENSHIP Citizen	61.6	81.5	-19.9***
STATUS (%) Not a citizen	38.4	18.5	19.9***
ANY ADULT IN FAMILY Yes	76.3	92.4	-16.1***
SPEAKS ENGLISH WELL OR VERY WELL (%)	22.9	7.6	15.3***
HIGHEST EDUCATIONAL Less than high school	20.7	11.7	9.0***
ATTAINMENT OF ADULTS IN FAMILY (%) High school graduate/Some college	63.8	66.2	-2.4
College graduate	15.5	22.1	-6.6***
CURRENT EMPLOYMENT Any full-time workers in family	44.4	45.5	-1.1
STATUS OF ADULTS IN FAMILY (%) Only part-time workers in family	22.6	23.0	-0.4
No workers in family	33.0	31.5	1.5
FAMILY INCOME At or below 138%	48.0	41.5	6.5*
FEDERAL POVERTY LEVEL 139 to 199%	15.9	15.1	0.8
(FPL) (%) 200 to 299%	18.9	15.6	3.3
300 to 399%	7.2	12.6	-5.4***
400% or more	10.0	15.2	-5.2***
SAMPLE SIZE	966	1,142	

Source: 2010 American Community Survey (ACS), data from Integrated Public Use Microdata Series (IPUMS) USA. Note: Insurance coverage is defined as of the time of the survey. Family is defined as the health insurance unit (HIU). Communities are based on the U.S. Census Bureau's Public Use Microdata Areas (PUMAs). Communities with high levels of uninsurance are defined as those in the PUMAs that rank in the state's top one-third in terms of numbers of uninsured persons.

*(**)(***) Significantly different from zero at the .10 (.05) (.01) level, two-tailed test.

DISCUSSION

With its 2006 health reform initiative, Massachusetts achieved near universal health insurance coverage and has maintained a high level of coverage despite the recent recession and slow recovery. Under health reform, the state has many fewer uninsured individuals and many fewer long-term uninsured than it had in 2006. Nonetheless, some uninsurance persists. This analysis, which examines the circumstances of non-elderly uninsured persons in the state, suggests several strategies for reaching out to the remaining uninsured to further expand insurance coverage in Massachusetts. These include initiatives targeted at uninsured individuals and initiatives targeted at the communities in which high numbers of uninsured individuals reside.

With respect to individual characteristics, continued efforts to reach younger adults are needed, as more than one-third of the adults in Massachusetts who were uninsured over the course of a year were between 19 and 26 years old. This is despite the state's efforts to reach young adults via an expansion of eligibility for dependent coverage up to age 26 and special young adult plans that provide lower cost (and less comprehensive coverage) through the state's Health Connector. Since the ACA's more extensive dependent coverage expansion was not effective until September 2010, this analysis does not fully account for any gains in coverage under that reform, which allows young adults in Massachusetts to be covered by an out-of-state parent's health plan, something that was not possible under the Massachusetts reform. Thus it is likely that the uninsurance rate among young adults is currently less than that reported for the 2008–2010 period.

The remaining uninsured were also disproportionately likely to be male, Hispanic, and non-citizens, groups that could potentially benefit from targeted outreach efforts, although not all are eligible for current coverage options and not all will be eligible for the expanded options under the ACA. Currently, undocumented immigrants and some legal immigrants are ineligible for Medicaid, and undocumented immigrants and adults with access to insurance through their employer are ineligible for Commonwealth Care. Under the ACA, the exclusions of undocumented immigrants and some legal immigrants from the Medicaid program will continue, while undocumented immigrants will also be excluded from the new Health Insurance Exchanges. In addition, while expanded Medicaid will include premium assistance for those with access to employer-sponsored insurance, those with an affordable offer of insurance through their employer will continue to be excluded from subsidized insurance through the Exchange. Outreach efforts will be needed to educate the uninsured about the changes in program eligibility and coverage options, and also about pathways to health care access for those who have few, if any, coverage options, such as undocumented immigrants. One group that will be particularly important to reach are the low-income uninsured workers who, because of an offer of coverage through their employer, are not

¹⁸ For more information about coverage for young adults through the Health Connector, see https://www.mahealthconnector.org/portal/site/connector/menuitem.fb0b6c6357abe78a76e5c810c6398041/.

currently eligible for Commonwealth Care but appear likely to be eligible for Medicaid as part of the ACA expansion.

Outreach efforts that address literacy and language issues among the uninsured are also needed. More than half of uninsured adults in communities with high levels of uninsurance reported an education level of high school or less, and nearly a quarter were in families in which no adult spoke English well or very well. Efforts to provide enrollment assistance for those with language barriers and educational outreach to immigrant neighborhoods, especially for adults in the Greater Boston area and for children outside Greater Boston, could help mitigate the lack of connection between these populations and the health care system.

Targeting outreach strategies outside the health care system are also important, as many of the uninsured do not currently have a usual source of care and make limited use of health care services. This is particularly true for those who have been uninsured for a year or more.

Finally, given the high concentration of uninsured persons in a small number of communities across the state, outreach efforts that target those specific communities could also be a useful strategy for reaching greater numbers of the uninsured. By combining geographic targeting with population targeting, there is the potential for particularly effective outreach efforts that focus on the needs of the uninsured individuals within the at-risk communities.

While Massachusetts has the lowest uninsurance rate in the country, the potential gains from expanding insurance coverage to the remaining uninsured are substantial, as expansion offers the possibility of more timely and affordable health care for this vulnerable population at low cost to the state. With nearly all of the uninsured in families with incomes below 400 percent of the FPL and with the majority of them being citizens, most will likely be eligible for Medicaid or subsidized coverage under the changes introduced with the ACA. Thus much of the cost of moving closer to universal coverage in Massachusetts will be funded with federal dollars.

TECHNICAL APPENDIX

DATA

This analysis relies on data from two surveys: the Massachusetts Health Reform Survey (MHRS) and the American Community Survey (ACS). We rely on the MHRS rather than the Massachusetts Health Insurance Survey (MHIS) because of its greater depth of information on insurance coverage, health care access and use, and health care affordability, as well as its oversample of uninsured persons.

MHRS. The MHRS focuses on the health insurance coverage, health care access and use, and out-of-pocket health care spending for civilian non-institutionalized working-age adults in Massachusetts. The survey relies on a random-digit-dialing landline telephone sample, with a random-digit sample of cell-phone numbers added in 2010. The MHRS is fielded in the fall of each year. The MHRS sample is limited to households that include at least one adult aged 19 to 64, with information obtained from a randomly selected non-elderly adult in the household. The MHRS oversamples low- and moderate-income households and households that include uninsured non-elderly adults. All interviews were conducted by telephone, with a response rate of 39 percent in the most recent year of the survey (42 percent for the landline sample and 31 percent for the cell-phone sample). This analysis uses data from the 2008–2010 MHRS pertaining to 10,185 non-elderly adults, including 1,128 uninsured non-elderly adults.

ACS. The ACS is conducted by the U.S. Census Bureau to provide information on the demographic, socioeconomic, and housing circumstances of U.S. residents. A question on health insurance coverage was added to the survey in 2008. The survey uses an address-based sample frame and collects data using mail, phone, and in-person interviews continuously over the year. Response to the ACS is required by law,²⁰ ensuring a very high weighted response rate: 98 percent for the most recent year.²¹ In the ACS, any member of the household can provide information on all members of the household, but respondents are encouraged to ask the relevant person if they are unsure of the answer.²²

For most of this work, we rely on the 2010 ACS public use data files for the civilian non-institutionalized population. ²³ This yielded a sample of 732,685 children and 1,796,679 non-elderly adults for the nation as a whole, with 14,873 children and 39,733 non-elderly adults in Massachusetts. The sample sizes for uninsured children and adults in Massachusetts were 208 and 1,900, respectively.

¹⁹ More information on the MHRS is available at http://www.bluecrossmafoundation.org.

²⁰ The law allows for a fine of not more than \$5,000 for refusing to provide the requested information.

²¹ The combined response rate reflects the total response after an initial mail survey, follow-up telephone interviews for those who do not respond to the mail survey, and follow-up in-person interviews for those who do not respond to the telephone interview.

²² More information on the ACS is available at http://www.census.gov/acs/www/.

²³ We rely on the augmented public use data from the Integrated Public Use Microdata Series (IPUMS) to take advantage of edits that have been made to improve the value of the data for research. See Ruggles, S., J.T. Alexander, K. Genadek, R. Goeken, M.B. Schroeder, and M. Sobek. 2010. Integrated Public Use Microdata Series: Version 5.0 [Machine-readable database]. Minneapolis, MN: University of Minnesota.

For some of the tabulations that focus on smaller geographic areas, we use the 2008–2010 three-year estimates data from the ACS. We access those data via the American FactFinder (http://factfinder2.census.gov/faces/nav/jsf/pages/using_factfinder.xhtml).

METHODS

The analyses of the MHRS data and the ACS data rely on descriptive methods, comparing insured and uninsured non-elderly adults within Massachusetts for the MHRS analyses and comparing uninsured children and non-elderly adults in Massachusetts with their counterparts in the rest of the country using the ACS. In presenting the results, we focus on differences between the groups that are statistically significant at the 10 percent level or better. All estimates are weighted and control for the complex designs of the surveys.

Defining uninsurance in the MHRS. The MHRS collects information on health insurance coverage at the time of the survey, as well as information on changes in coverage over the prior year. For this analysis, we focus on four measures of uninsurance:

- Uninsured at the time of the interview;
- Ever uninsured over the year: defined as uninsured at the time of the interview or at any time in the 12 months prior to the interview;
- Short-term uninsured: defined as uninsured at the time of the interview but insured at some point in the 12 months prior to the interview; and
- Long-term uninsured: defined as uninsured at the time of the interview and uninsured for the full 12 months prior to the interview.

In the 2008–2010 MHRS, 4.8 percent of the non-elderly adults were uninsured at the time of the interview and 10.6 percent were uninsured at some point over the year (Figure 1).²⁴ Among those uninsured at the time of the survey, 49.9 percent were short-term uninsured, that is, uninsured for less than a year, and 50.1 percent were long-term uninsured, that is, uninsured for a year or more (data not shown).

Defining uninsurance in the ACS. The ACS asks a single question on type of health insurance coverage that focuses on coverage at the time of the interview. Individuals for whom no insurance coverage type is identified are counted as uninsured. In 2010, 1.5 percent of children and 6.2 percent of non-elderly adults were estimated to be uninsured in Massachusetts at the time of the interview, as compared with 8.6 percent and 21.8 percent, respectively, in the rest of the nation.

Defining the local community in the ACS. The ACS is designed to provide representative data for the nation, states, and local areas. In the annual public use data files for the ACS, the smallest geographic areas that are identified—Public Use Microdata Areas (PUMAs)—are based on counties, subsets of

²⁴ Data from the Massachusetts Health Connector and Department of Revenue for 2009 indicate that approximately 4 percent of adult tax filers, a subset of adults in the state that likely excludes many low-income uninsured adults, were uninsured (or had coverage that did not meet the standards for minimal creditable coverage) for part of 2009, and about 4 percent were uninsured for the whole year. For more information see, Massachusetts Health Connector and the Department of Revenue. 2011. "Data of the Individual Mandate: Tax Year 2009." Boston, MA: Massachusetts Health Connector and the Department of Revenue. Available at: http://www.mass.gov/dor/docs/dor/health-care/2011/2009-health-care-report.pdf. Accessed October 4, 2012.

counties (in urban areas), and combinations of counties (in more rural areas).²⁵ Each of the PUMAs is designed to contain approximately 100,000 residents. There are 52 PUMAs in Massachusetts.

APPENDIX TABLE 1: UNINSURANCE RATE AND NUMBER UNINSURED FOR ALL PLACES IN MASSACHUSETTS FOR CHILDREN AND NON-ELDERLY ADULTS, 2008-2010

	CHILDREN 0 TO 17			NON-ELDERLY ADULTS 18 TO 64		
PLACES IN MASSACHUSETTS	TOTAL POPULATION	UNINSURANCE RATE	NUMBER OF UNINSURED	TOTAL POPULATION	UNINSURANCE RATE	NUMBER OF UNINSURED
Agawam (City)	5,905	0.0%	0	17,451	5.7%	993
Arlington (CDP)	8,452	0.3%	22	27,466	2.6%	721
Attleboro (City)	10,104	1.3%	134	27,890	6.9%	1,917
Barnstable (City)	9,042	3.7%	334	26,746	10.4%	2,779
Belmont (CDP)	5,862	1.9%	113	14,599	2.8%	409
Beverly (City)	7,517	4.6%	346	25,260	5.8%	1,469
Boston (City)	101,911	1.6%	1,659	443,356	7.1%	31,473
Braintree (City)	7,942	2.9%	233	21,637	2.7%	579
Brockton (City)	24,019	2.7%	657	58,881	10.4%	6,135
Brookline (CDP)	10,843	0.6%	66	39,698	2.3%	925
Burlington (CDP)	5,399	6.1%	331	14,518	5.8%	843
Cambridge (City)	13,795	1.6%	227	78,648	3.4%	2,661
Chelsea (City)	9,632	1.2%	117	22,099	14.3%	3,153
Chicopee (City)	11,992	1.0%	123	34,299	5.0%	1,702
Danvers (CDP)	5,368	0.0%	0	16,328	3.9%	638
Dedham (CDP)	4,902	1.1%	56	14,142	4.9%	692
Everett (City)	9,251	1.7%	158	27,015	15.9%	4,284
Fall River (City)	19,167	2.4%	457	55,852	7.1%	3,985
Fitchburg (City)	8,724	0.2%	16	26,615	6.0%	1,606
Framingham (CDP)	13,900	4.9%	688	44,076	9.4%	4,164
Franklin (City)	9,149	2.5%	233	19,771	4.1%	810
Gardner (City)	4,443	1.6%	70	11,718	4.4%	510
Gloucester (City)	5,182	1.0%	51	18,190	4.9%	891
Haverhill (City)	14,782	1.1%	156	38,550	6.2%	2,397
Holyoke (City)	9,849	1.8%	173	23,942	6.5%	1,560
Lawrence (City)	22,004	2.2%	493	46,757	12.8%	6,002
Leominster (City)	9,775	0.9%	89	25,181	8.2%	2,069
Lexington (CDP)	7,868	0.8%	61	17,096	1.4%	233
Lowell (City)	24,642	1.1%	271	69,912	9.2%	6,422
Lynn (City)	21,817	2.5%	538	57,467	11.1%	6,375

continued

²⁵ Aggregate information for smaller geographic areas is available from files created by the Census Bureau's American FactFinder, which reports from tabulations based on multiple years of the ACS. For example, three-year estimates are available for all geographies with a population of at least 20,000, and five-year estimates are available for all ACS geographies, including census tracts and block groups. Since the question on health insurance coverage was added to the ACS in 2008, the 2008–2010 file includes health insurance coverage. The first five-year file that will include health insurance coverage will be the file for 2008–2012. Appendix Table 1 provides estimates of the uninsurance rate and number of uninsured for children and non-elderly adults for places in Massachusetts for the 2008–2010 period. Because the data are available only in preselected tabulations in the three-year merge file, we cannot examine the characteristics of the uninsured children and non-elderly adults in these places.

APPENDIX TABLE 1: (continued) UNINSURANCE RATE AND NUMBER UNINSURED FOR ALL PLACES IN MASSACHUSETTS FOR CHILDREN AND NON-ELDERLY ADULTS, 2008-2010

	CHILDREN 0 TO 17			NON-ELDERLY ADULTS 18 TO 64			
PLACES IN MASSACHUSETTS	TOTAL POPULATION	UNINSURANCE RATE	NUMBER OF UNINSURED	TOTAL POPULATION	UNINSURANCE RATE	NUMBER OF UNINSURED	
Malden (City)	11,767	3.3%	388	40,125	9.3%	3,728	
Marblehead (CDP)	5,055	0.0%	0	11,866	2.5%	301	
Marlborough (City)	7,986	4.9%	389	25,409	4.3%	1,099	
Medford (City)	8,334	1.9%	160	38,807	6.0%	2,343	
Melrose (City)	5,749	0.0%	0	16,930	3.0%	506	
Methuen (City)	11,129	0.7%	73	29,105	5.2%	1,505	
Milford (CDP)	6,351	3.8%	242	15,950	10.1%	1,617	
Milton (CDP)	6,930	1.1%	76	15,848	3.7%	593	
Needham (CDP)	8,019	0.4%	31	16,130	1.9%	314	
New Bedford (City)	23,020	2.6%	599	57,041	11.2%	6,415	
Newton (City)	18,535	0.5%	93	53,568	2.2%	1,157	
Northampton (City)	5,060	0.0%	0	19,651	5.8%	1,145	
Norwood (CDP)	5,601	3.3%	184	17,568	4.2%	733	
Peabody (City)	10,151	1.9%	197	30,318	5.4%	1,630	
Pittsfield (City)	9,121	2.8%	255	26,645	5.1%	1,348	
Quincy (City)	14,463	3.0%	432	63,061	6.8%	4,319	
Randolph (CDP)	7,354	2.4%	173	20,332	5.7%	1,155	
Reading (CDP)	6,553	0.0%	0	14,355	2.1%	295	
Revere (City)	11,038	4.0%	446	32,606	14.5%	4,738	
Salem (City)	8,080	3.2%	261	28,038	6.9%	1,929	
Saugus (CDP)	5,584	3.3%	187	16,750	3.5%	591	
Somerville (City)	9,931	1.6%	159	59,329	7.5%	4,474	
Springfield (City)	41,744	1.1%	440	94,716	9.3%	8,792	
Stoneham (CDP)	4,290	0.7%	28	13,188	2.9%	378	
Taunton (City)	12,117	2.1%	257	36,047	5.9%	2,131	
Wakefield (CDP)	5,373	0.0%	0	15,460	2.6%	398	
Waltham (City)	8,072	2.2%	179	45,653	7.2%	3,279	
Watertown (City)	4,421	0.5%	21	22,646	4.9%	1,104	
Wellesley (CDP)	7,320	1.6%	115	16,540	2.2%	363	
Westfield (City)	8,864	1.6%	138	26,285	6.4%	1,686	
West Springfield (City)	5,991	3.3%	198	17,812	7.9%	1,399	
Weymouth (City)	11,995	1.8%	215	33,540	5.9%	1,990	
Wilmington (CDP)	5,707	3.0%	170	13,248	2.5%	335	
Winchester (CDP)	5,936	0.3%	16	11,819	2.6%	309	
Woburn (City)	8,131	2.4%	198	23,664	5.2%	1,226	
Worcester (City)	38,651	0.9%	341	119,257	6.4%	7,630	

 $Source: 2008-2010\ American\ Community\ Survey\ (ACS)\ 3-Year\ Estimates\ from\ American\ FactFinder.$

Notes: While the 2008-2010 American Community Survey (ACS) data generally reflect the December 2009 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas, in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities. Census designated places (CDPs) are delineated for each decennial census as the statistical counterparts of incorporated places. CDPs are delineated to provide data for settled concentrations of population that are identifiable by name but are not legally incorporated under the laws of the state in which they are located. The boundaries usually are defined in cooperation with local or tribal officials.