

# HEALTH INSURANCE COVERAGE AND HEALTH CARE ACCESS AND AFFORDABILITY IN MASSACHUSETTS: AFFORDABILITY STILL A CHALLENGE

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# TABLE OF CONTENTS

I. INTRODUCTION .....	3
II. DATA AND METHODS.....	5
III. HEALTH INSURANCE COVERAGE FOR NONELDERLY ADULTS .....	27
IV. HEALTH CARE ACCESS AND USE FOR NONELDERLY ADULTS.....	52
V. AFFORDABILITY OF HEALTH CARE FOR NONELDERLY ADULTS .....	82
VI. LOOKING FORWARD: COVERAGE AND OVERALL USE OF CARE ARE STRONG BUT OPPORTUNITIES PERSIST TO IMPROVE AFFORDABILITY.....	103

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## I. INTRODUCTION

The Blue Cross Blue Shield of Massachusetts Foundation began funding an annual survey of nonelderly adults, called the Massachusetts Health Reform Survey (MHRS), in the fall of 2006 to support the evaluation of Massachusetts' 2006 health care reform bill, entitled "An Act Providing Access to Affordable, Quality, Accountable Health Care" (Chapter 58 of the Acts of 2006). The Foundation continued to fund that survey in 2013, with support from the Robert Wood Johnson Foundation,<sup>1</sup> in anticipation of the new round of changes to the health care system under the 2010 national Patient Protection and Affordable Care Act (ACA) and other changes to be introduced by the states new cost-containment legislation, entitled "An Act Improving the Quality of Health Care and Reducing Costs Through Increased Transparency, Efficiency and Innovation" (Chapter 224 of the Acts of 2012).<sup>2</sup> The 2012 legislation is intended to bring the rate of growth in per-capita health care spending in the state down to the rate of growth of the state's economy. Chapter 224 builds on earlier cost-containment legislation the state enacted in 2008, "An Act to Promote Cost Containment, Transparency and Efficiency in the Delivery of Quality Health Care" (Chapter 305 of the Acts of 2008), and in 2010, "An Act to Promote Cost Containment, Transparency and Efficiency in the Provision of Quality Health Insurance for Individuals and Small Businesses" (Chapter 288 of the Acts of 2010).<sup>3</sup> According to the Massachusetts Center for Health Information and Analysis (CHIA), the overall rate of per-capita growth in spending on insured services<sup>4</sup> in 2013, although greater than inflation, was below the benchmark established under Chapter 224. However, it is not clear that that pattern reflects the influence of Massachusetts policy, since health care expenditure growth also slowed in the nation as a whole.<sup>5</sup>

Massachusetts' Chapter 58 was the template for the ACA, which is making wide-ranging changes to the health care system nationally and in Massachusetts. As Massachusetts' 2006 reform did for the state, the ACA utilizes a Medicaid expansion option for states, subsidies for private insurance, a health insurance marketplace, insurance market reforms, requirements for employers, and an individual coverage mandate, among other things, in an effort to expand health insurance coverage for the nation. While there are many similarities between Massachusetts' health reform and the ACA, there are also important differences. For example, both require individuals to obtain health insurance if affordable coverage is available to them, but the ACA requires this of all persons, while the Massachusetts law requires it only of adults; both require employers above a certain size to offer coverage to their employees or face penalties, but the specifics of

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1 The 2012 and 2013 rounds of the MHRS were jointly funded by the Blue Cross Blue Shield of Massachusetts Foundation and the Robert Wood Johnson Foundation (RWJF). RWJF and the Commonwealth Fund also provided supported for survey years 2006–2008. The survey was not fielded in 2011.

2 Gosline A and Rodman E. Summary of Chapter 224 of the Acts of 2012. Boston, MA: Blue Cross Blue Shield of Massachusetts Foundation, 2012, <http://bluecrossmafoundation.org/publication/summary-chapter-224-acts-2012>.

3 Mechanic RE, Altman SH, and McDonough JE. "The New Era of Payment Reform, Spending Targets and Cost Containment in Massachusetts: Early Lessons for the Nation." *Health Affairs*, 31(10):2334–42, 2012.

4 The measure of health care expenditures tracked by CHIA excludes products and services that consumers pay for outside their insurance policy, often including over-the-counter items, services not covered by the health plan, and vision and dental services.

5 Center for Health Information and Analysis. Annual Report on the Performance of the Massachusetts Health Care System. Boston, MA: Center for Health Information and Analysis, September, 2014, <http://www.mass.gov/chia/docs/r/pubs/14/chia-annual-report-2014.pdf>.

the requirements, what size employers they apply to, and the penalties vary;<sup>6</sup> and both expand Medicaid coverage and subsidize coverage for lower-income populations to help make insurance more affordable, but the specifics here vary as well.<sup>7</sup>

Despite such differences in policy and the many differences across the states that will influence the implementation of the ACA, the impacts of Chapter 58 in Massachusetts highlight the potential for gains in health insurance coverage, health care access and use, and health care affordability for the rest of the nation under the ACA.

This report provides an update on insurance coverage, health care access and use, and health care costs and affordability for working-age adults 19 to 64 in Massachusetts as of fall 2013, as the state was preparing to implement the major coverage-expansion components of the ACA and beginning to implement changes under Chapter 224. The 2013 MHRS highlights the state's ongoing success at maintaining near universal health insurance coverage since the 2006 health care reform legislation, as well as the continued burden of health care costs on the state's residents. The report is organized as follows: Chapter II describes the data and methods used in the study. Chapter III reports on health insurance coverage overall and by coverage type. For coverage type, we compare employer-sponsored insurance coverage (ESI) with other (non-ESI) coverage, where other (non-ESI) coverage is more likely to be public coverage for lower-income adults and nongroup coverage for higher-income adults. Chapters IV and V address health care access and use, and health care costs and affordability, respectively. Chapter V summarizes key findings and considers the opportunities for changes to the health care system as Massachusetts looks ahead.

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6 The state has made some changes in the Massachusetts health reform model in the process of implementing the ACA. For a summary of the changes, see Rodman E. Re-Forming Reform Part 2: Blue Cross Blue Shield of Massachusetts Foundation. Implementing the Affordable Care Act in Massachusetts. Boston, MA: Blue Cross Blue Shield of Massachusetts Foundation, 2013, [http://bluecrossmafoundation.org/sites/default/files/download/publication/Reforming\\_Reform\\_PtII\\_FINAL.pdf](http://bluecrossmafoundation.org/sites/default/files/download/publication/Reforming_Reform_PtII_FINAL.pdf).

7 For a comparison of the ACA and the 2006 Massachusetts legislation, see Seifert RW and Cohen AP. Re-Forming Reform: What the Patient Protection and Affordable Care Act Means for Massachusetts. Boston, MA: Blue Cross Blue Shield of Massachusetts Foundation, 2011, <http://bluecrossfoundation.org/sites/default/files/062110NHRReportFINAL.pdf>.

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## II. DATA AND METHODS

### DATA

The Massachusetts Health Reform Survey (MHRS) began in the fall of 2006, just prior to the implementation of key elements of Chapter 58, and has been fielded in the falls of 2006–2010, 2012, and 2013. The survey is funded by the Blue Cross Blue Shield of Massachusetts Foundation, with support for selected years from the Commonwealth Fund (2006–2008) and the Robert Wood Johnson Foundation (2006–2008, 2012, 2013). The MHRS is fielded by Social Science Research Solutions (SSRS, formerly International Communications Research) in conjunction with the Urban Institute.

Public use files for the 2006–2012 MHRS are available through the Inter-university Consortium for Political and Social Research (<http://www.icpsr.umich.edu/icpsrweb/landing.jsp>). The 2013 public use file for the MHRS will be posted there later this fall. Additional information about the MHRS is available in the survey methodology report.<sup>8</sup>

**Survey sample.** The MHRS is conducted with a random sample of approximately 3,000 working-age adults in Massachusetts in each year. In the initial years of the survey (2006–2009), “working-age” was defined as ages 18 to 64; in 2010 the definition was changed to ages 19 to 64 to establish consistency with the definition used by the Massachusetts Division of Health Care Finance and Policy, now the Center for Health Information and Analysis (CHIA).

The 2006 MHRS was based on a stratified random sample of households with a landline telephone. The survey oversampled low- and moderate-income populations targeted by many of the elements of Massachusetts’ health reform initiative. The oversamples included uninsured adults, lower-income adults with family incomes below 300 percent of the federal poverty level (FPL), and moderate-income adults with family incomes between 300 and 500 percent of FPL. The same basic design was used in the 2006–2009 rounds of the MHRS. In the 2008 MHRS, additional oversamples were added based on geographic areas and selected minority populations (African-American and Hispanic adults). In the 2010 MHRS, a random sample of cell phones was added to the survey to supplement the landline telephone sample, in order to reduce the coverage issues associated with a landline-only survey. Finally, in the 2012 and 2013 MHRS, the oversample of uninsured adults was dropped from the survey to reduce survey costs.

The decision to change the survey design in 2010 to include cell phones as well as landline telephones reflects the rapid increase in the share of cell phone-only households in Massachusetts and the nation over the last few years. Estimates based on the National Health Interview Survey (NHIS) showed a nationwide increase in the share of adults in cell phone-only households

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8 Long SK, Triplett T, Dutwin D, and Sherr S. The Massachusetts Health Reform Survey Methodology Report. Washington, DC: Urban Institute, 2014.

from 9.6 percent in January–June 2006 to 27.8 percent in July–December 2010.<sup>9,10</sup> Estimates for Massachusetts also showed a large gain in the share of adults in cell phone–only households, from 7.9 percent in January–December 2007 to 16.8 percent in July 2009–June 2010.<sup>11</sup>

**Survey fielding.** The field period for the MHRS is generally October to early January. All interviews were conducted using the Computer Assisted Telephone Interviewing (CATI) system. The CATI system ensured that questions followed logical skip patterns and that the listed attributes automatically rotated, eliminating “question position” bias. Extensive checking of the program was conducted to assure that skip patterns and sample splits followed the design of the questionnaire. The survey was translated into Spanish and Portuguese to increase the survey’s coverage by including non-English-speaking respondents in the survey.

**Survey content.** In addition to questions on insurance status, the survey includes questions that focus on the individual’s access to and use of health care, out-of-pocket health care costs and medical debt, insurance premiums and covered services (for those with insurance), and health and disability status. With few exceptions, the MHRS relies on questions drawn from established, well-validated surveys.<sup>12</sup> While we sought to maintain consistency with those prior surveys, some questions were modified to ensure that they address the issues of particular concern in Massachusetts. In addition, we developed new questions for some issues specific to the context of Massachusetts’ reform initiative. Over time, there have been changes to the content of the survey to add questions on emerging issues and, in order to keep the survey at a reasonable length, to eliminate questions that are deemed to be less useful. There were no changes in survey content in 2013.

Like all survey-based research, the MHRS relies on self-reported information. The quality of the data depends on the survey respondent’s ability to understand the questions and the response categories, to remember the relevant information, and to report the information accurately. We would expect the quality of the information reported by the respondent to be better for more recent circumstances and events and for events with greater saliency (e.g., current insurance status). Problems with recall are more likely for events that are more distant in time (e.g., number of doctor visits over the past 12 months), while problems with misreporting are more likely for sensitive or embarrassing questions (e.g., problems paying medical bills) or questions that are more difficult to answer (e.g., the amount of out-of-pocket health care spending over the past 12 months).

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9 Blumberg SJ and Luke JV. Wireless Substitution: Early Release of Estimates Based on Data from the National Health Interview Survey, July–December 2006. Hyattsville, MD: National Center for Health Statistics, 2007, [www.cdc.gov/nchs/nhis.htm](http://www.cdc.gov/nchs/nhis.htm).

10 Blumberg SJ and Luke JV. Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July–December 2010. Hyattsville, MD: National Center for Health Statistics, 2011, [www.cdc.gov/nchs/nhis.htm](http://www.cdc.gov/nchs/nhis.htm).

11 The estimates for Massachusetts (and the remaining states) are based on small-area statistical modeling techniques. For a discussion of the methods and the estimates, see Blumberg SJ, Luke JV, Ganesh N, Davern ME, Boudreaux MH, and Soderberg K. Wireless Substitution: State-level Estimates from the National Health Interview Survey, January 2007–June 2010. National Health Statistics Reports, no 39. Hyattsville, MD: National Center for Health Statistics, 2011, <http://www.cdc.gov/nchs/data/nhsr/nhsr039.pdf>.

12 These include government-sponsored surveys, such as the National Health Interview Survey, the Medical Expenditure Panel Survey, and Consumer Assessment of Healthcare Providers and Systems, and special surveys such as the Massachusetts Division of Health Care Finance and Policy’s Survey of Health Insurance Status, the Commonwealth Fund’s Biennial Health Insurance Survey and Consumerism in Health Care Survey, the Kaiser Family Foundation’s Low-income Survey, the Urban Institute’s National Survey of America’s Families, and the RAND Corporation’s Survey of Individual Market Candidates in California, among others.

**Survey response rate.** The overall response rate for the 2013 MHRS was 30.4 percent, which combines the response rates for the landline telephone sample (36.6 percent) and the cell phone sample (23.9 percent) (Exhibit II.1). This calculation is based on the response rate calculation formula (RR3) recommended by the American Association for Public Opinion Research (AAPOR). This formula is set to determine the percent of completed interviews out of all eligible cases in the sample. While response rates for cell phone samples are generally lower than those for landline samples, the cell phone sample captures a part of the population (adults in cell phone-only households) that is missed completely in surveys that focus only on the population with a landline telephone.

**EXHIBIT II.1: MASSACHUSETTS HEALTH REFORM SURVEY RESPONSE RATES, FALL 2006 TO FALL 2013**

	2006	2007	2008	2009	2010	2012	2013
<b>Landline sample</b>	48.9%	45.2%	43.8%	45.5%	42.4%	37.0%	36.6%
<b>Cell phone sample</b>	N/A	N/A	N/A	N/A	30.6%	25.7%	23.9%
<b>Total sample</b>	48.9%	45.2%	43.8%	45.5%	38.2%	33.1%	30.4%
<b>Sample size</b>	2,902	2,812	3,868	3,028	2,934	3,160	3,024

Source: 2006–2013 Massachusetts Health Reform Survey. The survey was not fielded in 2011.  
 Note: A cell phone sample was added to the MHRS in 2010.

As with other surveys, the response rates for both the landline and cell phone components of the MHRS have dropped over time. The MHRS response rates are comparable to those achieved in other recent social science and health surveys,<sup>13</sup> as is the decline in the response rate over time.<sup>14, 15</sup> Survey response rates have been declining for both government and non-government surveys for more than 20 years, as contacting sample members becomes more difficult and more of the sample members who are contacted refuse to complete surveys. For example, the response rate for the Survey of Public Participation in the Arts, a supplement to the Current Population Survey, dropped by 15 percentage points between 2008 and 2012,<sup>16</sup> and the response rate for the Pew Research Center’s People and the Press polls fell from 36 percent in 1997 to 25 percent in 2003 and to 9 percent in 2012.<sup>17</sup> Growing concern about declining response rates for household surveys is leading to expanded efforts to better understand the factors that are driving that decline and strategies for addressing the challenges that declining response rates impose on policy research.<sup>18</sup>

Notwithstanding the concern about dropping response rates over time, it is important to note that response rate is only one metric for assessing a survey, and a low response rate does not neces-

13 Davern M, McAlpine D, Beebe TJ, Ziegenfuss J, Rockwood T, and Call KC. “Are Lower Response Rates Hazardous to Your Health Survey? An Analysis of Three State Telephone Health Surveys.” *Health Services Research*, 45(5, Part 1):1324–44, 2010.  
 14 Atrostic BK, Bates N, Burt G, and Silberstein A. “Nonresponse in U.S. Government Household Surveys: Consistent Measures, Recent Trends, and New Insights.” *Journal of Official Statistics*, 17(2):209–26, 2001.  
 15 Curtin R, Presser S, and Singer E. “Changes in Telephone Survey Nonresponse Over the Past Quarter Century.” *Public Opinion Quarterly*, 69(1 Spring):87–98, 2005.  
 16 Triplett T and Silber B. 2012 Summary Report for the Survey of Public Participation in the Arts. Washington, DC: National Endowment for the Arts (forthcoming 2013).  
 17 Kohut A, Keeter S, Dimrock M, Doherty C, and Christian LM. Assessing the Representativeness of Public Opinion Surveys. Washington, DC: Pew Research Center, 2012.  
 18 National Research Council. *Nonresponse in Social Science Surveys: A Research Agenda*. Washington, DC: The National Academies Press, 2013.

sarily imply inaccurate estimates.<sup>19,20</sup> The available evidence suggests that large nonresponse bias is not that common and, when present, tends to affect only a subset of estimates from a survey.<sup>21,22</sup> Reassuringly, estimates of key measures in the MHRS are quite similar to those in the American Community Survey (ACS), which has a response rate of over 90 percent (Exhibit II.2).<sup>23</sup>

**EXHIBIT II.2: CHARACTERISTICS OF MASSACHUSETTS ADULTS 19 TO 64 IN THE 2013 MASSACHUSETTS HEALTH REFORM SURVEY (MHRS) AND THE 2012 AMERICAN COMMUNITY SURVEY (ACS)**

	2013 MHRS	2012 ACS
<b>Age</b>		
19 to 25 years	16.6%	16.2%
26 to 34 years	18.7%	18.8%
35 to 49 years	32.6%	32.5%
50 to 64 years	32.1%	32.5%
<b>Race/ethnicity</b>		
White, non-Hispanic	74.4%	75.3%
Other race, non-Hispanic	15.4%	14.9%
Hispanic	10.1%	9.8%
<b>Female</b>	51.4%	51.1%
<b>U.S. citizen</b>	90.8%	90.5%
<b>Marital status</b>		
Married	50.5%	48.5%
Divorced, separated, widowed	10.8%	14.4%
Never married/living with partner	38.7%	37.1%
<b>Education</b>		
Less than high school	7.4%	8.1%
High school graduate (includes some college)	51.1%	52.8%
College graduate or higher	41.5%	39.1%
<b>Work status</b>		
Working	71.0%	73.4%
Not working	29.0%	26.6%
<b>Current insurance coverage</b>		
Uninsured	4.8%	5.8%
Insured	95.2%	94.2%
<b>Sample size</b>	3,024	41,989

Sources: 2013 Massachusetts Health Reform Survey and 2012 American Community Survey.

Note: These are simple (unadjusted) estimates.

19 Groves M. "Nonresponse Rates and Nonresponse Bias in Household Surveys." *Public Opinion Quarterly*, 70(5):646-75, 2006.

20 Halbesleben JR and Whitman MV. "Evaluating Survey Quality in Health Services Research: A Decision Framework for Assessing Nonresponse Bias." *Health Services Research*, 48(3):913-30, 2013.

21 Brick JM. "The Future of Survey Sampling." *Public Opinion Quarterly*, 75(5):872-88, 2011.

22 Groves M, Presser S, and Dipko S. "The Role of Topic Interest in Survey Participation Decisions." *Public Opinion Quarterly*, 68(1): 2-31, 2004.

23 Note that some of these variables are used in the post-stratification weighting (e.g., age, sex, race/ethnicity), which would insure that they are similar across the surveys.

**Survey weights.** All tabulations based on the survey data were prepared using weights that adjust for the complex design of the survey, for undercoverage, and for survey nonresponse. Separate weights were constructed for the landline sample and for the combined landline and cell phone samples. The relative weights of the landline and cell phone samples for Massachusetts were determined using the NHIS estimates of the share of Massachusetts adults in households with landlines and cell phones.<sup>24</sup>

The final weights were constructed from a base weight for each adult that reflects his or her probability of selection for the survey and a post-stratification adjustment to ensure that the characteristics of the overall sample were consistent with the characteristics of the Massachusetts population as projected by the U.S. Census Bureau.<sup>25</sup> Specifically, the final weights include an adjustment to ensure that the age, sex, race/ethnicity, and geographic distribution of the sample are consistent with the distribution of the population in Massachusetts. This adjustment is needed since some adults are less likely than others to be included in the survey, resulting in them being underrepresented in the sample.

**Item nonresponse.** For the most part, survey respondents answered all the questions in the survey; there was very little missing data or item nonresponse. An exception to this was the family income measure; between four and six percent of the sample either did not know or would not provide any information on family income, and another three to five percent would only provide information on whether their family income was above or below 300 percent of FPL. We used hot deck procedures to assign values for the missing income data based on the individual's age, sex, marital status, family type (parent or childless adult), educational attainment, and, where available, income category (above or below 300 percent of FPL). Because of an error in the question on family income in 2010, there was a more elaborate adjustment to the income measure in that survey year.<sup>26</sup>

**Defining health insurance coverage.** Survey respondents were asked a series of “yes/no” questions about whether they had each of the different types of insurance coverage available in the state, including Medicare, employer-sponsored insurance (ESI), and nongroup coverage, as well as the range of publicly funded programs. Respondents were told to exclude health care plans that covered a single type of care (e.g., dental care, prescription drugs). Individuals who received care under the state's uncompensated care program—also referred to as the Health Safety Net—were counted as uninsured.

The primary insurance coverage questions in the MHRS focus on insurance coverage at the time of the survey (i.e., current insurance coverage); however, the survey also asks those who are currently insured whether they were uninsured at any time in the prior year and asks those who are currently uninsured whether they were insured at any time in the prior year. Thus, there are three

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24 Blumberg SJ, Luke JV, Ganesh N, Davern ME, and Boudreaux MH. Wireless Substitution: State-level Estimates from the National Health Interview Survey, 2010–2011. National Health Statistics Reports, no 61. Hyattsville, MD: National Center for Health Statistics, 2012, <http://www.cdc.gov/nchs/data/nhsr/nhsr061.pdf>.

25 For a discussion of the derivation of the population control totals generated by the U.S. Census Bureau for the Current Population Survey, see Appendix D (Derivation of Independent Population Controls) of the Current Population Survey Technical Paper 63RV: Design and Methodology. Washington, DC: U.S. Census Bureau, 2002, [www.census.gov/prod/2002pubs/tp63rv.pdf](http://www.census.gov/prod/2002pubs/tp63rv.pdf).

26 The data error and the adjustment to address that data error are described in Long SK, Stockley K, and Dahlen H. Health Reform in Massachusetts as of Fall 2010: Getting Ready for the Affordable Care Act & Addressing Affordability. Boston, MA: Blue Cross Blue Shield of Massachusetts Foundation, 2012, <http://bluecrossmafoundation.org/sites/default/files/MHRS%20Report%20Jan2012.pdf>.

measures of insurance coverage available from the survey: the individual's current insurance coverage, whether the individual was ever uninsured over the past 12 months, and whether the individual was ever insured over the past 12 months. Unless otherwise noted, we use “uninsured” in the text to refer to individuals who were uninsured at the time of the survey.

While most people are believed to report accurately whether they have insurance coverage in surveys, there is evidence of some misreporting of coverage type.<sup>27</sup> In Massachusetts, where several coverage options have similar names, respondents in the survey often reported being enrolled in multiple programs (e.g., Commonwealth Care and Commonwealth Choice) or having both direct purchase and public coverage. As this raises concerns about the accuracy of the reporting of coverage type for the various public programs and direct purchase, the analysis of source of coverage is limited to ESI coverage and all other types of insurance (referred to as “other coverage”).<sup>28</sup> An individual reporting both public coverage and ESI coverage (perhaps because of having coverage through the Insurance Partnership program under MassHealth or wraparound services under MassHealth) would be assigned to ESI coverage. Among lower-income adults, the “other coverage” category is generally reported to be public coverage (e.g., MassHealth or Commonwealth Care), while for higher-income adults, this category is more likely to represent direct purchase of nongroup coverage or Commonwealth Choice.

For this analysis, we focus on coverage at the time of the survey (referred to as “current coverage”) and coverage over the past year. Individuals who have health insurance coverage at the time of the survey and for all of the past year are referred to as “full-year” insured.

**Defining family income categories.** Survey respondents are asked to report on their family's income over the past year. We use that measure to examine health insurance coverage and health care coverage and affordability for the overall Massachusetts population and for various population subgroups based on family income. Incomes are grouped in two different ways:

- Comparisons based on two income groups of relevance to the coverage changes introduced under Chapter 58:
  - Higher-income adults—family income at or above 300 percent FPL
  - Lower-income adults—family income below 300 percent FPL
- Comparisons based on three income groups of relevance to the coverage changes introduced under the Affordable Care Act:
  - Low-income adults—family income at or below 138 percent FPL
  - Middle-income adults—family income between 139 and 399 percent FPL
  - High-income adults—family income at or above 400 percent FPL

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27 Cantor JC, Monheit AC, Brownlee S, and Schneider C. “The Adequacy of Household Survey Data for Evaluating the Nongroup Health Insurance Market.” *Health Services Research*, 42(4):1739-57, 2007.

28 One advantage of the MHRS relative to national surveys is the ability to ask detailed questions about the range of insurance options available in Massachusetts. In addition, the survey asks about other sources of care that are available in the state, such as the Indian Health Service and the Health Safety Net/Uncompensated Care/Free Care program. These types of care are excluded from the MHRS measures of insurance coverage.

**Sample characteristics.** Exhibits II.3–II.5 show the demographic, socioeconomic, and health and disability characteristics, respectively, of the nonelderly adults (hereafter “adults”) in Massachusetts from 2006 to 2013. Similar tabulations are provided by family income and health insurance status for the sample of adults insured at the time of the survey in 2013 (Exhibits II.6–II.11) and the adults insured for all of the past 12 months in 2013 (Exhibits II.12–II.17).

**EXHIBIT II.3: DEMOGRAPHIC CHARACTERISTICS OF ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2012	Fall 2013
<b>Age</b>							
19 to 25 years	13.9%	14.0%	13.5%	14.7%	16.3%	17.6%*	16.6%
26 to 34 years	17.7%	18.8%	19.5%	17.5%	17.2%	16.4%	18.7%
35 to 49 years	38.8%	39.5%	36.7%	36.2%	35.8%	33.7%**	32.6%**
50 to 64 years	29.6%	27.8%	30.3%	31.6%	30.7%	32.3%*	32.1%*
<b>Race/ethnicity</b>							
White, non-Hispanic	80.1%	80.1%	79.8%	81.2%	78.9%	75.6%**	74.4%**
Other race, non-Hispanic	12.0%	13.5%	13.4%	11.7%	13.0%	13.7%	15.4%*
Hispanic	7.9%	6.4%*	6.7%	7.0%	8.0%	10.6%**	10.1%*
<b>Female</b>	51.3%	51.5%	51.6%	52.5%	50.7%	51.5%	51.4%
<b>U.S. citizen</b>	92.6%	93.4%	94.0%	95.4%**	92.6% ^^	93.2%	90.8% ^
<b>Marital status</b>							
Married	56.1%	56.4%	54.3%	54.2%	53.4%	51.0%**	50.5%**
Living with partner	7.0%	6.6%	7.4%	7.0%	9.1%* ^	6.9%	8.9%
Divorced, separated, widowed	13.7%	11.8%	12.1%	13.4%	12.5%	11.1%**	10.8%**
Never married	23.2%	25.2%	26.2%	25.4%	25.0%	30.9%**	29.8%**
<b>Parent of one or more children under 18</b>	44.8%	45.2%	43.8%	42.4%	39.7%**	39.5%**	38.6%**
<b>Sample size</b>	3,007	2,937	4,041	3,165	3,040	3,160	3,024

Source: 2006–2013 Massachusetts Health Reform Survey. The survey was not fielded in 2011.

Note: These are simple (unadjusted) estimates.

\*\* Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^^ Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

**EXHIBIT II.4: SOCIOECONOMIC CHARACTERISTICS OF ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2012	Fall 2013
<b>Education</b>							
Less than high school	7.7%	8.4%	6.9%	6.9%	8.1%	7.7%	7.4%
High school graduate (includes some college)	52.3%	46.1%**	49.6%	50.2%	51.7%	49.5%	51.1%
College graduate or higher	40.1%	45.5%**	43.6%	42.9%	40.2%	42.8%	41.5%
<b>Work status</b>							
Full-time	51.1%	54.6%*	50.4% ^	47.6%	50.5%	51.3%	53.2%
Part-time	21.5%	19.7%	20.7%	19.4%	18.9%*	18.7%*	17.9%**
Not working	27.4%	25.7%	28.9% ^	33.0%** ^	30.6%	29.9%	29.0%
<b>Family income relative to the federal poverty level (FPL)</b>							
Below 100% of FPL	12.6%	14.0%	15.7%**	16.0%*	16.6%**	19.0%**	17.7%**
100-299% of FPL	31.0%	27.2%*	28.7%	27.6%*	30.5%	27.6%*	32.7% ^^
300-399% of FPL	15.0%	12.4%	10.0%** ^	11.1%**	11.0%**	11.1%**	9.6%**
400-499% of FPL	11.5%	11.4%	10.4%	12.2%	10.4%	9.3%*	8.7%*
At or above 500% of FPL	29.9%	35.1%**	35.2%**	33.0%*	31.5%	32.9%	31.3%
<b>Current insurance coverage</b>							
Any insurance coverage	86.0%	93.4%**	95.5%** ^^	94.9%**	93.9%**	94.7%**	95.2%**
– Employer-sponsored insurance (ESI) coverage	64.1%	68.7%**	67.9%**	66.1%	65.7%	63.3%	63.5%
– Other (non-ESI) coverage	21.9%	24.8%	27.6%**	28.7%**	28.2%**	31.4%**	31.7%**
Uninsured	14.0%	6.6%**	4.5%** ^^	5.1%**	6.1%**	5.3%**	4.8%**
<b>Region</b>							
Boston	11.0%	9.9%	11.5%	11.3%	11.5%	11.9%	12.5%
Metro West	32.8%	32.8%	32.8%	33.1%	32.8%	33.8%	33.4%
Northeast	11.2%	11.6%	11.1%	11.2%	11.3%	11.0%	11.0%
Central	12.2%	12.4%	12.5%	12.3%	12.1%	12.3%	12.1%
West	12.9%	12.8%	12.6%	12.8%	12.6%	12.3%	12.3%
Southeast	19.9%	20.3%	19.5%	19.4%	19.7%	18.6%	18.7%
<b>Sample size</b>	3,007	2,937	4,041	3,165	3,040	3,160	3,024

Source: 2006–2013 Massachusetts Health Reform Survey. The survey was not fielded in 2011.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^(^) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

**EXHIBIT II.5: HEALTH AND DISABILITY STATUS OF ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2012	Fall 2013
<b>Self-reported health status</b>							
Very good or excellent	57.1%	61.5%*	62.3%**	62.5%**	62.4%**	59.7%	59.7%
Good	28.2%	26.6%	23.8%** ^	22.9%**	23.3%**	26.1%	25.6%
Fair or poor	14.6%	12.0%*	13.9%	14.6%	14.3%	14.2%	14.7%
<b>Has a health condition <sup>a</sup></b>	52.5%	52.1%	54.2%	54.0%	52.0%	55.1%	53.1%
Hypertension	20.7%	19.7%	21.8%	21.6%	21.2%	21.8%	19.9%
Heart disease	4.2%	3.7%	4.5%	3.8%	4.5%	4.8%	4.5%
Diabetes	7.1%	6.7%	6.6%	7.7%	7.3%	7.8%	8.2%
Asthma	15.2%	13.0%	15.3% ^	16.2%	14.8%	17.8%	17.8%
Any other chronic or long-term health condition or health problem	29.6%	28.2%	30.5%	29.8%	28.2%	31.6%	28.0% ^
<b>Activities are limited by a health problem</b>	19.3%	17.6%	19.5%	20.5%	19.6%	21.7%	20.7%
<b>Sample size</b>	3,007	2,937	4,041	3,165	3,040	3,160	3,024

Source: 2006–2013 Massachusetts Health Reform Survey. The survey was not fielded in 2011.

Note: These are simple (unadjusted) estimates.

\*\* Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^(^)^ Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

a. Includes adults who report they have ever been told by a doctor or other health professional that they have at least one of the following: hypertension or high blood pressure; heart disease or congestive heart failure; diabetes; asthma; any other chronic or long-term health condition or health problem; or are pregnant.

**EXHIBIT II.6: DEMOGRAPHIC CHARACTERISTICS OF CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	CURRENTLY INSURED ADULTS	BY FAMILY INCOME		BY CURRENT HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level ^	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI) ^	Other (Non-ESI) Coverage
<b>Age</b>					
19 to 25 years	15.8%	5.5%	26.8% **	14.4%	18.7%
26 to 34 years	18.3%	15.6%	21.3% *	17.1%	20.8%
35 to 49 years	32.7%	37.8%	27.4% **	34.3%	29.7%
50 to 64 years	33.1%	41.2%	24.5% **	34.2%	30.9%
<b>Race/ethnicity</b>					
White, non-Hispanic	75.9%	85.6%	65.7% **	81.9%	64.2% **
Other race, non-Hispanic	15.0%	10.9%	19.3% **	12.7%	19.4% **
Hispanic	9.0%	3.5%	14.8% **	5.4%	16.3% **
<b>Female</b>	52.7%	51.6%	53.8%	51.6%	54.9%
<b>U.S. citizen</b>	91.9%	93.9%	89.6% **	93.4%	88.8% **
<b>Marital status</b>					
Married	51.9%	74.1%	28.6% **	63.2%	29.2% **
Living with partner	8.9%	6.9%	10.9% *	7.3%	12.0% *
Divorced, separated, widowed	10.7%	6.7%	14.9% **	7.3%	17.4% **
Never married	28.5%	12.4%	45.6% **	22.2%	41.3% **
<b>Parent of one or more children under 18</b>	39.6%	43.2%	35.9% **	41.6%	35.6% *
<b>Sample size</b>	2,924	1,647	1,277	1,910	1,014

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

**EXHIBIT II.7: SOCIOECONOMIC CHARACTERISTICS OF CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	CURRENTLY INSURED ADULTS	BY FAMILY INCOME		BY CURRENT HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level ^	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI) ^	Other (Non-ESI) Coverage
<b>Education</b>					
Less than high school	6.6%	1.1%	12.5% **	2.4%	15.1% **
High school graduate (includes some college)	50.8%	36.4%	66.2% **	44.2%	63.9% **
College graduate or higher	42.6%	62.6%	21.3% **	53.4%	21.0% **
<b>Work status</b>					
Full-time	54.2%	72.2%	35.2% **	70.3%	22.0% **
Part-time	17.0%	13.5%	20.7% **	13.8%	23.3% **
Not working	28.8%	14.3%	44.1% **	15.9%	54.6% **
<b>Family income relative to the federal poverty level (FPL)</b>					
Below 100% of FPL	16.5%	0.0%	33.9% **	5.6%	38.2% **
100-299% of FPL	32.1%	0.0%	66.1% **	25.6%	45.1% **
300-399% of FPL	10.0%	19.4%	0.0%	12.6%	4.7% **
400-499% of FPL	8.8%	17.1%	0.0%	11.7%	2.9% **
At or above 500% of FPL	32.7%	63.5%	0.0%	44.4%	9.1% **
<b>Current insurance coverage</b>					
Any insurance coverage	100.0%	100.0%	100.0%	100.0%	100.0%
– Employer-sponsored insurance (ESI) coverage	66.7%	89.2%	42.9% **	100.0%	0.0%
– Other (non-ESI) coverage	33.3%	10.8%	57.1% **	0.0%	100.0%
Uninsured	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Region</b>					
Boston	12.4%	9.5%	15.4% **	10.9%	15.3% *
Metro West	33.9%	38.6%	28.9% **	38.0%	25.8% **
Northeast	11.3%	12.6%	9.8%	10.8%	12.2%
Central	11.8%	11.9%	11.8%	12.4%	10.7%
West	11.9%	9.5%	14.4% **	10.4%	14.8% *
Southeast	18.8%	17.9%	19.8%	17.6%	21.2%
<b>Sample size</b>	2,924	1,647	1,277	1,910	1,014

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

**EXHIBIT II.8: HEALTH AND DISABILITY STATUS OF CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	CURRENTLY INSURED ADULTS	BY FAMILY INCOME		BY CURRENT HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level ^	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI) ^	Other (Non-ESI) Coverage
<b>Self-reported health status</b>					
Very good or excellent	59.9%	71.5%	47.6% **	68.0%	43.7% **
Good	25.8%	22.7%	29.2% *	24.0%	29.6%
Fair or poor	14.2%	5.9%	23.1% **	8.1%	26.6% **
<b>Has a health condition</b>					
Hypertension	20.6%	19.7%	21.5%	18.4%	24.9% **
Heart disease	4.7%	2.9%	6.5% **	2.9%	8.1% **
Diabetes	8.5%	6.7%	10.4% **	6.5%	12.5% **
Asthma	17.9%	13.9%	22.1% **	15.1%	23.5% **
Any other chronic or long-term health condition or health problem	27.9%	23.3%	32.9% **	22.4%	39.1% **
<b>Activities are limited by a health problem</b>	20.6%	8.5%	33.6% **	9.6%	42.9% **
<b>Sample size</b>	2,924	1,647	1,277	1,910	1,014

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

**EXHIBIT II.9: DEMOGRAPHIC CHARACTERISTICS OF CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	CURRENTLY INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage
<b>Age</b>					
19 to 25 years	15.8%	5.0%	9.8%	35.3%	20.5% **
26 to 34 years	18.3%	15.8%	13.9%	20.1%	22.2%
35 to 49 years	32.7%	38.1%	35.2%	25.9%	28.6%
50 to 64 years	33.1%	41.2%	41.1%	18.7%	28.8% **
<b>Race/ethnicity</b>					
White, non-Hispanic	75.9%	86.3%	79.4%	71.9%	61.2% *
Other race, non-Hispanic	15.0%	10.3%	15.5%	18.1%	20.2%
Hispanic	9.0%	3.4%	5.0%	9.8%	18.5% **
<b>Female</b>	52.7%	51.1%	55.6%	52.6%	54.8%
<b>U.S. citizen</b>	91.9%	94.4%	90.1%	91.1%	88.5%
<b>Marital status</b>					
Married	51.9%	75.7%	60.4% *	35.6%	23.2% **
Living with partner	8.9%	6.7%	8.9%	8.7%	12.6%
Divorced, separated, widowed	10.7%	6.3%	9.8%	9.6%	18.9% **
Never married	28.5%	11.4%	20.9% *	46.0%	45.3%
<b>Parent of one or more children under 18</b>	39.6%	43.5%	40.6%	37.6%	34.6%
<b>Sample size</b>	2,924	1,444	203	466	811

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

**EXHIBIT II.10: SOCIOECONOMIC CHARACTERISTICS OF CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	CURRENTLY INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage
<b>Education</b>					
Less than high school	6.6%	0.8%	3.1%	5.8%	17.5% **
High school graduate (includes some college)	50.8%	35.0%	47.7% *	64.9%	67.1%
College graduate or higher	42.6%	64.2%	49.2% **	29.3%	15.4% **
<b>Work status</b>					
Full-time	54.2%	75.8%	42.0% **	58.1%	18.1% **
Part-time	17.0%	12.5%	21.9%	16.8%	23.6% *
Not working	28.8%	11.7%	36.1% **	25.1%	58.3% **
<b>Family income relative to the federal poverty level (FPL)</b>					
Below 100% of FPL	16.5%	0.0%	0.0%	18.0%	45.8% **
100-299% of FPL	32.1%	0.0%	0.0%	82.0%	54.2% **
300-399% of FPL	10.0%	18.3%	27.9% *	0.0%	0.0%
400-499% of FPL	8.8%	17.0%	17.4%	0.0%	0.0%
At or above 500% of FPL	32.7%	64.6%	54.7%	0.0%	0.0%
<b>Current insurance coverage</b>					
Any insurance coverage	100.0%	100.0%	100.0%	100.0%	100.0%
– Employer-sponsored insurance (ESI) coverage	66.7%	100.0%	0.0%	100.0%	0.0%
– Other (non-ESI) coverage	33.3%	0.0%	100.0%	0.0%	100.0%
Uninsured	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Region</b>					
Boston	12.4%	9.5%	9.8%	13.9%	16.5%
Metro West	33.9%	39.3%	32.9%	35.0%	24.3% *
Northeast	11.3%	11.8%	19.5%	8.5%	10.8%
Central	11.8%	12.1%	10.2%	13.0%	10.8%
West	11.9%	9.2%	11.9%	13.0%	15.4%
Southeast	18.8%	18.2%	15.6%	16.4%	22.3%
<b>Sample size</b>	2,924	1,444	203	466	811

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

**EXHIBIT II.11: HEALTH AND DISABILITY STATUS OF CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	CURRENTLY INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage
<b>Self-reported health status</b>					
Very good or excellent	59.9%	71.5%	71.4%	60.1%	38.2% **
Good	25.8%	23.0%	19.7%	26.1%	31.6%
Fair or poor	14.2%	5.5%	8.9%	13.8%	30.1% **
<b>Has a health condition</b>					
Hypertension	20.6%	19.6%	20.5%	15.8%	25.8% **
Heart disease	4.7%	2.8%	3.7%	3.2%	9.0% **
Diabetes	8.5%	6.6%	7.8%	6.2%	13.5% **
Asthma	17.9%	13.6%	16.8%	18.3%	24.9%
Any other chronic or long-term health condition or health problem	27.9%	23.4%	21.9%	20.0%	42.6% **
<b>Activities are limited by a health problem</b>	20.6%	7.5%	16.7% **	14.2%	48.2% **
<b>Sample size</b>	2,924	1,444	203	466	811

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

**EXHIBIT II.12: DEMOGRAPHIC CHARACTERISTICS OF FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	FULL-YEAR INSURED ADULTS	BY FAMILY INCOME		BY CURRENT HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level ^	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI) ^	Other (Non-ESI) Coverage
<b>Age</b>					
19 to 25 years	15.0%	5.4%	26.0% **	14.1%	16.9%
26 to 34 years	17.6%	14.9%	20.8% *	16.3%	20.6%
35 to 49 years	33.2%	38.1%	27.5% **	34.8%	29.7%
50 to 64 years	34.2%	41.5%	25.7% **	34.8%	32.8%
<b>Race/ethnicity</b>					
White, non-Hispanic	75.9%	85.3%	65.0% **	81.6%	63.4% **
Non-white, non-Hispanic	14.9%	11.0%	19.4% **	12.8%	19.4% *
Hispanic	9.1%	3.6%	15.4% **	5.5%	17.1% **
<b>Female</b>	53.1%	51.9%	54.5%	52.2%	55.0%
<b>U.S. citizen</b>	92.4%	94.0%	90.5% *	93.5%	89.8% *
<b>Marital status</b>					
Married	53.6%	74.7%	29.3% **	64.4%	29.5% **
Living with partner	9.1%	6.9%	11.5% *	7.3%	13.0% *
Divorced, separated, widowed	10.6%	6.7%	15.0% **	7.4%	17.7% **
Never married	26.8%	11.7%	44.2% **	20.9%	39.9% **
<b>Parent of one or more children under 18</b>	40.2%	43.3%	36.7% **	42.4%	35.5% *
<b>Sample size</b>	2,795	1,611	1,184	1,871	924

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

**EXHIBIT II.13: SOCIOECONOMIC CHARACTERISTICS OF FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	FULL-YEAR INSURED ADULTS	BY FAMILY INCOME		BY CURRENT HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level ^	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI) ^	Other (Non-ESI) Coverage
<b>Education</b>					
Less than high school	6.7%	1.1%	13.3% **	2.4%	16.1% **
High school graduate (includes some college)	50.3%	36.4%	66.2% **	44.3%	63.2% **
College graduate or higher	43.0%	62.5%	20.5% **	53.2%	20.7% **
<b>Work status</b>					
Full-time	54.4%	72.1%	33.9% **	69.9%	20.4% **
Part-time	16.6%	13.7%	19.9% *	13.8%	22.7% **
Not working	29.1%	14.2%	46.2% **	16.3%	57.0% **
<b>Family income relative to the federal poverty level (FPL)</b>					
Below 100% of FPL	16.1%	0.0%	34.5%	5.7%	38.8% **
100-299% of FPL	30.5%	0.0%	65.5%	24.6%	43.4% **
300-399% of FPL	10.1%	18.9%	0.0%	12.5%	4.8% **
400-499% of FPL	9.1%	17.0%	0.0%	11.9%	2.9% **
At or above 500% of FPL	34.3%	64.1%	0.0%	45.3%	10.1% **
<b>Current insurance coverage</b>					
Any insurance coverage	100.0%	100.0%	100.0%	100.0%	100.0%
– Employer-sponsored insurance (ESI) coverage	68.7%	89.5%	44.7% **	100.0%	0.0%
– Other (non-ESI) coverage	31.3%	10.5%	55.3% **	0.0%	100.0%
Uninsured	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Region</b>					
Boston	12.5%	9.3%	16.1% **	11.0%	15.8% *
Metro West	33.4%	38.4%	27.7% **	37.3%	24.8% **
Northeast	11.2%	12.8%	9.4% *	10.7%	12.2%
Central	12.0%	12.0%	11.9%	12.6%	10.6%
West	11.9%	9.4%	14.7% **	10.6%	14.7% *
Southeast	19.1%	18.1%	20.3%	17.8%	21.9%
<b>Sample size</b>	2,795	1,611	1,184	1,871	924

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

**EXHIBIT II.14: HEALTH AND DISABILITY STATUS OF FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	FULL-YEAR INSURED ADULTS	BY FAMILY INCOME		BY CURRENT HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level ^	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI) ^	Other (Non-ESI) Coverage
<b>Self-reported health status</b>					
Very good or excellent	59.4%	71.1%	45.8% **	67.5%	41.4% **
Good	26.2%	22.9%	30.0% *	24.4%	30.1%
Fair or poor	14.5%	6.0%	24.3% **	8.1%	28.5% **
<b>Has a health condition</b>					
Hypertension	21.0%	20.0%	22.2%	18.8%	25.8% **
Heart disease	4.6%	2.9%	6.5% **	3.0%	8.1% **
Diabetes	8.6%	6.7%	10.8% **	6.5%	13.3% **
Asthma	18.0%	13.8%	22.8% **	15.2%	24.1% **
Any other chronic or long-term health condition or health problem	28.8%	23.6%	34.8% **	22.9%	41.7% **
<b>Activities are limited by a health problem</b>	20.9%	8.6%	35.2% **	9.7%	45.7% **
<b>Sample size</b>	2,795	1,611	1,184	1,871	924

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

**EXHIBIT II.15: DEMOGRAPHIC CHARACTERISTICS OF FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	FULL-YEAR INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage
<b>Age</b>					
19 to 25 years	15.0%	5.0%	9.8%	35.3%	20.5% **
26 to 34 years	17.6%	15.8%	13.9%	20.1%	22.2%
35 to 49 years	33.2%	38.1%	35.2%	25.9%	28.6%
50 to 64 years	34.2%	41.2%	41.1%	18.7%	28.8% **
<b>Race/ethnicity</b>					
White, non-Hispanic	75.9%	86.3%	79.4%	71.9%	61.2% *
Other race, non-Hispanic	14.9%	10.3%	15.5%	18.1%	20.2%
Hispanic	9.1%	3.4%	5.0%	9.8%	18.5% **
<b>Female</b>	53.1%	51.1%	55.6%	52.6%	54.8%
<b>U.S. citizen</b>	92.4%	94.4%	90.1%	91.1%	88.5%
<b>Marital status</b>					
Married	53.6%	75.7%	60.4% *	35.6%	23.2% **
Living with partner	9.1%	6.7%	8.9%	8.7%	12.6%
Divorced, separated, widowed	10.6%	6.3%	9.8%	9.6%	18.9% **
Never married	26.8%	11.4%	20.9% *	46.0%	45.3%
<b>Parent of one or more children under 18</b>	40.2%	43.5%	40.6%	37.6%	34.6%
<b>Sample size</b>	2,795	1,444	203	466	811

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

**EXHIBIT II.16: SOCIOECONOMIC CHARACTERISTICS OF FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	FULL-YEAR INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage
<b>Education</b>					
Less than high school	6.7%	0.8%	3.1%	5.8%	17.5% **
High school graduate (includes some college)	50.3%	35.0%	47.7% *	64.9%	67.1%
College graduate or higher	43.0%	64.2%	49.2% **	29.3%	15.4% **
<b>Work status</b>					
Full-time	54.4%	75.8%	42.0% **	58.1%	18.1% **
Part-time	16.6%	12.5%	21.9%	16.8%	23.6% *
Not working	29.1%	11.7%	36.1% **	25.1%	58.3% **
<b>Family income relative to the federal poverty level (FPL)</b>					
Below 100% of FPL	16.1%	0.0%	0.0%	18.0%	45.8% **
100-299% of FPL	30.5%	0.0%	0.0%	82.0%	54.2% **
300-399% of FPL	10.1%	18.3%	27.9% *	0.0%	0.0%
400-499% of FPL	9.1%	17.0%	17.4%	0.0%	0.0%
At or above 500% of FPL	34.3%	64.6%	54.7%	0.0%	0.0%
<b>Current insurance coverage</b>					
Any insurance coverage	100.0%	100.0%	100.0%	100.0%	100.0%
– Employer-sponsored insurance (ESI) coverage	68.7%	100.0%	0.0%	100.0%	0.0%
– Other (non-ESI) coverage	31.3%	0.0%	100.0%	0.0%	100.0%
Uninsured	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Region</b>					
Boston	12.5%	9.5%	9.8%	13.9%	16.5%
Metro West	33.4%	39.3%	32.9%	35.0%	24.3% *
Northeast	11.2%	11.8%	19.5%	8.5%	10.8%
Central	12.0%	12.1%	10.2%	13.0%	10.8%
West	11.9%	9.2%	11.9%	13.0%	15.4%
Southeast	19.1%	18.2%	15.6%	16.4%	22.3%
<b>Sample size</b>	2,795	1,444	203	466	811

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

**EXHIBIT II.17: HEALTH AND DISABILITY STATUS OF FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	FULL-YEAR INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage
<b>Self-reported health status</b>					
Very good or excellent	59.4%	71.5%	71.4%	60.1%	38.2% **
Good	26.2%	23.0%	19.7%	26.1%	31.6%
Fair or poor	14.5%	5.5%	8.9%	13.8%	30.1% **
<b>Has a health condition</b>					
Hypertension	21.0%	19.6%	20.5%	15.8%	25.8% **
Heart disease	4.6%	2.8%	3.7%	3.2%	9.0% **
Diabetes	8.6%	6.6%	7.8%	6.2%	13.5% **
Asthma	18.0%	13.6%	16.8%	18.3%	24.9%
Any other chronic or long-term health condition or health problem	28.8%	23.4%	21.9%	20.0%	42.6% **
<b>Activities are limited by a health problem</b>	20.9%	7.5%	16.7% **	14.2%	48.2% **
<b>Sample size</b>	2,795	1,444	203	466	811

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

## METHODS

This report focuses on 2013 and on changes over time since 2006. For the latter, we compare outcomes for the cross-sectional samples of adults in periods following the implementation of health reform with the outcomes for a similar cross-sectional sample of adults just prior to the implementation of health reform (2006).<sup>29</sup> We report simple (unadjusted) estimates.<sup>30</sup> Any differences between the baseline time period and the follow-up time periods will reflect the impacts of Chapter 58 as well as other factors beyond health reform that changed over those years. These would include, for example, the continuing increase in health care costs in the state, a trend that predates health reform;<sup>31</sup> the severe economic recession that began in December 2007; the initial implementation of some changes related to the ACA (e.g., the establishment of high-risk pools and the expansion of dependent coverage to adult children); and changes in the Massachusetts population over time (as shown in Exhibits II.3–II.5). Given the significant changes in other

29 The 2006 survey was fielded as the Commonwealth Care program was beginning for adults with family incomes of less than 100 percent of FPL; however, enrollment started slowly.

30 In prior years, when there was a stronger focus on linking changes over time to the 2006 reforms, we presented regression-adjusted estimates.

31 Blue Cross Blue Shield of Massachusetts Foundation. Health Care Costs and Spending in Massachusetts: A Review of the Evidence. Chartpack. Boston, MA: Blue Cross Blue Shield of Massachusetts Foundation, March 2013, <http://bluecrossmafoundation.org/sites/default/files/download/publication/Cost%20Deck%20March%202013.pdf>.

factors that have occurred since the implementation of Chapter 58, we cannot attribute trends over the time since 2006 solely to the effects of Chapter 58.

For the component of the report that focuses on 2013, we present both descriptive tables and multivariate analyses. We focus on the overall population of adults as well as the adults who had insurance coverage at the time of the survey and those who had insurance coverage all year—that is, full-year insured adults. We focus on full-year insured adults for much of the analysis of access to health care and affordability of health care since most of those measures are based on the respondent's experiences over the prior year (e.g., whether he/she had a doctor visit in the past 12 months).

In presenting the descriptive tables for insured adults, we focus on differences in outcomes by family income and by health insurance coverage type, including differences by coverage type within family income groups. In some cases, those comparisons are based on relatively small sample sizes that can yield imprecise estimates. In addition, because we are conducting multiple comparisons, it is also important to acknowledge that with a five percent level of statistical significance for the tests of differences over time and across groups, we would expect to estimate one difference in 20 comparisons as statistically significant when it is not, due to chance. Thus evidence of changes over time and of differences across population subgroups will be more compelling if there is consistent evidence across a range of measures.

The multivariate analyses examine the association between the characteristics of the sample members and the outcomes of interest, including measures of health insurance coverage, access to care, and health care affordability. As the outcomes of interest are binary (1/0) variables, we estimate logit models. In reporting the results we focus on the effects of a change in each factor (e.g., age) on the probability of the outcome occurring, holding everything else constant. For example, we estimate the change in the probability of not having stable health insurance coverage over the year associated with a change in the respondent's age from 19 to 25 years to 26 to 34 years. All of the analyses are weighted and control for the complex design of the sample using the survey estimation procedures (svy) in Stata.<sup>32</sup> In the text, we focus on estimates that were statistically significant at the five percent level or better, unless otherwise noted.

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<sup>32</sup> StataCorp. 2013. Stata Statistical Software: Release 13. College Station, TX: StataCorp LP.

### III. HEALTH INSURANCE COVERAGE FOR NONELDERLY ADULTS

#### TRENDS IN HEALTH INSURANCE COVERAGE FOR ADULTS: 2006–2013

- Health insurance coverage remained strong in Massachusetts in 2013, with 95.2 percent of nonelderly adults ages 19 to 64 reporting coverage at the time of the survey. This compares with 86.0 percent reporting coverage in 2006 (Exhibit III.1). In the US as a whole, by contrast, health insurance coverage for adults dropped over this period from 80.2 percent to 79.6 percent based on the National Health Interview Survey.<sup>33,34</sup>
- Employer-sponsored insurance (ESI) coverage also remained strong in 2013 (63.5 percent), with ESI coverage as high in 2013 as it was in 2006 for adults (Exhibit III.1).
- Continuity of insurance coverage is also quite high, as 89.6 percent of adults reported insurance coverage all year and 80.8 percent reported having the same insurance coverage all year in 2013 (Exhibit III.1).

**EXHIBIT III.1: SIMPLE (UNADJUSTED) TRENDS IN HEALTH INSURANCE COVERAGE FOR ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2012	Fall 2013
<b>Current insurance coverage</b>							
Any insurance coverage	86.0	93.4**	95.5** ^^	94.9**	93.9**	94.7**	95.2**
– Employer-sponsored insurance (ESI) coverage	64.1	68.7**	67.9**	66.1	65.7	63.3	63.5
– Other (non-ESI) coverage	21.9	24.8	27.6**	28.7**	28.2**	31.4**	31.7**
Uninsured	14.0	6.6**	4.5** ^^	5.1**	6.1**	5.3**	4.8**
<b>Insurance over the past 12 months</b>							
Always uninsured	9.2	4.2**	2.0** ^^	2.7**	3.2**	2.7**	2.5**
Part year insured and part year uninsured	10.7	9.5	8.8	7.3**	9.1	9.1	7.6**
Always insured	80.0	86.2**	89.1** ^^	90.0**	87.5** ^	88.1**	89.6**
– Always insured with same insurance all year	N/A	76.0	77.8	79.7	75.9 ^^	77.7	80.8 ^
– Always insured but not same insurance all year	N/A	9.9	10.9	10.1	11.6	10.2	8.6
<b>Sample size</b>	3,007	2,937	4,041	3,165	3,040	3,160	3,024

Source: 2006–2013 Massachusetts Health Reform Survey. The survey was not fielded in 2011.

Notes: These are simple (unadjusted) estimates. N/A indicates that the data are not available for that year.

\*(\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^(^^) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

33 Cohen RA and Martinez ME. Health insurance coverage: Early release of estimates from the National Health Interview Survey, 2006. National Center for Health Statistics, June 2007, <http://www.cdc.gov/nchs/nhis.htm>.

34 Cohen RA and Martinez ME. Health insurance coverage: Early release of estimates from the National Health Interview Survey, 2013. National Center for Health Statistics. <http://www.cdc.gov/nchs/nhis/releases.htm>.

- High levels of health insurance coverage and continuity of insurance coverage are reported by adults at all income levels. For example, among lower-income adults (family income below 300 percent of FPL), 91.8 percent were covered at the time of the survey and 82.7 percent were covered all year in 2013. Among middle- and high-income adults the coverage levels were even higher, with more than 98 percent covered at the time of the survey and 94 to 97 percent covered all year (Exhibit III.2).
- There was variation in coverage type by income group, with low-income adults relying less heavily on ESI coverage than on other (non-ESI) coverage (39.4 versus 52.4 percent), while the middle- and high-income adults relied more heavily on ESI (82.9 versus 15.3 percent for middle-income adults, with family income between 300 and 399 percent of FPL, and 89.1 versus 9.6 percent for high-income adults, with family income at or above 400 percent FPL) (Exhibit III.2). The other (non-ESI) coverage is more likely to be public coverage for the lower-income adults (e.g., MassHealth and Commonwealth Care) and to be private nongroup or Commonwealth Choice coverage for the middle- and high-income adults.
- Consistent with the high levels of ESI coverage, most adults and most working adults continued to have access to ESI coverage through a job in 2013, with the level in 2013 similar to that in 2006 (Exhibit III.3).

**EXHIBIT III.2: SIMPLE (UNADJUSTED) TRENDS IN HEALTH INSURANCE COVERAGE FOR ADULTS 19 TO 64 IN MASSACHUSETTS, BY FAMILY INCOME, FALL 2006 TO FALL 2013**

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2012	Fall 2013
<b>FAMILY INCOME BELOW 300% OF THE FEDERAL POVERTY LEVEL (FPL)</b>							
<b>Current insurance coverage</b>							
Any insurance coverage	75.9	87.7**	92.0** ^^	90.8**	90.3**	90.4**	91.8**
Employer-sponsored insurance (ESI) coverage	35.3	39.8	40.4	37.0	40.1*	34.6	39.4
Other (non-ESI) coverage	40.6	47.8*	51.6**	53.9**	50.2**	55.8**	52.4**
Uninsured	24.1	12.3**	8.0** ^^	9.2**	9.7**	9.6**	8.2**
<b>Insurance over the past 12 months</b>							
Always uninsured	16.1	7.9**	3.7** ^^	5.2**	4.9**	4.8**	4.2**
Part year insured and part year uninsured	19.0	15.7	14.3*	11.8**	14.5*	15.4*	12.8**
Always insured	64.7	76.1**	81.8** ^^	82.9**	80.4**	79.7**	82.7**
– Always insured with same insurance all year	N/A	65.5	70.9 ^	73.2	69.2	70.2	74.1
– Always insured but not same insurance all year	N/A	10.1	10.6	9.7	11.1	9.1	8.5
<b>Sample size</b>	1,446	1,311	2,055	1,503	1,444	1,392	1,353

(continued)

**EXHIBIT III.2: (CONTINUED)**

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2012	Fall 2013
<b>FAMILY INCOME 300% TO 399% OF FPL</b>							
<b>Current insurance coverage</b>							
Any insurance coverage	87.6	93.4*	97.0** ^^	97.1**	91.9 ^	97.1**	98.3**
ESI coverage	76.6	80.4	79.5	86.3*	76.4 ^^	81.6	82.9
Other (non-ESI) coverage	11.0	13.0	17.5	10.7	15.5	15.4	15.3
Uninsured	12.4	6.6*	3.0** ^^	2.9**	8.1 ^	2.9**	1.7**
<b>Insurance over the past 12 months</b>							
Always uninsured	6.6	4.5	0.9** ^^	1.3**	5.8 ^	1.5**	1.2**
Part year insured and part year uninsured	7.9	12.2	8.7	6.0	10.5	5.9	5.2
Always insured	85.5	83.3	90.4	92.7*	83.7 ^^	92.6*	93.6**
– Always insured with same insurance all year	N/A	73.3	78.6	81.7	69.2 ^^	81.4	85.7
– Always insured but not same insurance all year	N/A	9.9	11.2	11.0	14.5	11.3	7.9
<b>Sample size</b>	422	362	439	368	339	365	320
<b>FAMILY INCOME AT OR ABOVE 400% OF FPL</b>							
<b>Current insurance coverage</b>							
Any insurance coverage	96.1	98.6**	98.6**	98.2**	98.4**	98.9**	98.7**
ESI coverage	89.8	91.1	92.1	89.2	91.0	90.2	89.1
Other (non-ESI) coverage	6.3	7.5	6.5	9.0	7.4	8.7	9.6*
Uninsured	3.9	1.4**	1.4**	1.8**	1.6**	1.1**	1.3**
<b>Insurance over the past 12 months</b>							
Always uninsured	2.9	0.9**	0.5**	0.6**	0.6**	0.7**	0.8**
Part year insured and part year uninsured	3.0	3.3	3.4	3.3	2.9	3.1	1.7
Always insured	94.0	95.8	96.0	96.0	96.4*	96.3	97.2**
– Always insured with same insurance all year	N/A	86.1	84.4	85.4	85.8	85.1	88.1
– Always insured but not same insurance all year	N/A	9.6	11.0	10.3	10.6	11.1	8.9
<b>Sample size</b>	1,139	1,262	1,547	1,294	1,249	1,403	1,351

Source: 2006–2013 Massachusetts Health Reform Survey. The survey was not fielded in 2011.

Notes: These are simple (unadjusted) estimates. N/A indicates that the data are not available for that year.

\*(\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^(^^) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

**EXHIBIT III.3: SIMPLE (UNADJUSTED) TRENDS IN EMPLOYER-SPONSORED HEALTH INSURANCE OFFERS AND COVERAGE FOR ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL AND BY WORK STATUS, FALL 2006 TO FALL 2013**

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2012	Fall 2013
<b>ALL ADULTS</b>							
Has access to employer-sponsored insurance (ESI) through a job	69.4	72.5	71.7	69.1	69.8	68.0	67.3
Has ESI coverage	64.1	68.7**	67.9**	66.1	65.7	63.3	63.5
– Has ESI coverage through own employer	41.4	42.1	41.0	41.1	39.6	36.5**	38.5*
– Has ESI coverage through family member's employer	21.1	25.4**	25.6**	23.5	24.6*	25.3**	23.7
<b>Sample size</b>	3,007	2,937	4,041	3,165	3,040	3,160	3,024
<b>ALL WORKERS</b>							
Has access to ESI through a job	82.4	83.3	85.4	85.6*	83.4	80.8	80.5
Has ESI coverage	75.0	78.2	80.0**	81.2**	77.6 ^	74.1	75.1
– Has ESI coverage through own employer	52.8	52.6	53.2	55.4	52.4	47.0**	49.8
– Has ESI coverage through family member's employer	21.1	24.4*	25.4*	24.2*	23.6	25.7**	24.1*
<b>Sample size</b>	2,087	2,080	2,667	1,996	2,003	2,140	2,066

Source: 2006–2013 Massachusetts Health Reform Survey. The survey was not fielded in 2011.

Notes: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^(^^) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

**CHARACTERISTICS OF CURRENT HEALTH INSURANCE COVERAGE FOR NONELDERLY ADULTS INSURED AT THE TIME OF THE 2013 SURVEY**

- Roughly half (54.9 percent) of currently insured adults in Massachusetts reported having a choice of health plans in 2013, with the level similar across health insurance types and somewhat higher for adults with incomes at or above 300 percent of FPL relative to their lower-income counterparts (61.0 versus 48.4 percent) (Exhibit III.4).
- Two-thirds of insured adults in a plan with a tiered network reported that they knew how to obtain information on the providers in that network, and more than half (52.9 percent) reported using that information (Exhibit III.5).
- Among the insured adults, higher-income adults were more likely than lower-income adults (83.4 versus 49.6 percent) and adults with ESI coverage were more likely than adults with other (non-ESI) coverage (78.4 versus 43.6 percent) to know how to obtain information about providers in tiered networks, although there was little difference in use by either income level or insurance type (Exhibit III.5).

**EXHIBIT III.4: CURRENT HEALTH INSURANCE TYPE REPORTED BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

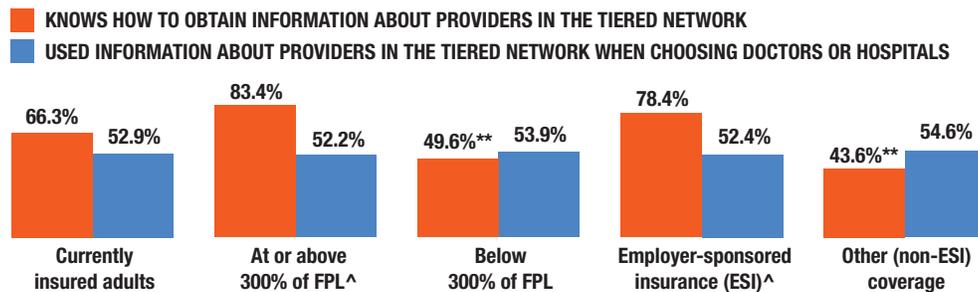
	CURRENTLY INSURED ADULTS	BY FAMILY INCOME		BY CURRENT HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level ^	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI) ^	Other (Non-ESI) Coverage
<b>Had a choice of health plans</b>	54.9	61.0	48.4 **	55.1	54.5
<b>Health plan includes a network of preferred providers</b>	65.9	72.6	58.5 **	70.8	55.8 **
Health plan includes a tiered network	27.4	26.4	28.6	26.8	28.7
Process for enrollment in tiered network:					
– Tiered network was a choice by respondent	57.5	62.7	52.5 *	58.1	56.5
– Tiered network was not a choice by respondent	42.5	37.3	47.5 *	41.9	43.5
Type of care covered by tiered network:					
– Doctor care	24.1	24.2	24.0	24.6	23.0
– Hospital care	20.1	19.8	20.5	19.9	20.6
<b>Health plan pays toward costs for out-of-network care</b>	52.7	61.6	40.6 **	60.2	33.3 **
<b>Health plan requires referral to see a specialist</b>	47.0	47.6	46.3	46.8	47.3
<b>Sample size</b>	2,924	1,647	1,277	1,910	1,014
<b>Share of population</b>	95.2%	48.9%	46.2%	63.5%	31.7%

Source: 2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates. Many of the survey respondents are not able to answer questions about the characteristics of their current health insurance coverage. The focus here is on the share of adults who report a particular characteristic, with the omitted category those adults who reported either that their health plan does not include that characteristic or that they do not know whether their health plan included that characteristic.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

**EXHIBIT III.5: KNOWLEDGE OF HOW TO OBTAIN AND USE INFORMATION ON PROVIDERS IN A TIERED NETWORK AMONG CURRENTLY INSURED ADULTS 19 TO 64 IN A HEALTH PLAN WITH A TIERED NETWORK IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY HEALTH INSURANCE TYPE, FALL 2013**



Source: 2013 Massachusetts Health Reform Survey (N=2,924).

Notes: These are simple (unadjusted) estimates. These estimates exclude a small share of respondents who did not respond to the question. FPL is Federal Poverty Level. A network is a group of providers, such as physicians, hospitals, and pharmacies, who contract with a health plan to provide health care services to members of that health plan. A tiered network is a subset of the more cost-effective providers who are available to the consumer at lower cost.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

- While about half of all insured adults reported that their health plan pays toward costs for out of network care, that figure was much higher for adults with incomes at or above 300 percent of FPL than for those with lower incomes (61.6 versus 40.6 percent) and for adults with ESI coverage than those with other (non-ESI) coverage (60.2 versus 33.3 percent) (Exhibit III.4).
- Between 2012 and 2013 there were few changes in the characteristics of health insurance coverage for insured adults by family income or insurance type. There were two slight shifts perhaps reflecting a trend in employer purchasing away from HMO products and toward PPO products. These shifts were among those with ESI coverage, where there was a 4.5 percent decline in those enrolled in plans including a network of preferred providers and a 4.0 percent decline in those enrolled in plans that require a referral to see a specialist. Both of these characteristics are more common among HMO products (Exhibit III.6).

**EXHIBIT III.6: CHANGES IN CHARACTERISTICS OF CURRENT HEALTH INSURANCE COVERAGE REPORTED BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2012 TO FALL 2013**

	CURRENTLY INSURED ADULTS	BY FAMILY INCOME		BY CURRENT HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage
<b>Had a choice of health plans</b>	-1.3	-2.3	1.1	-3.7	3.6
<b>Health plan includes a network of preferred providers</b>	-2.0	-3.4	1.1	-4.5*	3.4
Health plan includes a tiered network	0.9	0.4	1.4	0.8	1.1
Process for enrollment in tiered network:					
– Tiered network was a choice by respondent	-3.7	-5.2	-0.9	-8.7	5.7
– Tiered network was not a choice by respondent	3.7	5.2	0.9	8.7	-5.7
Type of care covered by tiered network:					
– Doctor care	2.3	2.2	2.4	1.9	3.1
– Hospital care	1.5	2.1	0.5	2.1	0.2
<b>Health plan pays toward costs for out-of-network care</b>	-1.2	-2.1	3.4	-1.7	3.5
<b>Health plan requires referral to see a specialist</b>	-1.7	-1.9	-1.3	-4.0*	2.9
<b>Sample size</b>	5,954	3,388	2,566	3,902	2,052
<b>Share of population</b>	95.0%	50.8%	44.2%	63.4%	31.6%

Source: 2012–2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates. Many of the survey respondents are not able to answer questions about the characteristics of their current health insurance coverage. The focus here is on the share of adults who report a particular characteristic, with the omitted category those adults who reported either that their health plan does not include that characteristic or that they do not know whether their health plan includes that characteristic.

\*(\*\*) Change between 2012 and 2013 is significantly different from zero at the .05 (.01) level, two-tailed test.

- There were few differences in the characteristics of ESI and other (non-ESI) health insurance coverage for higher-income adults, with incomes at or above 300 percent of FPL, although the small sample size for adults with other (non-ESI) coverage makes that estimate imprecise. Among lower-income adults, those with ESI coverage were less likely to report having a choice of plans and more likely to report having a tiered network and a plan that pays toward costs for out of network care than were adults with other (non-ESI) coverage (Exhibit III.7).

**EXHIBIT III.7: CHARACTERISTICS OF CURRENT HEALTH INSURANCE COVERAGE REPORTED BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	CURRENTLY INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage
<b>Had a choice of health plans</b>	54.9	60.7	63.8	42.8	52.6 **
<b>Health plan includes a network of preferred providers</b>	65.9	73.3	67.5	65.3	53.2 *
Health plan includes a tiered network	27.4	26.8	22.5	26.8	29.9
Process for enrollment in tiered network:					
– Tiered network was a choice by respondent	57.5	63.4	55.8	46.4	56.6
– Tiered network was not a choice by respondent	42.5	36.6	44.2	53.6	43.4
Type of care covered by tiered network:					
– Doctor care	24.1	25.0	17.3	23.7	24.2
– Hospital care	20.1	20.3	15.6	19.0	21.6
<b>Health plan pays toward costs for out-of-network care</b>	52.7	63.2	47.6 *	52.7	29.4 **
<b>Health plan requires referral to see a specialist</b>	47.0	47.0	51.9	46.2	46.4
<b>Sample size</b>	2,924	1,444	203	466	811
<b>Share of population</b>	95.2%	63.5%	31.7%	63.5%	31.7%

Source: 2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates. Many of the survey respondents are not able to answer questions about the characteristics of their current health insurance coverage. The focus here is on the share of adults who report a particular characteristic, with the omitted category those adults who reported either that their health plan does not include that characteristic or that they do not know whether their health plan includes that characteristic.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

- Between 2012 and 2013 there were few changes in the characteristics of health insurance coverage for lower- and higher-income insured adults regardless of insurance type (Exhibit III.8).

**EXHIBIT III.8: CHANGES IN CHARACTERISTICS OF CURRENT HEALTH INSURANCE COVERAGE REPORTED BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2012 TO FALL 2013**

	CURRENTLY INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage
<b>Had a choice of health plans</b>	-1.3	-2.9	3.2	-2.0	3.8
<b>Health plan includes a network of preferred providers</b>	-2.0	-4.6*	7.7	-2.5	2.5
Health plan includes a tiered network	0.9	0.5	-0.8	1.7	1.4
Process for enrollment in tiered network:					
– Tiered network was a choice by respondent	-3.7	-5.3	-4.5	-14.6	7.4
– Tiered network was not a choice by respondent	3.7	5.3	4.5	14.6	-7.4
Type of care covered by tiered network:					
– Doctor care	2.3	2.2	2.6	1.2	3.2
– Hospital care	1.5	2.5	-0.6	1.1	0.4
<b>Health plan pays toward costs for out-of-network care</b>	-1.2	-2.2	3.5	2.6	3.2
<b>Health plan requires referral to see a specialist</b>	-1.7	-2.9	6.1	-7.1	2.3
<b>Sample size</b>	5,954	2,998	390	904	1,662
<b>Share of population</b>	95.0%	45.4%	5.3%	17.9%	26.2%

Source: 2012-2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates. Many of the survey respondents are not able to answer questions about the characteristics of their current health insurance coverage. The focus here is on the share of adults who report a particular characteristic, with the omitted category those adults who reported either that their health plan does not include that characteristic or that they do not know whether their health plan includes that characteristic.

\*(\*\*) Change between 2012 and 2013 is significantly different from zero at the .05 (.01) level, two-tailed test.

**DEDUCTIBLES AND PREMIUMS UNDER CURRENT HEALTH INSURANCE COVERAGE FOR NONELDERLY ADULTS INSURED AT THE TIME OF THE 2013 SURVEY**

- Among currently insured adults in Massachusetts, higher-income adults were more likely than lower-income adults (65.1 versus 34.3 percent), and adults with ESI coverage were more likely than adults with other (non-ESI) coverage (64.8 versus 21.9 percent), to have a health plan with a deductible, including a high deductible (defined as a deductible of more than \$1,000 or more per year) (Exhibit III.9).
- Higher-income insured adults and adults with ESI coverage were also more likely to pay a premium for their coverage (80.3 versus 39.6 percent for lower-income adults and 76.7 versus 28.0 percent for adults with other [non-ESI] coverage, respectively) (Exhibit III.9).

**EXHIBIT III.9: DEDUCTIBLES AND PREMIUMS FOR CURRENT HEALTH INSURANCE COVERAGE REPORTED BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	CURRENTLY INSURED ADULTS	BY FAMILY INCOME		BY CURRENT HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level <sup>^</sup>	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI) <sup>^</sup>	Other (Non-ESI) Coverage
<b>Health plan has an annual deductible</b>	50.7	65.1	34.3**	64.8	21.9**
Deductible is \$1,000 or more per person	17.8	24.5	10.2**	22.1	9.0**
Deductible is \$1,000 or more per person and plan includes a Health Savings Account	4.5	7.4	1.1**	6.4	0.6**
<b>Individual pays toward premium for health insurance coverage</b>	60.5	80.3	39.6**	76.7	28.0**
Pays toward premium for individual coverage	23.3	23.3	23.4	25.2	19.5**
Pays toward premium for family coverage	37.2	57.0	16.2**	51.5	8.5**
Annual premium payment is more than 5% of family income	28.7	34.1	25.2**	40.4	11.3**
– Annual payment for individual coverage is more than 5% of family income	11.2	8.3	13.1*	13.1	8.4*
– Annual payment for family coverage is more than 5% of family income	17.4	25.7	12.1**	27.2	2.9**
Annual premium payment is more than 10% of family income	12.9	10.4	14.5	17.8	5.8**
– Annual payment for individual coverage is more than 10% of family income	5.4	2.5	7.3**	6.8	3.4
– Annual payment for family coverage is more than 10% of family income	7.5	7.9	7.2	11.0	2.3**
Premium payment is made under a Section 125 plan	27.3	42.5	12.4**	42.4	1.9**
<b>Has a health care flexible spending account</b>	20.0	29.5	9.7**	28.4	3.3**
<b>Sample size</b>	2,924	1,647	1,277	1,910	1,014
<b>Share of population</b>	95.2%	48.9%	46.2%	63.5%	31.7%

Source: 2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates. Many of the survey respondents are not able to answer questions about the characteristics of their current health insurance coverage. The focus here is on the share of adults who report a particular characteristic, with the omitted category those adults who reported either that their health plan does not include that characteristic or that they do not know whether their health plan includes that characteristic. Because of the way the income information is collected in the survey, the measures of spending relative to family income cannot be constructed for adults with family income above 600 percent of federal poverty level (FPL)

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

- Insured lower-income adults with individual coverage were likely to pay a greater share of their income for towards premiums than higher-income adults with that coverage. For example, 7.3 percent of lower-income adults with individual coverage spent more than 10 percent of family income on their premium as compared with 2.5 percent of higher-income adults. There was no difference in the share of lower- and higher-income adults paying more than 10 percent of family income for family coverage, although higher-income adults were more likely than lower-income adults to pay more than 5 percent of family income for family coverage (Exhibit III.9).

- Insured adults with ESI coverage were much more likely than those with other (non-ESI) coverage to pay a premium toward their insurance coverage (76.7 percent versus 28.0 percent) and to pay a high share of their income toward individual or family premiums. This is consistent with the high share of public coverage, with its financial protections, among those with other (non-ESI) coverage (Exhibit III.9).
- Between 2012 and 2013 there were increases in the shares of both higher-income insured adults (up 7.5 percentage points) and adults with ESI coverage (up 6.3 percentage points) reporting that their health plan had a deductible and that they were spending more than five percent of family income on individual coverage (up 3.2 percentage points for higher-income adults and 4.9 for adults with ESI coverage, respectively) (Exhibit III.10). Among both higher- and lower-income insured adults, adults with ESI coverage were more likely to have an annual deductible and to be paying premiums than were adults with other (non-ESI) coverage. However, higher-income adults with other coverage were more likely to be paying premiums that were more than 10 percent of family income than were their higher-income counterparts with ESI coverage, although the small sample size for higher-income adults with other (non-ESI) coverage makes that estimate imprecise (Exhibit III.11).

**EXHIBIT III.10: CHANGES IN DEDUCTIBLES AND PREMIUMS FOR CURRENT HEALTH INSURANCE COVERAGE REPORTED BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2012 TO FALL 2013**

	CURRENTLY INSURED ADULTS	BY FAMILY INCOME		BY CURRENT HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage
<b>Health plan has an annual deductible</b>	3.3	7.5**	0.3	6.3**	-2.1
Deductible is \$1,000 or more per person	3.5*	5.3*	2.4	3.7*	3.0
Deductible is \$1,000 or more per person and plan includes a Health Savings Account	1.2	2.9*	-0.4	1.6	0.4
<b>Individual pays toward premium for health insurance coverage</b>	1.8	1.0	6.5	1.0	3.5
Pays toward premium for individual coverage	2.1	0.7	3.7	3.3	-0.4
Pays toward premium for family coverage	-0.3	0.2	2.8	-2.3	3.9*
Annual premium payment is more than 5% of family income	4.4	4.5	4.8	5.0	2.6
– Annual payment for individual coverage is more than 5% of family income	3.6*	3.2*	3.5	4.9*	1.5
– Annual payment for family coverage is more than 5% of family income	0.8	1.3	1.3	0.1	1.0
Annual premium payment is more than 10% of family income	2.0	0.4	3.0	2.5	1.1
– Annual payment for individual coverage is more than 10% of family income	1.3	0.2	1.8	2.0	0.2
– Annual payment for family coverage is more than 10% of family income	0.7	0.1	1.2	0.5	0.9
Premium payment is made under a Section 125 plan	-0.4	-0.7	2.3	-1.5	1.2
<b>Has a health care flexible spending account</b>	0.1	-0.8	2.9	-0.8	1.9
<b>Sample size</b>	5,954	3,388	2,566	3,902	2,052
<b>Share of population</b>	95.0%	50.8%	44.2%	63.4%	31.6%

Source: 2012–2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates. Many of the survey respondents are not able to answer questions about the characteristics of their current health insurance coverage. The focus here is on the share of adults who report a particular characteristic, with the omitted category those adults who reported either that their health plan does not include that characteristic or that they do not know whether their health plan includes that characteristic. Because of the way the income information is collected in the survey, the measures of spending relative to family income cannot be constructed for adults with family income above 600 percent of federal poverty level (FPL).

\*(\*\*) Change between 2012 and 2013 is significantly different from zero at the .05 (.01) level, two-tailed test.

**EXHIBIT III.11: DEDUCTIBLES AND PREMIUMS FOR CURRENT HEALTH INSURANCE COVERAGE REPORTED BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	CURRENTLY INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI) <sup>^</sup>	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI) <sup>^</sup>	Other (Non-ESI) Coverage
<b>Health plan has an annual deductible</b>	50.7	66.5	53.4*	60.7	15.3**
Deductible is \$1,000 or more per person	17.8	23.7	31.4	18.2	4.6**
Deductible is \$1,000 or more per person and plan includes a Health Savings Account	4.5	8.0	2.6**	2.4	0.2*
<b>Individual pays toward premium for health insurance coverage</b>	60.5	82.1	65.5**	64.9	20.5**
Pays toward premium for individual coverage	23.3	22.5	30.1	31.4	17.4**
Pays toward premium for family coverage	37.2	59.6	35.5**	33.6	3.1**
Annual premium payment is more than 5% of family income	28.7	34.1	33.9	48.6	8.2**
– Annual payment for individual coverage is more than 5% of family income	11.2	7.5	14.4	20.6	7.6**
– Annual payment for family coverage is more than 5% of family income	17.4	26.6	19.5	28.0	0.6**
Annual premium payment is more than 10% of family income	12.9	8.8	21.5*	29.6	3.6**
– Annual payment for individual coverage is more than 10% of family income	5.4	2.2	4.6	12.9	3.3**
– Annual payment for family coverage is more than 10% of family income	7.5	6.7	16.9	16.7	0.3**
Premium payment is made under a Section 125 plan	27.3	47.6	0.7**	30.1	2.1**
<b>Has a health care flexible spending account</b>	20.0	32.4	5.2**	19.1	3.0**
<b>Sample size</b>	2,924	1,444	203	466	811
<b>Share of population</b>	95.2%	43.6%	5.3%	19.8%	26.4%

Source: 2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates. Many of the survey respondents are not able to answer questions about the characteristics of their current health insurance coverage. The focus here is on the share of adults who report a particular characteristic, with the omitted category those adults who reported either that their health plan does not include that characteristic or that they do not know whether their health plan includes that characteristic. Because of the way the income information is collected in the survey, the measures of spending relative to family income cannot be constructed for adults with family income above 600 percent of federal poverty level (FPL).

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

- Between 2012 and 2013 there were few significant changes in the share of adults reporting deductibles and premiums for health insurance coverage for lower-income insured adults regardless of insurance type. Among higher-income adults with ESI coverage there were more changes, including an increase in health plans with a deductible (Exhibit III.12).

**EXHIBIT III.12: CHANGES IN DEDUCTIBLES AND PREMIUMS FOR CURRENT HEALTH INSURANCE COVERAGE REPORTED BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2012 TO FALL 2013**

	CURRENTLY INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage
<b>Health plan has an annual deductible</b>	3.3	7.6**	8.0	3.5	-4.1
Deductible is \$1,000 or more per person	3.5*	4.9*	9.0	1.1	2.1
Deductible is \$1,000 or more per person and plan includes a Health Savings Account	1.2	3.1*	1.6	-1.7	0.2
<b>Individual pays toward premium for health insurance coverage</b>	1.8	0.3	7.8	6.8	2.9
Pays toward premium for individual coverage	2.1	1.7	-8.1	5.9	1.3
Pays toward premium for family coverage	-0.3	-1.4	15.9*	0.9	1.6
Annual premium payment is more than 5% of family income	4.4	3.1	13.8	5.7	1.2
– Annual payment for individual coverage is more than 5% of family income	3.6*	3.2*	3.5	5.6	1.3
– Annual payment for family coverage is more than 5% of family income	0.8	-0.1	10.4	0.1	-0.1
Annual premium payment is more than 10% of family income	2.0	-0.7	8.0	4.3	0.3
– Annual payment for individual coverage is more than 10% of family income	1.3	0.5	-1.2	2.8	0.5
– Annual payment for family coverage is more than 10% of family income	0.7	-1.2	9.3	1.5	-0.2
Premium payment is made under a Section 125 plan	-0.4	-1.1	-1.3	0.6	1.7
<b>Has a health care flexible spending account</b>	0.1	-0.9	0.8	2.4	2.2*
<b>Sample size</b>	5,954	2,998	390	904	1,662
<b>Share of population</b>	95.0%	45.4%	5.3%	17.9%	26.2%

Source: 2012–2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates. Many of the survey respondents are not able to answer questions about the characteristics of their current health insurance coverage. The focus here is on the share of adults who report a particular characteristic, with the omitted category those adults who reported either that their health plan does not include that characteristic or that they do not know whether their health plan includes that characteristic. Because of the way the income information is collected in the survey, the measures of spending relative to family income cannot be constructed for adults with family income above 600 percent of federal poverty level (FPL).

\*(\*\*) Change between 2012 and 2013 is significantly different from zero at the .05 (.01) level, two-tailed test.

## CONSUMER EXPERIENCES WITH CURRENT HEALTH INSURANCE COVERAGE FOR NONELDERLY ADULTS WITH INSURANCE COVERAGE AT THE TIME OF THE 2013 SURVEY

- Nearly two-thirds of currently insured adults in Massachusetts rate their health insurance coverage as very good or excellent in terms of the range of services available, the choice of doctors and other providers, the quality of care available, the locations of doctors and other providers, and their ability to get specialist care. By contrast, only half rate financial protection against high medical bills as very good or excellent (Exhibit III.13).

**EXHIBIT III.13: RATING OF CURRENT HEALTH INSURANCE COVERAGE BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	CURRENTLY INSURED ADULTS	BY FAMILY INCOME		BY CURRENT HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level <sup>^</sup>	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI) <sup>^</sup>	Other (Non-ESI) Coverage
<b>Rates health insurance coverage as very good or excellent</b>					
Range of services available	64.6	71.3	57.3**	68.9	55.8**
Choice of doctors and other providers	64.4	71.4	56.9**	70.2	52.6**
Quality of care available	64.0	72.1	55.2**	68.3	55.1**
Location of doctors and other providers	65.5	72.3	58.2**	70.6	55.2**
Ability to get specialist care	63.2	71.0	54.8**	68.4	52.5**
Financial protection against high medical bills	50.1	55.5	44.3**	51.1	48.0
<b>Rates any aspects of health insurance coverage as very good or excellent</b>	79.8	85.4	74.0**	83.0	73.5**
<b>Rates all aspects of health insurance coverage as very good or excellent</b>	32.7	38.9	26.1**	36.5	25.1**
<b>Sample size</b>	2,924	1,647	1,277	1,910	1,014
<b>Share of population</b>	95.2%	48.9%	46.2%	63.5%	31.7%

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

- Higher-income insured adults are more likely than lower-income adults, and adults with ESI coverage are more likely than adults with other (non-ESI) coverage, to rate their health insurance coverage as very good or excellent (Exhibit III.13). There was little change in ratings of health insurance coverage between 2012 and 2013 (Exhibit III.14).

**EXHIBIT III.14: CHANGES IN RATING OF CURRENT HEALTH INSURANCE COVERAGE BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2012 TO FALL 2013**

	CURRENTLY INSURED ADULTS	BY FAMILY INCOME		BY CURRENT HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage
<b>Rates health insurance coverage as very good or excellent</b>					
Range of services available	-1.9	-0.9	-1.8	-2.3	-1.0
Choice of doctors and other providers	-1.8	-2.5	0.4	-2.6	-0.1
Quality of care available	-2.7	-2.0	-2.1	-2.5	-3.2
Location of doctors and other providers	-1.4	-1.2	-0.3	-2.3	0.6
Ability to get specialist care	-0.5	-0.7	1.3	-1.2	1.2
Financial protection against high medical bills	-3.0	-2.7	-2.6	-3.2	-2.8
<b>Rates any aspects of health insurance coverage as very good or excellent</b>	-3.4*	-2.0	-4.2	-3.4	-3.5
<b>Rates all aspects of health insurance coverage as very good or excellent</b>	-1.0	-0.2	-0.8	-0.4	-2.0
<b>Sample size</b>	5,954	3,388	2,566	3,902	2,052
<b>Share of population</b>	95.0%	50.8%	44.2%	63.4%	31.6%

Source: 2012–2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Change between 2012 and 2013 is significantly different from zero at the .05 (.01) level, two-tailed test.

- Among both higher- and lower-income insured adults, those with ESI coverage were more likely to rate their health insurance coverage as very good or excellent for one or more attributes than those with other (non-ESI) coverage, although the small sample size for higher-income adults with other (non-ESI) coverage makes that estimate imprecise (Exhibit III.15). For lower-income adults, other (non-ESI) coverage is mostly public coverage, while for higher-income adults other (non-ESI) coverage is mostly private nongroup coverage.

**EXHIBIT III.15: RATING OF CURRENT HEALTH INSURANCE COVERAGE BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	CURRENTLY INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage
<b>Rates health insurance coverage as very good or excellent</b>					
Range of services available	64.6	73.1	56.3**	59.5	55.7
Choice of doctors and other providers	64.4	73.4	54.9**	63.2	52.1*
Quality of care available	64.0	74.0	56.3**	55.7	54.9
Location of doctors and other providers	65.5	73.8	60.7*	63.7	54.1*
Ability to get specialist care	63.2	72.8	54.6**	58.4	52.1
Financial protection against high medical bills	50.1	56.8	45.2*	38.7	48.5
<b>Rates any aspects of health insurance coverage as very good or excellent</b>	79.8*	86.7	74.8*	74.9	73.2
<b>Rates all aspects of health insurance coverage as very good or excellent</b>	32.7	40.3	27.2*	28.0	24.7
<b>Sample size</b>	2,924	1,444	203	466	811
<b>Share of population</b>	95.2%	43.6%	5.3%	19.8%	26.4%

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

**EXHIBIT III.16: CHANGES IN RATING OF CURRENT HEALTH INSURANCE COVERAGE BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2012 TO FALL 2013**

	CURRENTLY INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage
<b>Rates health insurance coverage as very good or excellent</b>					
Range of services available	-1.9	-1.0	0.6	-3.1	-1.3
Choice of doctors and other providers	-1.8	-2.8	1.4	0.2	-0.4
Quality of care available	-2.7	-1.4	-6.2	-1.6	-2.5
Location of doctors and other providers	-1.4	-1.9	5.0	-1.3	-0.3
Ability to get specialist care	-0.5	-0.9	2.0	1.0	1.0
Financial protection against high medical bills	-3.0	-2.4	-4.3	-1.5	-2.4
<b>Rates any aspects of health insurance coverage as very good or excellent</b>	<b>-3.4*</b>	<b>-1.6</b>	<b>-4.3</b>	<b>-5.8</b>	<b>-3.3</b>
<b>Rates all aspects of health insurance coverage as very good or excellent</b>	<b>-1.0</b>	<b>-0.7</b>	<b>4.9</b>	<b>3.1</b>	<b>-3.4</b>
<b>Sample size</b>	<b>5,954</b>	<b>2,998</b>	<b>390</b>	<b>904</b>	<b>1,662</b>
<b>Share of population</b>	<b>95.0%</b>	<b>45.4%</b>	<b>5.3%</b>	<b>17.9%</b>	<b>26.2%</b>

Source: 2012–2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Change between 2012 and 2013 is significantly different from zero at the .05 (.01) level, two-tailed test.

- Although most insured adults did not report problems with their health insurance coverage over the past year, 18.3 percent reported expensive medical bills for services that were not covered, 16.6 percent reported that a doctor charged a lot more than their insurance would pay, 22.3 percent reported that they had to contact the insurance company about a bill, and 13.8 percent reported that their doctor's office did not accept their insurance type (Exhibit III.17).

**EXHIBIT III.17: PROBLEMS WITH HEALTH INSURANCE COVERAGE OVER THE PAST YEAR REPORTED BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	CURRENTLY INSURED ADULTS	BY FAMILY INCOME		BY CURRENT HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level <sup>^</sup>	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI) <sup>^</sup>	Other (Non-ESI) Coverage
Had expensive medical bills for services not covered by health insurance	18.3	17.8	18.7	18.3	18.2
Doctor charged a lot more than health insurance would pay and individual had to pay the difference	16.6	17.9	15.3	18.5	12.9**
Had to contact health insurance company because bill was not paid promptly or payment was denied	22.3	23.3	21.2	24.4	18.0*
Told doctor's office or clinic did not accept individual's type of health insurance	13.8	7.9	20.2**	7.9	25.7**
Told doctor's office or clinic did not accept new patients	14.1	10.9	17.4**	10.6	21.0**
<b>Sample size</b>	2,924	1,647	1,277	1,910	1,014
<b>Share of population</b>	95.2%	48.9%	46.2%	63.5%	31.7%

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

- Lower-income adults are more likely than higher-income adults, and adults with other (non-ESI) coverage are more likely than adults with ESI coverage, to have had problems with a doctor's office not accepting their insurance type, with more than 25 percent of those with other (non-ESI) coverage reporting such access problems. Adults with ESI were also more likely than adults with other (non-ESI) coverage to have had to contact their insurance company about a bill (Exhibit III.17). Between 2012 and 2013 there were no significant changes in the share of insured adults reporting problems with their health insurance coverage (Exhibit III.18).

**EXHIBIT III.18: CHANGES IN PROBLEMS WITH HEALTH INSURANCE COVERAGE OVER THE PAST YEAR REPORTED BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2012 TO FALL 2013**

	CURRENTLY INSURED ADULTS	BY FAMILY INCOME		BY CURRENT HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage
Had expensive medical bills for services not covered by health insurance	1.0	1.3	0.6	0.3	2.3
Doctor charged a lot more than health insurance would pay and individual had to pay the difference	0.3	0.2	0.7	0.1	0.8
Had to contact health insurance company because bill was not paid promptly or payment was denied	-0.5	-0.5	-0.4	-0.5	-0.4
Told doctor's office or clinic did not accept individual's type of health insurance	-1.5	-1.9	-2.1	-1.7	-1.0
Told doctor's office or clinic did not accept new patients	1.4	1.8	0.4	0.5	3.2
<b>Sample size</b>	5,954	3,388	2,566	3,902	2,052
<b>Share of population</b>	95.0%	50.8%	44.2%	63.4%	31.6%

Source: 2012–2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Change between 2012 and 2013 is significantly different from zero at the .05 (.01) level, two-tailed test.

- Lower-income adults with ESI coverage were more likely to have problems with doctors charging more than their health insurance would pay and having to pay the difference, and with having had to contact their health insurance company because of a problem with the payment of a bill, than were lower-income adults with other (non-ESI) coverage. However, lower-income adults with other (non-ESI) coverage were more likely than lower-income adults with ESI coverage to be told that the doctor's office or clinic did not accept their type of insurance or to be told that the doctor's office or clinic was not accepting new patients. For lower-income adults, other (non-ESI) coverage is mostly public coverage (Exhibit III.19).

**EXHIBIT III.19: PROBLEMS WITH HEALTH INSURANCE COVERAGE OVER THE PAST YEAR REPORTED BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	CURRENTLY INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage
Had expensive medical bills for services not covered by health insurance	18.3	16.9	25.6	21.3	16.8
Doctor charged a lot more than health insurance would pay and individual had to pay the difference	16.6	17.1	24.2	21.4	10.7**
Had to contact health insurance company because bill was not paid promptly or payment was denied	22.3	22.9	26.9	27.9	16.2**
Told doctor's office or clinic did not accept individual's type of health insurance	13.8	5.8	24.8**	12.6	25.9**
Told doctor's office or clinic did not accept new patients	14.1	10.3	16.2	11.3	22.0**
<b>Sample size</b>	2,924	1,444	203	466	811
<b>Share of population</b>	95.2%	43.6%	5.3%	19.8%	26.4%

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

**EXHIBIT III.20: CHANGES IN PROBLEMS WITH HEALTH INSURANCE COVERAGE OVER THE PAST YEAR REPORTED BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2012 TO FALL 2013**

	CURRENTLY INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage
Had expensive medical bills for services not covered by health insurance	1.0	-0.2	13.8**	0.9	0.0
Doctor charged a lot more than health insurance would pay and individual had to pay the difference	0.3	-1.1	10.7	2.5	-1.2
Had to contact health insurance company because bill was not paid promptly or payment was denied	-0.5	-1.6	9.2	1.4	-2.4
Told doctor's office or clinic did not accept individual's type of health insurance	-1.5	-2.5*	2.8	-0.9	-1.8
Told doctor's office or clinic did not accept new patients	1.4	2.1	-1.3	-4.2	4.0
<b>Sample size</b>	5,954	2,998	390	904	1,662
<b>Share of population</b>	95.0%	45.4%	5.3%	17.9%	26.2%

Source: 2012–2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Change between 2012 and 2013 is significantly different from zero at the .05 (.01) level, two-tailed test.

## FACTORS ASSOCIATED WITH STABILITY OF HEALTH INSURANCE COVERAGE FOR NONELDERLY ADULTS IN 2013

- As reported above, 80.8 percent of nonelderly adults in Massachusetts had stable insurance coverage in 2013, defined as having been insured all year with the same coverage. The adults without stable coverage moved in and out of coverage, moved in and out of different types of coverage, or were uninsured all year. The adults with stable insurance coverage were more likely than those without stable coverage to be older, white and non-Hispanic, married, and female. They were also more likely to be U.S. citizens and to speak English at home. They were also more likely to have family income at or above 400 percent of FPL (Exhibit III.21).

### EXHIBIT III.21: DESCRIPTIVE ANALYSIS OF INDIVIDUAL AND FAMILY CHARACTERISTICS ASSOCIATED WITH STABILITY OF HEALTH INSURANCE COVERAGE OVER THE PAST 12 MONTHS FOR ALL ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013

	ALL ADULTS	STABILITY OF HEALTH INSURANCE COVERAGE	
		Adults Who Had Stable Health Insurance Coverage	Adults Who Did Not Have Stable Health Insurance Coverage
<b>Age</b>			
19 to 25 years	16.6	13.9	28.2 **
26 to 34 years	18.7	17.1	25.3 *
35 to 49 years	32.6	33.9	26.9 *
50 to 64 years	32.1	35.0	19.6 **
<b>Race/ethnicity</b>			
White, non-Hispanic	74.4	76.1	67.1 *
Other race, non-Hispanic	15.4	14.7	18.5
Hispanic	10.1	9.1	14.0
<b>Female</b>	51.4	53.4	42.8 **
<b>U.S. citizen</b>	90.8	92.5	83.6 **
<b>Speaks English at home</b>	85.7	87.8	76.9 **
<b>Marital status</b>			
Married	50.5	53.8	36.9 **
Living with partner	8.9	9.5	5.8 *
Divorced, separated, widowed	10.8	11.0	10.2
Never married	29.8	25.7	47.1 **
<b>Parent of one or more children under 18</b>	38.6	40.0	32.9
<b>Number of adults 19 and older in household</b>			
One	14.3	13.8	16.6
Two	50.8	51.9	46.0
Three or more	34.9	34.3	37.4
<b>Education</b>			
Less than high school	7.4	7.1	9.0
High school graduate (includes some college)	51.1	50.7	52.3
College graduate or higher	41.5	42.2	38.8

(continued)

**EXHIBIT III.21: (CONTINUED)**

	ALL ADULTS	STABILITY OF HEALTH INSURANCE COVERAGE	
		Adults Who Had Stable Health Insurance Coverage	Adults Who Did Not Have Stable Health Insurance Coverage
<b>Self-reported health status</b>			
Very good or excellent	59.7	58.5	64.1
Good	25.6	26.4	22.5
Fair or poor	14.7	15.1	13.4
<b>Has a health condition <sup>a</sup></b>	53.1	54.6	46.7 *
<b>Activities are limited by a health problem</b>	20.7	21.8	16.5 *
<b>Family income relative to the federal poverty level (FPL)</b>			
At or below 138% of FPL	25.8	23.2	37.1 **
139-299% of FPL	24.5	23.0	31.1
300-399% of FPL	9.6	10.2	7.4
At or above 400% of FPL	40.0	43.6	24.5 **
<b>Region</b>			
Boston	12.5	12.3	12.4
Metro West	33.4	32.8	36.0
Northeast	11.0	11.0	11.7
Central	12.1	12.3	11.7
West	12.3	12.1	13.3
Southeast	18.7	19.7	14.9
<b>Sample size</b>	3,024	2,556	455
<b>Share of population</b>	100.0%	80.8%	18.7%

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

(\*\*) Significantly different from value for remainder of sample at the .05 (.01) level, two-tailed test.

a. Includes adults who report they have ever been told by a doctor or other health professional that they have at least one of the following: hypertension or high blood pressure; heart disease or congestive heart failure; diabetes; asthma; any other chronic or long-term health condition or health problem; or are pregnant.

- Based on the multivariate analysis, the factors that are the strongest predictors of not having stable health insurance coverage over the year for adults include being male (5.2 percentage points more likely to not have stable coverage than females), not speaking English at home (12.4 percentage points more likely than non-English speakers), and having lower family income. Adults with family income at or above 400 percent FPL were 14.7 percentage points more likely to have stable health insurance coverage than were adults with family income at or below 138 percent of FPL. Also, those with activities limited by a health problem were 6.5 percentage points more likely to have stable coverage (Exhibit III.22).

**EXHIBIT III.22: ESTIMATES OF CHANGE IN PROBABILITY OF NOT HAVING STABLE HEALTH INSURANCE COVERAGE OVER THE PAST 12 MONTHS ASSOCIATED WITH A CHANGE IN INDIVIDUAL AND FAMILY CHARACTERISTICS FOR ALL ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**

**CHANGE IN PROBABILITY OF NOT HAVING STABLE COVERAGE ASSOCIATED WITH CHANGE IN CHARACTERISTIC**

<b>Age</b>	
19 to 25 years ^	
26 to 34 years	1.4
34 to 49 years	-5.3
50 to 64 years	-7.6
<b>Race/ethnicity</b>	
White, non-Hispanic^	
Other race, non-Hispanic	-2.7
Hispanic	-3.9
<b>Female</b>	-5.2 **
<b>U.S. citizen</b>	-4.7
<b>Speaks English at home</b>	-12.4 *
<b>Marital status</b>	
Married ^	
Living with partner	-5.8
Divorced, separated, widowed	4.2
Never married	5.5
<b>Parent of one or more children under 18</b>	-0.5
<b>Number of adults 19 and older in household</b>	
One ^	
Two	0.7
Three or more	-1.7
<b>Education</b>	
Less than high school ^	
High school graduate (includes some college)	-0.3
College graduate or higher	2.3
<b>Self-reported health status</b>	
Very good or excellent ^	
Good	-3.2
Fair or poor	-2.5
<b>Has a health condition <sup>a</sup></b>	-0.3
<b>Activities are limited by a health problem</b>	-6.5 **
<b>Family income relative to the federal poverty level (FPL)</b>	
At or below 138% of FPL ^	
139-299% of FPL	-3.0
300-399% of FPL	-11.2 **
At or above 400% of FPL	-14.7 **

(continued)

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**EXHIBIT III.22: (CONTINUED)**

**CHANGE IN PROBABILITY OF NOT HAVING  
STABLE COVERAGE ASSOCIATED WITH  
CHANGE IN CHARACTERISTIC**

<b>Region</b>	
Boston <sup>^</sup>	
Metro West	5.0
Northeast	6.1
Central	3.4
West	6.6
Southeast	1.8
<b>Sample size</b>	2,879

Source: 2013 Massachusetts Health Reform Survey (N=3,024).

Note: Estimates are marginal effects from logit model.

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

<sup>^</sup> Base category for categorical variables with more than two values.

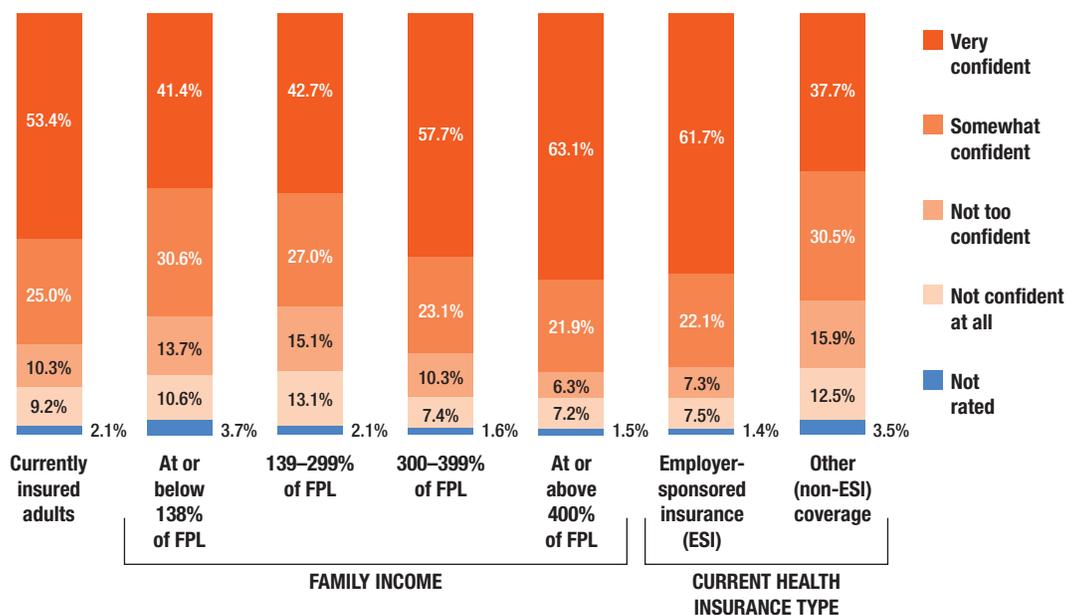
a. Includes adults who report they have ever been told by a doctor or other health professional that they have at least one of the following: hypertension or high blood pressure; heart disease or congestive heart failure; diabetes; asthma; any other chronic or long-term health condition or health problem; or are pregnant.

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## CONFIDENCE IN ABILITY TO KEEP HEALTH INSURANCE COVERAGE IN THE FUTURE AMONG NONELDERLY ADULTS WITH INSURANCE COVERAGE AT THE TIME OF THE 2013 SURVEY

- Most (78.4 percent) of insured adults in Massachusetts were somewhat confident or very confident in their ability to keep their health insurance coverage in the future (Exhibit III.23).
- Insured adults were more likely to be somewhat or very confident in their ability to keep their health insurance coverage if they had higher family income (85.0 percent among adults with family income at or above 400 percent of FPL versus 72.0 percent among adults with family income at or below 138 percent of FPL) or if they were covered by ESI rather than other (non-ESI) coverage (83.8 versus 68.2 percent) (Exhibit III.23).

**EXHIBIT III.23: CONFIDENCE IN ABILITY TO KEEP HEALTH INSURANCE COVERAGE IN THE FUTURE FOR CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**



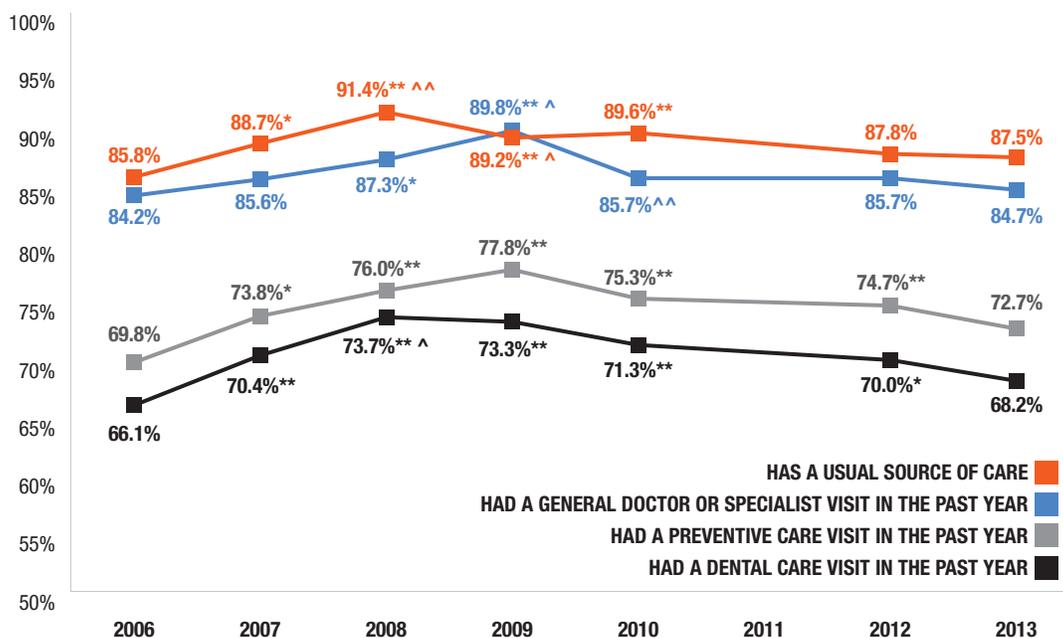
Source: 2013 Massachusetts Health Reform Survey (N=2,924).  
 Notes: These are simple (unadjusted) estimates. FPL is Federal Poverty Level.

## IV. HEALTH CARE ACCESS AND USE FOR NONELDERLY ADULTS

### TRENDS IN HEALTH CARE ACCESS AND USE FOR NONELDERLY ADULTS: 2006–2013

- In 2013, health care access and use for nonelderly adults in Massachusetts, which had increased over the 2007 to 2010 period, were not significantly different from the levels in 2006. As in 2006, most (87.5 percent) of adults had a usual source of care and most (84.7 percent) had had a doctor visit over the past year in 2013. Many of the adults also had a preventive care visit (72.7 percent) and a dental care visit (68.2 percent) in 2013 (Exhibit IV.1).

**EXHIBIT IV.1: SIMPLE (UNADJUSTED) TRENDS IN ACCESS TO HEALTH CARE OVER THE PAST YEAR FOR ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**



Source: 2006–2013 Massachusetts Health Reform Survey (N=22,374). The survey was not fielded in 2011.

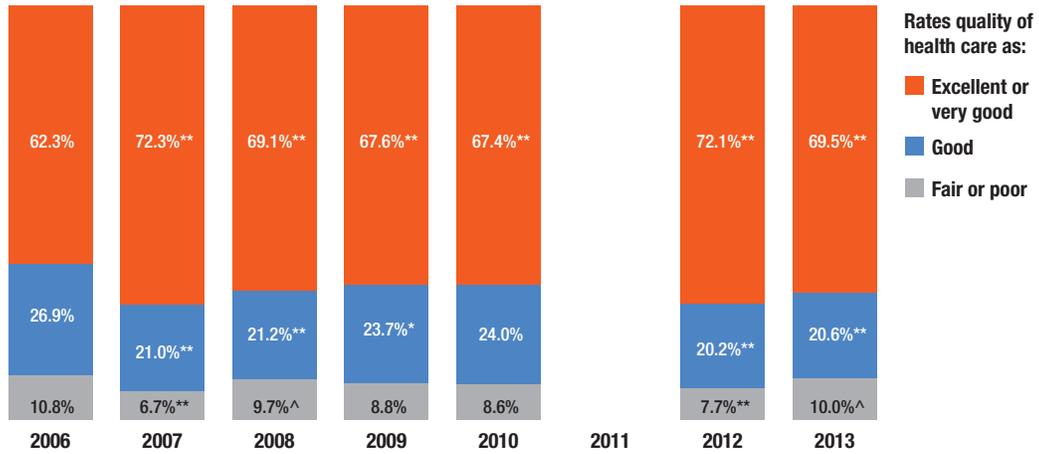
Notes: These are simple (unadjusted) estimates. The data for these outcomes and some additional access and use measures are provided in Appendix Exhibit IV.1.

\*(\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^(^^) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

- In 2013, as in 2006, the majority of the adults (69.5 percent) who used health care rated the quality of the care they had received over the past year as very good or excellent, a rate that is statistically higher than that before reform (Exhibit IV.2).

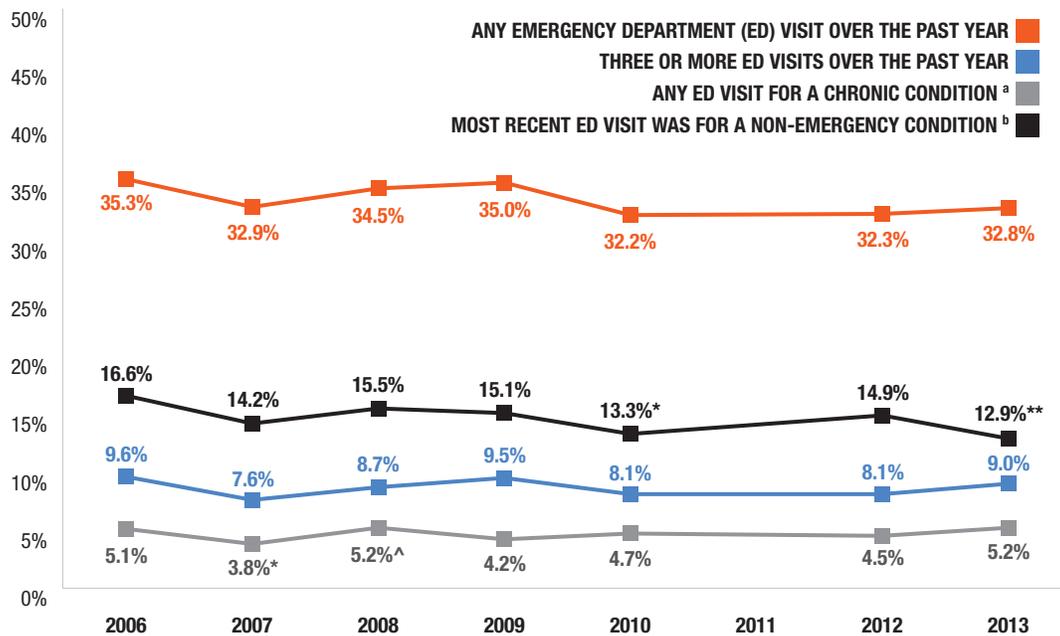
**EXHIBIT IV.2: SIMPLE (UNADJUSTED) TRENDS IN QUALITY OF HEALTH CARE RECEIVED OVER THE PAST YEAR FOR ADULTS 19 TO 64 IN MASSACHUSETTS WHO USED HEALTH CARE OVER THE PAST YEAR, FALL 2006 TO FALL 2013**



Source: 2006-2013 Massachusetts Health Reform Survey (N=22,374). The survey was not fielded in 2011.  
 Notes: These are simple (unadjusted) estimates. The data for these outcomes and some additional access and use measures are provided in Appendix Exhibit IV.1.  
 (\*\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.  
 (^) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

- Emergency department use remained fairly stable for adults between 2006 and 2013, although the share of adults reporting that their most recent emergency department visits was a non-emergency visit (that is, a visit was for a condition that could have been treated by a regular doctor if one had been available) dropped from 16.6 percent in 2006 to 12.9 percent in 2013 (Exhibit IV.3).

**EXHIBIT IV.3: SIMPLE (UNADJUSTED) TRENDS IN EMERGENCY DEPARTMENT USE OVER THE PAST YEAR FOR ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**



Source: 2006–2013 Massachusetts Health Reform Survey (N=22,374). The survey was not fielded in 2011.

Notes: These are simple (unadjusted) estimates.

a. Includes adults who report they have ever been told by a doctor or other health professional that they have at least one of the following: hypertension or high blood pressure; heart disease or digestive heart failure; diabetes; asthma; or any other chronic or long-term health condition or health problem.

b. A condition that the respondent thought could have been treated by a regular doctor if one had been available.

\*(\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^(^^) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

## TRENDS IN HEALTH CARE ACCESS AND USE FOR NONELDERLY ADULTS WITH CONTINUOUS HEALTH INSURANCE COVERAGE OVER THE PAST YEAR: 2006–2013

- Health care access and use for adults in Massachusetts who had health insurance coverage for all of the prior year remained quite stable between 2006 and 2013. As in 2006, in 2013 most (89.9 percent) full-year insured adults had a usual source of care, and most (87.9 percent) had had a doctor visit over the past year. Many of the adults also had a preventive care visit (76.1 percent) and a dental care visit (71.0 percent) in 2013 (Exhibit IV.4).

**EXHIBIT IV.4: SIMPLE (UNADJUSTED) TRENDS IN HEALTH CARE ACCESS AND USE FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2012	Fall 2013
Has a usual source of care (excluding the emergency department [ED])	92.2	92.8	94.3	91.9 ^	92.5	91.4	89.9
Any general doctor or specialist visit in the past 12 months	90.1	89.8	90.0	92.3 ^	88.4 ^^	88.9	87.9
Any visit for preventive care in the past 12 months	77.0	78.9	78.7	80.8*	78.5	78.2	76.1
Any dental care visit in past 12 months	73.3	75.0	77.5**	76.1	74.9	72.7	71.0
Any emergency department (ED) visits in past 12 months	33.9	31.6	33.8	34.9	31.5	32.0	32.0
– Three or more ED visits	9.2	7.1	8.0	9.7	8.6	7.9	8.8
– Any ED visit for a chronic condition	4.8	3.6	5.0 ^	4.4	4.7	4.4	5.1
– Most recent ED visit was for non-emergency condition <sup>a</sup>	14.5	13.5	15.0	15.2	12.1 ^	14.3	12.2
Among those using care in the past year, share rating quality of care as very good or excellent	66.7	75.7**	72.1**	70.4*	69.8	73.8**	71.1*
<b>Sample size</b>	2,159	2,350	3,357	2,657	2,584	2,855	2,795

Source: 2006–2013 Massachusetts Health Reform Survey. The survey was not fielded in 2011.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^(^^) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

a. A condition that the respondent thought could have been treated by a regular doctor if one had been available.

- As was true for full-year insured adults overall, there were few significant changes in health care access and use between 2006 and 2013 for full-year insured adults at different income levels. The few changes that are observed include an increase in the share of low- and middle-income insured adults who rated the quality of health care they received as very good or excellent between 2006 and 2013, a decline in the share of high-income insured adults reporting an emergency department visit over the 2006 to 2013 period, and a cutting in half of the rate of use of the emergency room by high-income adults for non-emergency conditions (Exhibit IV.5).

**EXHIBIT IV.5: SIMPLE (UNADJUSTED) TRENDS IN HEALTH CARE ACCESS AND USE FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, BY FAMILY INCOME, FALL 2006 TO FALL 2013**

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2012	Fall 2013
<b>ADULTS WITH FAMILY INCOME BELOW 300% OF THE FEDERAL POVERTY LEVEL</b>							
Has a usual source of care (excluding the emergency department [ED])	89.5	90.5	91.8	87.7 ^	88.3	88.2	86.0
Any general doctor or specialist visit in the past 12 months	89.9	86.2	87.7	92.1 ^	85.2 ^^	88.2	88.1
Any visit for preventive care in the past 12 months	77.2	76.3	76.7	80.5	76.5	78.4	75.0
Any dental care visit in past 12 months	54.6	61.7*	66.0**	64.0**	63.6**	61.4*	59.0
Any emergency department (ED) visits in past 12 months	47.5	46.1	48.0	49.9	45.0	47.4	45.3
– Three or more ED visits	18.1	15.1	15.5	17.1	15.3	14.3	16.1
– Any ED visit for a chronic condition	9.5	7.5	7.7	7.8	7.1	7.4	9.3
– Most recent ED visit was for non-emergency condition <sup>a</sup>	20.6	22.4	23.2	23.6	19.2	23.8	19.4
Among those using care in the past year, share rating quality of care as very good or excellent	57.3	67.3**	61.9	65.7**	59.5	66.9**	63.7*
<b>Sample size</b>	813	880	1,531	1,119	1,111	1,159	1,184
<b>ADULTS WITH FAMILY INCOME 300-399% OF THE FEDERAL POVERTY LEVEL</b>							
Has a usual source of care (excluding the emergency department [ED])	89.3	93.8	97.0**	96.4*	93.4	94.3	92.4
Any general doctor or specialist visit in the past 12 months	88.8	87.5	90.2	91.0	90.1	88.5	90.7
Any visit for preventive care in the past 12 months	75.7	76.2	82.8	81.8	79.5	75.6	79.0
Any dental care visit in past 12 months	81.1	73.3	76.3	77.2	76.0	76.9	73.8
Any emergency department (ED) visits in past 12 months	29.6	28.4	27.3	25.8	26.9	24.4	30.3
– Three or more ED visits	6.9	3.4	4.8	8.8	4.0	4.5	5.5
– Any ED visit for a chronic condition	3.2	1.3	5.9 ^	3.4	2.6	2.7	2.7
– Most recent ED visit was for non-emergency condition <sup>a</sup>	13.7	12.1	12.5	8.6	12.4	11.2	9.9

(continued)

**EXHIBIT IV.5: (CONTINUED)**

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2012	Fall 2013
Among those using care of the past year, share rating quality of care as very good or excellent	65.7	72.2	67.6	68.5	73.3	74.3	75.2*
<b>Sample size</b>	323	290	377	325	274	336	298
<b>ADULTS WITH FAMILY INCOME AT OR ABOVE 400% OF THE FEDERAL POVERTY LEVEL</b>							
Has a usual source of care (excluding the emergency department [ED])	95.2	94.1	95.8	94.3	96.3	93.6	93.6
Any general doctor or specialist visit in the past 12 months	90.7	92.9	91.9	92.7	90.9	89.6	87.1
Any visit for preventive care in the past 12 months	77.3	81.3	79.5	80.8	80.0	78.5	76.5
Any dental care visit in past 12 months	84.2	84.6	87.3	86.0	85.0	82.0	83.3
Any emergency department (ED) visits in past 12 months	25.4	22.3	23.3	24.5	20.3* ^	20.0*	18.1**
– Three or more ED visits	3.5	2.4	2.4	3.8	3.3	3.0	1.7
– Any ED visit for a chronic condition	1.9	1.3	2.5 ^	1.8	2.9	2.2	1.2
– Most recent ED visit was for non-emergency condition <sup>a</sup>	10.4	7.7	8.7	9.8	5.4** ^^	6.5*	5.1**
Among those using care of the past year, share rating quality of care as very good or excellent	73.7	82.2**	81.4**	74.7 ^^	78.1	79.9*	78.0
<b>Sample size</b>	1,023	1,178	1,449	1,213	1,191	1,360	1,313

Source: 2006–2013 Massachusetts Health Reform Survey. The survey was not fielded in 2011.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^(^^) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

a. A condition that the respondent thought could have been treated by a regular doctor if one had been available.

## **UNMET NEED FOR HEALTH CARE IN 2013 AMONG NONELDERLY ADULTS WITH CONTINUOUS HEALTH INSURANCE COVERAGE OVER THE PAST YEAR**

- Nearly a third (29.8 percent) of full-year insured adults in Massachusetts reported going without needed health care in 2013, most often for medical care (17.0 percent), prescription drugs (12.9 percent), and dental care (12.7 percent) (Exhibit IV.6).
- The reasons for the unmet need varied, with unmet need due to the costs of care reported by 13.8 percent of full-year insured adults and unmet need due to other factors reported by 20.0 percent of the adults (Exhibit IV.6).
- Nearly a quarter (23.2 percent) of full-year insured adults reported difficulty obtaining health care due to provider access issues over the past year, including one in 10 who reported difficulty finding a general doctor (Exhibit IV.6).
- Unmet need for health care was significantly higher for lower-income full-year insured adults than higher-income full-year insured adults. For example, nearly 40 percent of insured adults with family incomes below 300 percent of FPL reported unmet need, as compared with 22.1 percent of higher-income insured adults. Similarly, 20.3 percent of the lower-income adults reported unmet need due to the cost of care, which was more than double the 8.1 percent for higher-income adults (Exhibit IV.6).
- Lower-income full-year insured adults were also significantly more likely to report difficulty obtaining health care due to provider access issues than were higher-income adults, at 29.0 percent and 18.1 percent respectively (Exhibit IV.6).
- Unmet need for health care was significantly higher for full-year insured adults with other (non-ESI) coverage as compared with adults with ESI coverage. For example, 44.5 percent of insured adults with other (non-ESI) coverage reported unmet need, as compared with 23.0 percent of insured adults with ESI coverage. Similarly, 22.6 percent of the adults with other (non-ESI) coverage reported unmet need due to the cost of care, which was more than double the 9.8 percent for adults with ESI (Exhibit IV.6).
- Full-year insured adults with other (non-ESI) coverage were more likely to report difficulty obtaining health care due to provider access issues than were adults with ESI coverage, at 34.5 and 18.0 percent respectively (Exhibit IV.6).

**EXHIBIT IV.6: UNMET NEED FOR HEALTH CARE AND DIFFICULTY OBTAINING HEALTH CARE FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	FULL-YEAR INSURED ADULTS	BY FAMILY INCOME		BY HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level <sup>^</sup>	Below 300% of Federal Poverty Level	Employer- sponsored Insurance (ESI) <sup>^</sup>	Other (Non-ESI) Coverage
<b>Did not get needed care in past 12 months</b>	29.8	22.1	38.6**	23.0	44.5**
<b>Type of unmet need:</b>					
Medical care	17.0	13.8	20.7**	13.6	24.4**
– Doctor care	7.5	4.2	11.2**	5.6	11.5**
– Specialist care	6.3	4.6	8.2**	5.4	8.2
– Medical tests, treatment, or follow-up care	9.5	7.2	12.1**	7.4	14.0**
– Preventive care screening	4.6	4.3	4.9	3.7	6.6*
Prescription drugs	12.9	8.8	17.5**	10.5	17.9**
Dental care	12.7	6.5	19.8**	7.2	24.7**
<b>Did not get needed care in past 12 months because of cost of care</b>	13.8	8.1	20.3**	9.8	22.6**
<b>Did not get needed care in past 12 months because of reasons other than cost of care</b>	20.0	15.5	25.1**	15.5	29.9**
<b>Had difficulty obtaining health care due to provider access issues in the past 12 months</b>	23.2	18.1	29.0**	18.0	34.5**
<b>Type of difficulty:</b>					
Had difficulties finding a general doctor	10.5	7.4	14.1**	7.4	17.4**
Had difficulties finding a specialist	9.4	6.4	12.9**	6.3	16.3**
Had unmet need because of difficulties seeing a provider	7.6	5.1	10.4**	5.6	11.9**
– Difficulty finding a provider who would see them	4.8	2.2	7.8**	2.9	9.2**
– Difficulty getting an appointment with a provider	7.1	4.6	9.9**	5.4	10.9**
Had unmet need because of problems with provider location or hours	6.4	4.8	8.2*	4.2	11.2**
– Hours that care was available were not convenient	5.2	4.5	6.0	3.8	8.3**
– Difficulty getting to location of care	3.3	1.4	5.4**	1.4	7.2**
<b>Sample size</b>	2,795	1,611	1,184	1,871	924
<b>Share of population</b>	89.4%	47.8%	41.6%	61.4%	28.0%

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

- Full-year insured adults with other (non-ESI) coverage reported higher levels of unmet need and more difficulty obtaining health care due to provider access issues than full-year insured adults with ESI coverage at all income levels, although the small sample size for higher-income adults makes that estimate imprecise. This was particularly true for lower-income adults, for whom other (non-ESI) coverage is most likely to be public coverage. Among lower-income adults, those with other (non-ESI) coverage were more likely to report unmet need overall (45.6 versus 29.8 percent reported by lower-income adults with ESI coverage) and more likely to report unmet need due to the cost of care (24.2 versus 15.5 percent). Lower-income adults with other (non-ESI) coverage were also more likely to report difficulties obtaining care because of provider access issues, with more than one-third (35.5 percent) reporting such problems as compared with 21.1 percent of lower-income adults with ESI coverage (Exhibit IV.7).
- Among lower-income adults with other (non-ESI) coverage, nearly 25 percent reported an unmet need for medical care, and 27 percent reported unmet need for dental care (Exhibit IV.7).
- Between 2012 and 2013, there were no significant changes in unmet need for health care for full-year insured adults overall, by family income level, or by health insurance type (Exhibit IV.8 and IV.9).

**EXHIBIT IV.7: UNMET NEED FOR HEALTH CARE AND DIFFICULTY OBTAINING HEALTH CARE FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	FULL-YEAR INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI) <sup>^</sup>	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI) <sup>^</sup>	Other (Non-ESI) Coverage
<b>Did not get needed care in past 12 months</b>	29.8	20.1	39.1**	29.8	45.6**
<b>Type of unmet need:</b>					
Medical care	17.0	12.6	24.0*	15.8	24.5*
– Doctor care	7.5	3.9	6.9	9.5	12.5
– Specialist care	6.3	4.3	7.5	7.9	8.4
– Medical tests, treatment, or follow-up care	9.5	6.5	13.5	9.5	14.1
– Preventive care screening	4.6	3.8	8.3	3.3	6.3
Prescription drugs	12.9	7.8	16.9*	16.8	18.1
Dental care	12.7	5.6	14.2*	11.0	27.0**
<b>Did not get needed care in past 12 months because of cost of care</b>	13.8	7.3	15.2*	15.5	24.2*
<b>Did not get needed care in past 12 months because of reasons other than cost of care</b>	20.0	14.4	25.5	17.9	30.8**
<b>Had difficulty obtaining health care due to provider access issues in the past 12 months</b>	23.2	16.7	30.1**	21.1	35.5**
<b>Type of difficulty:</b>					
Had difficulties finding a general doctor	10.5	6.6	14.3*	9.3	18.1**
Had difficulties finding a specialist	9.4	5.7	12.7	7.6	17.1**
Had unmet need because of difficulties seeing a provider	7.6	5.2	4.9	6.7	13.4**
– Difficulty finding a provider who would see them	4.8	2.0	4.0	4.8	10.3**
– Difficulty getting an appointment with a provider	7.1	4.8	3.6	6.7	12.4*
Had unmet need because of problems with provider location or hours	6.4	4.4	7.9	3.5	11.9**
– Hours that care was available were not convenient	5.2	4.3	6.3	2.5	8.7**
– Difficulty getting to location of care	3.3	1.1	4.1	2.3	7.9**
<b>Sample size</b>	2,795	1,424	187	447	737
<b>Share of population</b>	89.4%	42.8%	5.0%	18.6%	23.0%

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

**EXHIBIT IV.8: CHANGES IN UNMET NEED FOR HEALTH CARE AND DIFFICULTY OBTAINING HEALTH CARE FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2012 TO FALL 2013**

	FULL-YEAR INSURED ADULTS	BY FAMILY INCOME		BY HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage
<b>Did not get needed care in past 12 months</b>	-0.7	0.6	-4.2	-0.4	-2.3
<b>Type of unmet need:</b>					
Medical care	-0.5	0.1	-1.9	-0.7	-0.3
– Doctor care	1.3	0.1	2.3	1.1	1.7
– Specialist care	0.3	0.7	-0.5	1.0	-1.3
– Medical tests, treatment, or follow-up care	0.0	-0.5	0.2	-0.7	1.4
– Preventive care screening	0.2	0.3	0.0	-0.1	0.8
Prescription drugs	0.1	0.2	-0.9	0.9	-1.8
Dental care	-0.2	0.4	-2.3	-0.7	0.3
<b>Did not get needed care in past 12 months because of cost of care</b>	-0.1	-0.1	-1.4	0.4	-1.8
<b>Did not get needed care in past 12 months because of reasons other than cost of care</b>	-1.1	-0.3	-3.4	-1.0	-2.1
<b>Had difficulty obtaining health care due to provider access issues in the past 12 months</b>	0.9	2.0	-1.7	1.1	-0.2
<b>Type of difficulty:</b>					
Had difficulties finding a general doctor	1.3	0.0	2.4	-0.1	4.3
Had difficulties finding a specialist	0.5	1.4	-1.4	0.1	1.1
Had unmet need because of difficulties seeing a provider	0.1	0.5	-1.0	0.7	-1.4
– Difficulty finding a provider who would see them	-0.4	-0.5	-1.0	0.0	-1.7
– Difficulty getting an appointment with a provider	1.0	0.7	0.9	1.1	0.6
Had unmet need because of problems with provider location or hours	-1.9	-0.1	-4.7*	-1.1	-4.0
– Hours that care was available were not convenient	-0.6	1.1	-3.0	-0.7	-0.4
– Difficulty getting to location of care	-1.2	-0.9	-2.0	-0.3	-3.4
<b>Sample size</b>	5,650	3,307	2,343	3,816	1,834
<b>Share of population</b>	88.7%	49.4%	39.2%	61.4%	27.3%

Source: 2012–2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates.

\*(\*\*) Change between 2012 and 2013 is significantly different from zero at the .05 (.01) level, two-tailed test.

**EXHIBIT IV.9: CHANGES IN UNMET NEED FOR HEALTH CARE AND DIFFICULTY OBTAINING HEALTH CARE FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2012 TO FALL 2013**

	FULL-YEAR INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage
<b>Did not get needed care in past 12 months</b>	-0.7	-0.1	4.9	-3.4	-4.0
<b>Type of unmet need:</b>					
Medical care	-0.5	-0.3	2.6	-2.6	-0.9
– Doctor care	1.3	0.3	-2.5	2.1	2.6
– Specialist care	0.3	0.9	-1.4	0.6	-1.3
– Medical tests, treatment, or follow-up care	0.0	-1.0	3.0	-0.5	1.0
– Preventive care screening	0.2	0.1	2.2	-0.6	0.5
Prescription drugs	0.1	-0.3	3.9	2.4	-3.2
Dental care	-0.2	0.4	-0.6	-4.9	0.4
<b>Did not get needed care in past 12 months because of cost of care</b>	-0.1	0.2	-3.3	-0.6	-1.5
<b>Did not get needed care in past 12 months because of reasons other than cost of care</b>	-1.1	-0.4	0.4	-3.4	-2.7
<b>Had difficulty obtaining health care due to provider access issues in the past 12 months</b>	0.9	1.9	1.0	-2.2	-0.5
<b>Type of difficulty:</b>					
Had difficulties finding a general doctor	1.3	-0.1	0.3	-0.8	5.2
Had difficulties finding a specialist	0.5	1.3	2.0	-4.0	0.9
Had unmet need because of difficulties seeing a provider	0.1	1.2	-5.9	-1.2	-0.5
– Difficulty finding a provider who would see them	-0.4	0.0	-5.1	-0.5	-1.0
– Difficulty getting an appointment with a provider	1.0	1.3	-5.3	0.1	1.9
Had unmet need because of problems with provider location or hours	-1.9	0.0	-1.3	-4.2	-4.6
– Hours that care was available were not convenient	-0.6	0.8	3.9	-4.7*	-1.4
– Difficulty getting to location of care	-1.2	-0.6	-4.0	0.2	-3.3
<b>Sample size</b>	5,650	2,955	352	861	1,482
<b>Share of population</b>	88.7%	44.5%	4.9%	16.9%	22.3%

Source: 2012-2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates.

\*(\*\*) Change between 2012 and 2013 is significantly different from zero at the .05 (.01) level, two-tailed test.

## FACTORS ASSOCIATED WITH UNMET NEED FOR HEALTH CARE IN 2013 FOR NONELDERLY ADULTS WITH CONTINUOUS HEALTH INSURANCE COVERAGE OVER THE PAST YEAR

- Full-year insured adults with unmet need for health care in Massachusetts tend to be somewhat younger, female, more likely to be a parent, and less well educated than those without such need. In addition, they are more likely to report being in fair or poor health, more likely to have a health problem that limits their activities, and more likely to have a health condition than those without such unmet need. Full-year insured adults with unmet need also are more likely to have lower family incomes and to have other (non-ESI) coverage (Exhibit IV.10).

### EXHIBIT IV.10: DESCRIPTIVE ANALYSIS OF FACTORS ASSOCIATED WITH UNMET NEED FOR HEALTH CARE OVER THE PAST 12 MONTHS FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013

	FULL-YEAR INSURED ADULTS	UNMET NEED FOR HEALTH CARE	
		Adults With No Unmet Need	Adults With Unmet Need
<b>Age</b>			
19 to 25 years	15.0	15.2	14.9
26 to 34 years	17.6	16.0	22.1 *
35 to 49 years	33.2	33.6	31.8
50 to 64 years	34.2	35.2	31.3
<b>Race/ethnicity</b>			
White, non-Hispanic	75.9	76.9	73.2
Other race, non-Hispanic	14.9	15.1	14.8
Hispanic	9.1	7.9	11.9
<b>Female</b>	53.1	50.0	60.5 **
<b>U.S. citizen</b>	92.4	92.3	92.5
<b>Speaks English at home</b>	87.5	88.1	86.5
<b>Marital status</b>			
Married	53.6	56.2	46.6 **
Living with partner	9.1	7.5	12.9 *
Divorced, separated, widowed	10.6	10.2	11.5
Never married	26.8	26.1	29.0
<b>Parent of one or more children under 18</b>	40.2	38.3	44.9 *
<b>Number of adults 19 and older in household</b>			
One	13.8	12.8	16.2
Two	51.8	52.6	50.1
Three or more	34.4	34.6	33.7
<b>Education</b>			
Less than high school	6.7	5.2	10.2 **
High school graduate (includes some college)	50.3	47.6	56.3 *
College graduate or higher	43.0	47.2	33.4 **

(continued)

**EXHIBIT IV.10: (CONTINUED)**

	FULL-YEAR INSURED ADULTS	UNMET NEED FOR HEALTH CARE	
		Adults With No Unmet Need	Adults With Unmet Need
<b>Self-reported health status</b>			
Very good or excellent	59.4	64.4	47.6 **
Good	26.2	26.1	26.5
Fair or poor	14.5	9.5	25.9 **
<b>Has a health condition <sup>a</sup></b>	54.2	48.1	68.4 **
<b>Activities are limited by a health problem</b>	20.9	14.6	35.0 **
<b>Family income relative to the federal poverty level (FPL)</b>			
At or below 138% of FPL	23.4	19.4	32.5 **
139-299% of FPL	23.1	21.2	27.8 *
300-399% of FPL	10.1	10.2	9.6
At or above 400% of FPL	43.4	49.1	30.0 **
<b>Current health insurance coverage</b>			
Employer-sponsored insurance (ESI) coverage	68.7	75.2	53.1 **
Other (non-ESI) coverage	31.3	24.8	46.9 **
<b>Has high-deductible health plan</b>	22.7	23.2	21.5
<b>Region</b>			
Boston	12.5	12.1	13.7
Metro West	33.4	35.2	29.5
Northeast	11.2	11.5	10.4
Central	12.0	12.6	10.3
West	11.9	10.6	14.7 *
Southeast	19.1	18.0	21.4
<b>Sample size</b>	2,795	1,963	806
<b>Share of population</b>	89.4%	62.3%	26.4%

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from value for remainder of sample at the .05 (.01) level, two-tailed test.

a. Includes adults who report they have ever been told by a doctor or other health professional that they have at least one of the following: hypertension or high blood pressure; heart disease or congestive heart failure; diabetes; asthma; any other chronic or long-term health condition or health problem; or are pregnant.

- The multivariate analysis shows that the strongest predictors of unmet need for health care among full-year insured adults are related to demographic characteristics, health and disability status, and having a high-deductible health plan, controlling for other factors. For example, insured women are 7.8 percentage points more likely to have unmet need than insured men, and insured parents are 7.8 percentage points more likely to have unmet need than insured childless adults. For adults with a health problem, the probability of unmet need ranges from 9.5 percentage points higher for adults with a health condition than for those without a health condition to 12.2 percentage points higher for those who report poor health than for those who report very good or excellent health. Finally, having a high-deductible health plan is as-

sociated with a 6.2 percentage point increase in the probability of having unmet need (Exhibit IV.11).

**EXHIBIT IV.11: ESTIMATES OF CHANGE IN PROBABILITY OF UNMET NEED FOR HEALTH CARE OVER THE PAST 12 MONTHS ASSOCIATED WITH A CHANGE IN INDIVIDUAL AND FAMILY CHARACTERISTICS FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**

	<b>CHANGE IN PROBABILITY OF UNMET NEED ASSOCIATED WITH CHANGE IN CHARACTERISTIC</b>
<b>Age</b>	
19 to 25 years ^	
26 to 34 years	1.8
35 to 49 years	-5.6
50 to 64 years	-7.7
<b>Race/ethnicity</b>	
White, non-Hispanic ^	
Other race, non-Hispanic	-5.6
Hispanic	2.0
<b>Female</b>	7.8 **
<b>U.S. citizen</b>	-3.1
<b>Speaks English at home</b>	5.3
<b>Marital status</b>	
Married ^	
Living with partner	6.4
Divorced, separated, widowed	-4.5
Never married	0.0
<b>Parent of one or more children under 18</b>	7.8 **
<b>Number of adults 19 or older in household</b>	
One ^	
Two	-0.5
Three or more	1.4
<b>Education</b>	
Less than high school ^	
High school graduate (includes some college)	1.5
College graduate or higher	0.6
<b>Self-reported health status</b>	
Very good or excellent ^	
Good	0.8
Fair or poor	12.2 *
<b>Has a health condition <sup>a</sup></b>	9.5 **
<b>Activities are limited by a health problem</b>	9.8 **
(continued)	

**EXHIBIT IV.11: (CONTINUED)**

**CHANGE IN PROBABILITY OF  
UNMET NEED ASSOCIATED WITH  
CHANGE IN CHARACTERISTIC**

<b>Family income relative to the federal poverty level (FPL)</b>	
At or below 138% of FPL ^	
139-299% of FPL	-0.6
300-399% of FPL	-3.3
At or above 400% of FPL	-9.0
<b>Current health insurance coverage</b>	
Employer-sponsored insurance (ESI) coverage ^	
Other (non-ESI) coverage	7.1
<b>Has high-deductible health plan</b>	6.2 *
<b>Region</b>	
Boston ^	
Metro West	-0.5
Northeast	-3.7
Central	-3.3
West	2.6
Southeast	0.1
<b>Sample size</b>	2,626

Source: 2013 Massachusetts Health Reform Survey.

Note: Estimates are marginal effects from logit model.

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

^ Base category for categorical variables with more than two values.

a. Includes adults who report they have ever been told by a doctor or other health professional that they have at least one of the following: hypertension or high blood pressure; heart disease or congestive heart failure; diabetes; asthma; any other chronic or long-term health condition or health problem; or are pregnant.

- Full-year insured adults with unmet need for health care due to the cost of care tend to be female, a parent, and less well educated than those without such a need. In addition, they are more likely to report being in fair or poor health, more likely to have a health problem that limits their activities, and more likely to have a health condition than those without such unmet need. Full-year insured adults with unmet need also are more likely to have lower family incomes and to have other (non-ESI) coverage (Exhibit IV.12).

**EXHIBIT IV.12: DESCRIPTIVE ANALYSIS OF INDIVIDUAL AND FAMILY CHARACTERISTICS ASSOCIATED WITH COST-RELATED REASONS FOR UNMET NEED FOR HEALTH CARE OVER THE PAST 12 MONTHS FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**

	FULL-YEAR INSURED ADULTS	BY PRESENCE OF UNMET NEED DUE TO COST OF CARE	
		No Unmet Need	Unmet Need
<b>Age</b>			
19 to 25 years	15.0	15.6	11.6
26 to 34 years	17.6	16.7	23.4
35 to 49 years	33.2	33.3	32.7
50 to 64 years	34.2	34.5	32.3
<b>Race/ethnicity</b>			
White, non-Hispanic	75.9	76.1	74.3
Other race, non-Hispanic	14.9	15.6	10.7 *
Hispanic	9.1	8.2	14.9 *
<b>Female</b>	53.1	51.5	62.8 *
<b>U.S. citizen</b>	92.4	92.6	91.1
<b>Speaks English at home</b>	87.5	88.3	82.6
<b>Marital status</b>			
Married	53.6	54.4	48.5
Living with partner	9.1	7.9	16.3 *
Divorced, separated, widowed	10.6	10.6	10.2
Never married	26.8	27.1	25.1
<b>Parent of one or more children under 18</b>	40.2	38.4	51.7 **
<b>Number of adults 19 or older in household</b>			
One	13.8	13.5	15.2
Two	51.8	52.2	49.6
Three or more	34.4	34.3	35.2
<b>Education</b>			
Less than high school	6.7	6.0	11.5 *
High school graduate (includes some college)	50.3	49.0	58.3 *
College graduate or higher	43.0	45.1	30.1 **
<b>Self-reported health status</b>			
Very good or excellent	59.4	62.3	41.2 **
Good	26.2	25.9	28.2
Fair or poor	14.5	11.9	30.6 **

(continued)

**EXHIBIT IV.12: (CONTINUED)**

	FULL-YEAR INSURED ADULTS	BY PRESENCE OF UNMET NEED DUE TO COST OF CARE	
		No Unmet Need	Unmet Need
<b>Has a health condition <sup>a</sup></b>	54.2	51.1	74.0 **
<b>Activities are limited by a health problem</b>	20.9	17.7	41.3 **
<b>Family income relative to the federal poverty level (FPL)</b>			
At or below 138% of FPL	23.4	22.0	32.2 **
139-299% of FPL	23.1	21.0	36.3 **
300-399% of FPL	10.1	10.0	10.8
At or above 400% of FPL	43.4	47.0	20.7 **
<b>Current health insurance coverage</b>			
Employer-sponsored insurance (ESI) coverage	68.7	71.9	48.7 **
Other (non-ESI) coverage	31.3	28.1	51.3 **
<b>Has high-deductible health plan</b>	22.7	22.0	26.7
<b>Region</b>			
Boston	12.5	12.8	10.3
Metro West	33.4	33.7	31.6
Northeast	11.2	11.7	8.2
Central	12.0	12.6	7.9 *
West	11.9	11.1	16.9
Southeast	19.1	18.2	25.0 *
<b>Sample size</b>	2,795	2,424	371
<b>Share of population</b>	89.4%	77.1%	12.3%

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from value for remainder of sample at the .05 (.01) level, two-tailed test.

a. Includes adults who report they have ever been told by a doctor or other health professional that they have at least one of the following: hypertension or high blood pressure; heart disease or congestive heart failure; diabetes; asthma; any other chronic or long-term health condition or health problem; or are pregnant.

- The multivariate analysis shows that the strongest predictors of unmet need due to costs are similar to those for unmet need overall, with the addition of a strong income effect: high-income insured adults are 8.5 percentage points less likely than low-income insured adults to have unmet need due to costs. Also important is having a high deductible health plan, with the likelihood of unmet need due to cost 9.0 percentage points higher for those with a high-deductible health plan (Exhibit IV.13).

**EXHIBIT IV.13: ESTIMATES OF CHANGE IN PROBABILITY OF UNMET NEED FOR HEALTH CARE DUE TO COST OVER THE PAST 12 MONTHS ASSOCIATED WITH A CHANGE IN INDIVIDUAL AND FAMILY CHARACTERISTICS FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**

	<b>CHANGE IN PROBABILITY OF UNMET NEED ASSOCIATED WITH CHANGE IN CHARACTERISTIC</b>
<b>Age</b>	
19 to 25 years ^	
26 to 34 years	3.6
35 to 49 years	2.8
50 to 64 years	2.8
<b>Race/ethnicity</b>	
White, non-Hispanic ^	
Other race, non-Hispanic	-8.5 **
Hispanic	0.6
<b>Female</b>	4.7 *
<b>U.S. citizen</b>	-6.4
<b>Speaks English at home</b>	-0.3
<b>Marital status</b>	
Married ^	
Living with partner	7.0
Divorced, separated, widowed	-3.5
Never married	1.7
<b>Parent of one or more children under 18</b>	8.1 **
<b>Number of adults 19 or older in household</b>	
One ^	
Two	0.2
Three or more	2.3
<b>Education</b>	
Less than high school ^	
High school graduate (includes some college)	0.9
College graduate or higher	1.3
<b>Self-reported health status</b>	
Very good or excellent ^	
Good	1.4
Fair or poor	5.5 *
(continued)	

**EXHIBIT IV.13: (CONTINUED)**

	<b>CHANGE IN PROBABILITY OF UNMET NEED ASSOCIATED WITH CHANGE IN CHARACTERISTIC</b>
<b>Has a health condition <sup>a</sup></b>	5.7 *
<b>Activities are limited by a health problem</b>	6.4 **
<b>Family income relative to the federal poverty level (FPL)</b>	
At or below 138% of FPL <sup>^</sup>	
139-299% of FPL	4.7
300-399% of FPL	-1.5
At or above 400% of FPL	-8.5 *
<b>Current health insurance coverage</b>	
Employer-sponsored insurance (ESI) coverage <sup>^</sup>	
Other (non-ESI) coverage	4.8
<b>Has high-deductible health plan</b>	9.0 **
<b>Region</b>	
Boston <sup>^</sup>	
Metro West	3.4
Northeast	-2.7
Central	-1.9
West	3.9
Southeast	4.6
<b>Sample size</b>	2,645

Source: 2013 Massachusetts Health Reform Survey.

Note: Estimates are marginal effects from logit model.

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

<sup>^</sup> Base category for categorical variables with more than two values.

a. Includes adults who report they have ever been told by a doctor or other health professional that they have at least one of the following: hypertension or high blood pressure; heart disease or congestive heart failure; diabetes; asthma; any other chronic or long-term health condition or health problem; or are pregnant.

**EXHIBIT IV.14: DESCRIPTIVE ANALYSIS OF INDIVIDUAL AND FAMILY CHARACTERISTICS ASSOCIATED WITH UNMET NEED FOR HEALTH CARE OVER THE PAST 12 MONTHS FOR REASONS OTHER THAN COST FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**

	FULL-YEAR INSURED ADULTS	BY PRESENCE OF UNMET NEED RELATED TO ISSUES OTHER THAN COST	
		No Unmet Need	Unmet Need
<b>Age</b>			
19 to 25 years	15.0	14.8	15.9
26 to 34 years	17.6	15.9	24.5 **
35 to 49 years	33.2	34.0	29.8
50 to 64 years	34.2	35.2	29.9
<b>Race/ethnicity</b>			
White, non-Hispanic	75.9	76.5	73.4
Other race, non-Hispanic	14.9	14.8	15.4
Hispanic	9.1	8.6	11.1
<b>Female</b>	53.1	51.5	59.4 *
<b>U.S. citizen</b>	92.4	92.1	93.4
<b>Speaks English at home</b>	87.5	87.1	89.0
<b>Marital status</b>			
Married	53.6	55.4	46.1 *
Living with partner	9.1	8.2	12.7
Divorced, separated, widowed	10.6	10.4	11.3
Never married	26.8	26.1	29.9
<b>Parent of one or more children under 18</b>	40.2	39.3	44.0
<b>Number of adults 19 or older in household</b>			
One	13.8	13.0	16.8
Two	51.8	51.6	52.8
Three or more	34.4	35.4	30.4
<b>Education</b>			
Less than high school	6.7	6.1	9.4
High school graduate (includes some college)	50.3	48.7	56.6 *
College graduate or higher	43.0	45.3	34.0 **
<b>Self-reported health status</b>			
Very good or excellent	59.4	62.1	48.6 **
Good	26.2	26.0	26.8
Fair or poor	14.5	11.9	24.7 **
<b>Has a health condition <sup>a</sup></b>	54.2	51.5	65.2 **
<b>Activities are limited by a health problem</b>	20.9	17.8	33.6 **

(continued)

**EXHIBIT IV.14:** (CONTINUED)

	FULL-YEAR INSURED ADULTS	BY PRESENCE OF UNMET NEED RELATED TO ISSUES OTHER THAN COST	
		No Unmet Need	Unmet Need
<b>Family income relative to the federal poverty level (FPL)</b>			
At or below 138% of FPL	23.4	21.1	32.5 **
139-299% of FPL	23.1	22.5	25.9
300-399% of FPL	10.1	10.8	7.2 *
At or above 400% of FPL	43.4	45.6	34.4 **
<b>Current health insurance coverage</b>			
Employer-sponsored insurance (ESI) coverage	68.7	72.5	53.1 **
Other (non-ESI) coverage	31.3	27.5	46.9 **
<b>Has high-deductible health plan</b>	22.7	24.4	16.1 **
<b>Region</b>			
Boston	12.5	12.1	14.0
Metro West	33.4	34.7	28.0 *
Northeast	11.2	11.1	11.4
Central	12.0	11.9	12.1
West	11.9	11.1	14.9
Southeast	19.1	19.0	19.5
<b>Sample size</b>	2,795	2,241	554
<b>Share of population</b>	89.4%	71.5%	17.8%

Source: 2013 Massachusetts Health Reform Survey.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from value for remainder of sample at the .05 (.01) level, two-tailed test.

a. Includes adults who report they have ever been told by a doctor or other health professional that they have at least one of the following: hypertension or high blood pressure; heart disease or congestive heart failure; diabetes; asthma; any other chronic or long-term health condition or health problem; or are pregnant.

- The multivariate analysis of unmet need for health care for reasons unrelated to the costs of care shows that the strongest predictor of that unmet need is language. Adults who do not speak English at home are 8.4 percentage points more likely than adults who do to have unmet need for reasons other than costs (Exhibit IV.15).

**EXHIBIT IV.15: ESTIMATES OF CHANGE IN PROBABILITY OF UNMET NEED FOR HEALTH CARE FOR REASONS OTHER THAN COST OVER THE PAST 12 MONTHS ASSOCIATED WITH A CHANGE IN INDIVIDUAL AND FAMILY CHARACTERISTICS FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**

	<b>CHANGE IN PROBABILITY OF UNMET NEED ASSOCIATED WITH CHANGE IN CHARACTERISTIC</b>
<b>Age</b>	
19 to 25 years ^	
26 to 34 years	4.0
35 to 49 years	-8.0
50 to 64 years	-8.5
<b>Race/ethnicity</b>	
White, non-Hispanic ^	
Other race, non-Hispanic	-0.3
Hispanic	3.3
<b>Female</b>	4.7
<b>U.S. citizen</b>	0.4
<b>Speaks English at home</b>	8.4 *
<b>Marital status</b>	
Married ^	
Living with partner	2.0
Divorced, separated, widowed	-2.8
Never married	-1.7
<b>Parent of one or more children under 18</b>	3.3
<b>Number of adults 19 or older in household</b>	
One ^	
Two	-0.1
Three or more	-2.0
<b>Education</b>	
Less than high school ^	
High school graduate (includes some college)	2.6
College graduate or higher	0.6
<b>Self-reported health status</b>	
Very good or excellent ^	
Good	1.9
Fair or poor	9.2
<b>Has a health condition <sup>a</sup></b>	3.9
<b>Activities are limited by a health problem</b>	4.7

(continued)

**EXHIBIT IV.15: (CONTINUED)**

**CHANGE IN PROBABILITY OF  
UNMET NEED ASSOCIATED WITH  
CHANGE IN CHARACTERISTIC**

<b>Family income relative to the federal poverty level (FPL)</b>	
At or below 138% of FPL ^	
139-299% of FPL	-0.7
300-399% of FPL	-5.0
At or above 400% of FPL	-1.4
<b>Current health insurance coverage</b>	
Employer-sponsored insurance (ESI) coverage ^	
Other (non-ESI) coverage	5.4
<b>Has high-deductible health plan</b>	-3.3
<b>Region</b>	
Boston ^	
Metro West	-1.3
Northeast	-0.5
Central	0.6
West	2.6
Southeast	-2.1
<b>Sample size</b>	2,645

Source: 2013 Massachusetts Health Reform Survey.

Note: Estimates are marginal effects from logit model.

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

^ Base category for categorical variables with more than two values.

a. Includes adults who report they have ever been told by a doctor or other health professional that they have at least one of the following: hypertension or high blood pressure; heart disease or congestive heart failure; diabetes; asthma; any other chronic or long-term health condition or health problem; or are pregnant.

**EXHIBIT IV.16: DESCRIPTIVE ANALYSIS OF FACTORS ASSOCIATED WITH DIFFICULTIES OBTAINING HEALTH CARE DUE TO PROVIDER ACCESS ISSUES OVER THE PAST 12 MONTHS FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**

	FULL-YEAR INSURED ADULTS	BY PRESENCE OF DIFFICULTIES OBTAINING HEALTH CARE DUE TO PROVIDER ACCESS ISSUES <sup>b</sup>	
		No Difficulties	Difficulties
<b>Age</b>			
19 to 25 years	15.0	15.1	14.0
26 to 34 years	17.6	16.8	27.5 *
35 to 49 years	33.2	33.4	30.8
50 to 64 years	34.2	34.7	27.7
<b>Race/ethnicity</b>			
White, non-Hispanic	75.9	76.1	73.1
Other race, non-Hispanic	14.9	15.0	15.8
Hispanic	9.1	8.8	11.1
<b>Female</b>	53.1	52.2	60.8 *
<b>U.S. citizen</b>	92.4	92.6	90.2
<b>Speaks English at home</b>	87.5	87.8	86.4
<b>Marital status</b>			
Married	53.6	54.4	44.4 *
Living with partner	9.1	8.7	12.5
Divorced, separated, widowed	10.6	10.6	10.4
Never married	26.8	26.3	32.7
<b>Parent of one or more children under 18</b>	40.2	39.6	46.5
<b>Number of adults 19 or older in household</b>			
One	13.8	13.4	18.5
Two	51.8	52.3	47.5
Three or more	34.4	34.3	34.0
<b>Education</b>			
Less than high school	6.7	6.6	7.2
High school graduate (includes some college)	50.3	49.1	59.2
College graduate or higher	43.0	44.2	33.7 *
<b>Self-reported health status</b>			
Very good or excellent	59.4	61.0	45.3 **
Good	26.2	26.1	27.4
Fair or poor	14.5	12.9	27.3 **
<b>Has a health condition <sup>a</sup></b>	54.2	53.0	66.3 *
<b>Activities are limited by a health problem</b>	20.9	18.9	36.4 **

(continued)

**EXHIBIT IV.16: (CONTINUED)**

	FULL-YEAR INSURED ADULTS	BY PRESENCE OF DIFFICULTIES OBTAINING HEALTH CARE DUE TO PROVIDER ACCESS ISSUES <sup>b</sup>	
		No Difficulties	Difficulties
<b>Family income relative to the federal poverty level (FPL)</b>			
At or below 138% of FPL	23.4	22.5	31.0 *
139-299% of FPL	23.1	22.4	29.6
300-399% of FPL	10.1	10.3	7.8
At or above 400% of FPL	43.4	44.8	31.7 **
<b>Current health insurance coverage</b>			
Employer-sponsored insurance (ESI) coverage	68.7	70.9	48.7 **
Other (non-ESI) coverage	31.3	29.1	51.3 **
<b>Has high-deductible health plan</b>	22.7	23.4	17.7
<b>Region</b>			
Boston	12.5	12.6	11.9
Metro West	33.4	33.9	29.4
Northeast	11.2	11.2	9.7
Central	12.0	11.6	15.3
West	11.9	11.4	15.6
Southeast	19.1	19.2	18.1
<b>Sample size</b>	2,795	2,490	267
<b>Share of population</b>	89.4%	79.6%	8.6%

Source: 2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates. Provider access issues are defined in text.

\*(\*\*) Significantly different from value for remainder of sample at the .05 (.01) level, two-tailed test.

a. Includes adults who report they have ever been told by a doctor or other health professional that they have at least one of the following: hypertension or high blood pressure; heart disease or congestive heart failure; diabetes; asthma; any other chronic or long-term health condition or health problem; or are pregnant.

b. Includes unmet need due to difficulty finding a provider, difficulty getting an appointment with a provider, and difficulty with the location of a provider.

- There were no strong predictors of difficulties obtaining health care due to provider access issues, such as difficulty finding a provider or difficulty getting an appointment with a provider, from the multivariate analysis, suggesting that the problems were dispersed across the population subgroups (Exhibit IV.17).

**EXHIBIT IV.17: ESTIMATES OF CHANGE IN PROBABILITY OF DIFFICULTIES OBTAINING HEALTH CARE DUE TO PROVIDER ACCESS ISSUES OVER THE PAST 12 MONTHS ASSOCIATED WITH A CHANGE IN INDIVIDUAL AND FAMILY CHARACTERISTICS FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**

	<b>CHANGE IN PROBABILITY OF DIFFICULTIES OBTAINING HEALTH CARE WITH CHANGE IN CHARACTERISTIC</b>
<b>Age</b>	
19 to 25 years ^	
26 to 34 years	5.5
35 to 49 years	-0.6
50 to 64 years	-1.0
<b>Race/ethnicity</b>	
White, non-Hispanic ^	
Other race, non-Hispanic	-0.6
Hispanic	0.0
<b>Female</b>	2.6
<b>U.S. citizen</b>	-8.9
<b>Speaks English at home</b>	3.8
<b>Marital status</b>	
Married ^	
Living with partner	2.2
Divorced, separated, widowed	-1.0
Never married	4.0
<b>Parent of one or more children under 18</b>	3.8
<b>Number of adults 19 or older in household</b>	
One ^	
Two	0.1
Three or more	2.1
<b>Education</b>	
Less than high school ^	
High school graduate (includes some college)	4.7
College graduate or higher	3.7
<b>Self-reported health status</b>	
Very good or excellent ^	
Good	1.1
Fair or poor	6.3
(continued)	

**EXHIBIT IV.17: (CONTINUED)**

	<b>CHANGE IN PROBABILITY OF DIFFICULTIES OBTAINING HEALTH CARE WITH CHANGE IN CHARACTERISTIC</b>
<b>Has a health condition <sup>a</sup></b>	2.5
<b>Activities are limited by a health problem</b>	2.5
<b>Family income relative to the federal poverty level (FPL)</b>	
At or below 138% of FPL <sup>^</sup>	
139-299% of FPL	3.2
300-399% of FPL	1.3
At or above 400% of FPL	2.7
<b>Current health insurance coverage</b>	
Employer-sponsored insurance (ESI) coverage <sup>^</sup>	
Other (non-ESI) coverage	6.6
<b>Has high-deductible health plan</b>	-0.2
<b>Region</b>	
Boston <sup>^</sup>	
Metro West	1.3
Northeast	0.4
Central	5.4
West	3.9
Southeast	0.7
<b>Sample size</b>	2,618

Source: 2013 Massachusetts Health Reform Survey.

Notes: Estimates are marginal effects from logit model. Provider access issues are defined in text.

\*(\*\*) Significantly different from value for remainder of sample at the .05 (.01) level, two-tailed test.

<sup>^</sup> Base category for categorical variables with more than two values.

a. Includes adults who report they have ever been told by a doctor or other health professional that they have at least one of the following: hypertension or high blood pressure; heart disease or congestive heart failure; diabetes; asthma; any other chronic or long-term health condition or health problem; or are pregnant.

**APPENDIX EXHIBIT IV.1: SIMPLE (UNADJUSTED) TRENDS IN HEALTH CARE ACCESS AND USE FOR ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2012	Fall 2013
<b>Has a usual source of care (excluding the emergency department [ED])</b>	85.8	88.7*	91.4** ^^	89.2** ^	89.6**	87.8	87.5
– Usual source of care is doctor's office or private clinic	64.8	68.8*	70.8**	71.8**	70.6**	65.4	67.6
– Had usual source of care more than one year		92.6	92.1	94.0	92.0	93.1	93.6
<b>Health care use in past 12 months</b>							
– Any general doctor or specialist visit	84.2	85.6	87.3*	89.8** ^	85.7 ^^	85.7	84.7
– Any visit for preventive care	69.8	73.8*	76.0**	77.8**	75.3**	74.7**	72.7
– Any general doctor visit	79.6	80.9	84.1** ^	86.3**	81.0 ^^	81.9	81.1
– Any specialist visit	50.4	49.9	53.0	53.8*	53.2	50.7	52.1
– Any visit to a nurse practitioner, physician assistant, or midwife rather than a general doctor	N/A	N/A	N/A	N/A	35.3	39.9	38.2
– Had visits to more than one doctor's office or clinic	N/A	N/A	N/A	N/A	48.2	46.8	48.4
– Had help coordinating care across providers	N/A	N/A	N/A	N/A	55.4	55.0	52.1
<b>Any dental care visit in past 12 months</b>	66.1	70.4**	73.7** ^	73.3**	71.3**	70.0*	68.2
<b>Any hospital stay in the past 12 months (excluding for birth)</b>	11.6	10.0	11.3	10.9	10.1	10.7	8.7** ^
<b>Took any prescription drugs in past 12 months</b>	55.9	53.9	60.5** ^^	59.6*	57.2	59.3*	56.8
<b>Any emergency department (ED) visits in past 12 months</b>	35.3	32.9	34.5	35.0	32.2	32.3	32.8
– Three or more ED visits	9.6	7.6	8.7	9.5	8.1	8.1	9.0
– Most recent ED visit was for non-emergency condition <sup>a</sup>	16.6	14.2	15.5	15.1	13.3*	14.9	12.9**
– Most important reason for most recent ED visit was because needed care after office hours at doctor's office or clinic or told by doctor's office or clinic to go to the ED	N/A	N/A	N/A	N/A	N/A	9.9	7.7 ^
– Any ED visit related to a chronic health condition in the past 12 months	5.1	3.8*	5.2 ^	4.2	4.7	4.5	5.2
<b>Among those who used care in the past 12 months, share rating quality of care as very good or excellent</b>	62.3	72.3**	69.1**	67.6**	67.4**	72.1**	69.5**
<b>Sample size</b>	3,007	2,937	4,041	3,165	3,040	3,160	3,024

Source: 2006–2013 Massachusetts Health Reform Survey. The survey was not fielded in 2011.

Note: These are simple (unadjusted) estimates. N/A indicates that the data are not available for that year.

\*\* Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^(^^) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

a. A condition that the respondent thought could have been treated by a regular doctor if one had been available.

**APPENDIX EXHIBIT IV.2: SIMPLE (UNADJUSTED) TRENDS IN HEALTH CARE ACCESS AND USE FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2012	Fall 2013
<b>Has a usual source of care (excluding the emergency department [ED])</b>	92.2	92.8	94.3	91.9 ^	92.5	91.4	89.9
– Usual source of care is doctor's office or private clinic	74.0	73.3	75.1	74.7	74.5	68.9**	71.1
– Had usual source of care more than one year		94.0	93.4	94.5	93.3	93.9	94.3
<b>Health care use in past 12 months</b>							
– Any general doctor or specialist visit	90.1	89.8	90.0	92.3 ^	88.4 ^^	88.9	87.9
– Any visit for preventive care	77.0	78.9	78.7	80.8*	78.5	78.2	76.1
– Any general doctor visit	86.2	86.1	86.8	88.9	84.1 ^^	85.4	84.4
– Any specialist visit	55.4	52.5	55.5	55.9	56.1	53.3	54.4
– Any visit to a nurse practitioner, physician assistant, or midwife rather than a general doctor	N/A	N/A	N/A	N/A	36.5	40.9	39.6
– Had visits to more than one doctor's office or clinic	N/A	N/A	N/A	N/A	49.8	47.5	49.6
– Had help coordinating care across providers	N/A	N/A	N/A	N/A	59.7	60.0	55.0
<b>Any dental care visit in past 12 months</b>	73.3	75.0	77.5**	76.1	74.9	72.7	71.0
<b>Any hospital stay in the past 12 months (excluding for birth)</b>	12.2	10.0	11.2	11.0	10.1	10.7	9.2**
<b>Took any prescription drugs in past 12 months</b>	60.5	57.3	62.7 ^^	61.9	59.7	61.7	58.8
<b>Any emergency department (ED) visits in past 12 months</b>	33.9	31.6	33.8	34.9	31.5	32.0	32.0
– Three or more ED visits	9.2	7.1	8.0	9.7	8.6	7.9	8.8
– Most recent ED visit was for non-emergency condition <sup>a</sup>	14.5	13.5	15.0	15.2	12.1 ^	14.3	12.2
– Most important reason for most recent ED visit was because needed care after office hours at doctor's office or clinic or told by doctor's office or clinic to go to the ED	N/A	N/A	N/A	N/A	N/A	10.1	7.4 ^^
– Any ED visit related to a chronic health condition in the past 12 months	4.8	3.6	5.0 ^	4.4	4.7	4.4	5.1
<b>Among those who used care in the past 12 months, share rating quality of care as very good or excellent</b>	66.7	75.7**	72.1**	70.4*	69.8	73.8**	71.1*
<b>Sample size</b>	2,159	2,350	3,357	2,657	2,584	2,855	2,795

Source: 2006–2013 Massachusetts Health Reform Survey. The survey was not fielded in 2011.

Notes: These are simple (unadjusted) estimates. N/A indicates that the data are not available for that year.

\*\* Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^(^^) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

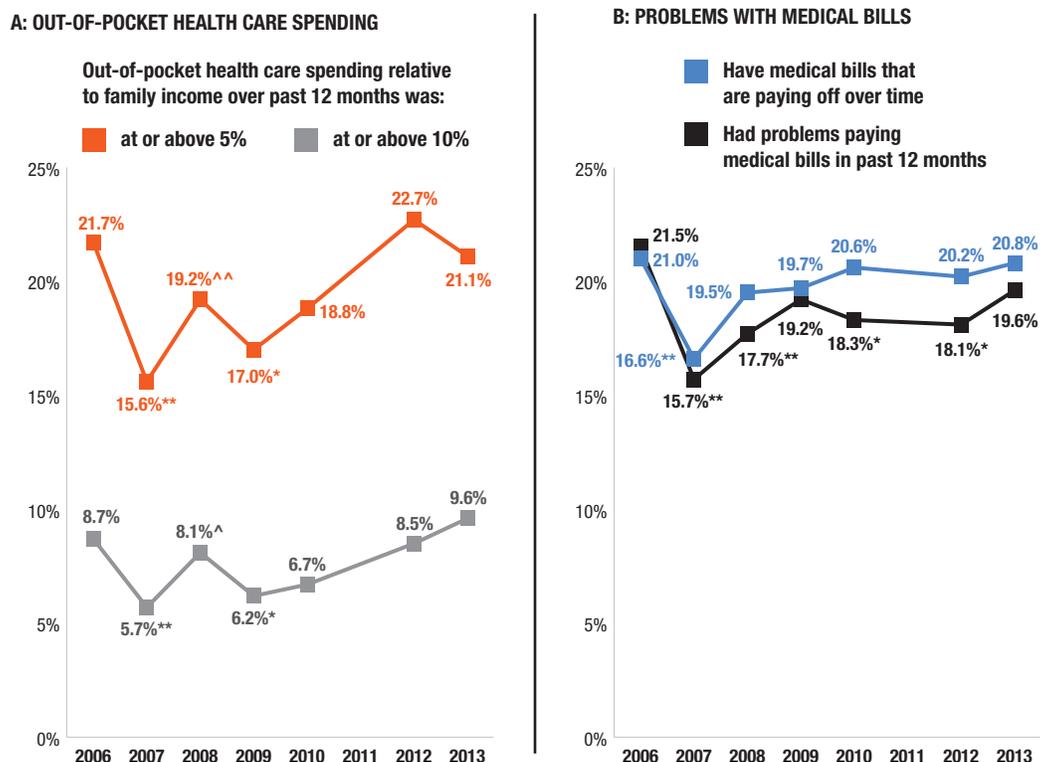
a. A condition that the respondent thought could have been treated by a regular doctor if one had been available.

## V. AFFORDABILITY OF HEALTH CARE FOR NONELDERLY ADULTS

### TRENDS IN AFFORDABILITY OF HEALTH CARE FOR NONELDERLY ADULTS: 2006–2013

- In 2013, the affordability of health care for adults overall in Massachusetts, which had improved somewhat over the 2007 to 2009 period, was not significantly different from the level in 2006. As in 2006, roughly one in five of the adults with family income below 500 percent of FPL had out-of-pocket spending over the past 12 months<sup>35</sup> that was at or above five percent of family income (21.1 percent). Among all adults, roughly one in five had problems paying medical bills (19.6 percent) and had medical bills that they were paying off over time (20.8 percent) in 2013 (Exhibit V.1).

**EXHIBIT V.1: SIMPLE (UNADJUSTED) TRENDS IN AFFORDABILITY OF HEALTH CARE OVER THE PAST YEAR FOR ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**



Source: 2006–2013 Massachusetts Health Reform Survey (N=22,374). The survey was not fielded in 2011.

Notes: These are simple (unadjusted) estimates. Because of the way the income information is collected in the survey, the measures of spending relative to family income cannot be constructed for adults with family income above 500 percent of federal poverty level (FPL) in all years.

\*(\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

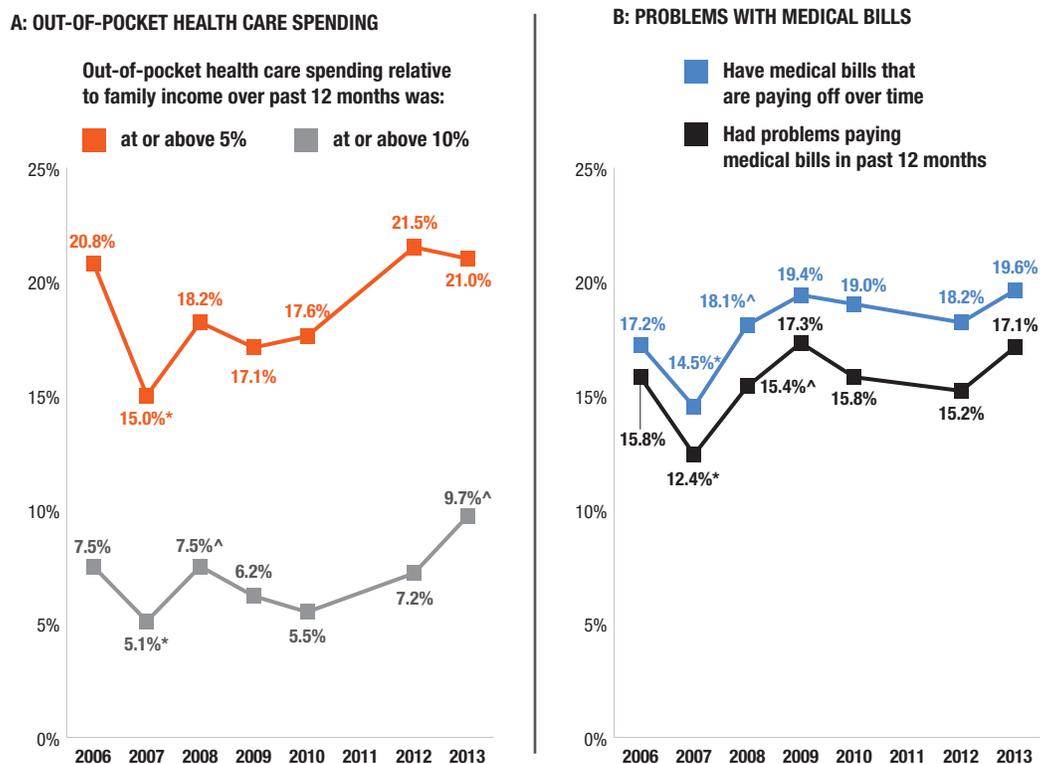
^(^^) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

<sup>35</sup> Because of the way income is collected in the survey, the measures of spending relative to family income cannot be constructed for adults with family income above 500 percent of FPL.

## TRENDS IN AFFORDABILITY OF HEALTH CARE FOR NONELDERLY ADULTS WITH CONTINUOUS HEALTH INSURANCE COVERAGE OVER THE PAST YEAR: 2006–2013

- As was true for adults overall, the affordability of health care for adults in Massachusetts who had health insurance coverage for all of the prior year was not significantly different from the level in 2006. As in 2006, roughly one in five of the full-year insured adults with family income below 500 percent of FPL had out-of-pocket spending over the past 12 months that was at or above five percent of family income (21.0 percent). Among all insured adults, roughly one in five had problems paying medical bills (17.1 percent) and had medical bills that they were paying off over time (19.6 percent) in 2013.
- The share of full-year insured adults with family income below 500 percent of FPL who had out-of-pocket spending over the past 12 months that was at or above 10 percent of family income increased from 7.2 percent in 2012 to 9.7 percent in 2013 (Exhibit V.2).

**EXHIBIT V.2: SIMPLE (UNADJUSTED) TRENDS IN AFFORDABILITY OF HEALTH CARE OVER THE PAST YEAR FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**



Source: 2006–2013 Massachusetts Health Reform Survey (N=18,757). The survey was not fielded in 2011.

Notes: These are simple (unadjusted) estimates. Because of the way the income information is collected in the survey, the measures of spending relative to family income cannot be constructed for adults with family income above 500 percent of federal poverty level (FPL) in all years.

\*(\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^(^^) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

- The share of full-year insured adults with a health care flexible spending account has grown over time, from 14.8 percent in 2006 to 20.9 percent in 2013 (Exhibit V.3).

**EXHIBIT V.3: SIMPLE (UNADJUSTED) TRENDS IN HEALTH CARE SPENDING, MEDICAL BILLS, AND MEDICAL DEBT FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2012	Fall 2013
<b>Out-of-pocket (OOP) health care spending over the past 12 months relative to family income for those below 500% of the federal poverty level (FPL) <sup>a</sup></b>							
At or above 5% of family income	20.8	15.0*	18.2	17.1	17.6	21.5	21.0
At or above 10% of family income	7.5	5.1*	7.5 <sup>^</sup>	6.2	5.5	7.2	9.7 <sup>^</sup>
<b>OOP health care spending of \$500 or more in the past 12 months on:</b>							
– Prescription drugs	29.3	25.1*	26.1	25.8*	25.4*	28.1	28.9
– Dental and vision care	36.2	33.6	35.8	33.8	32.4*	36.0	36.9
– Other medical expenses	28.0	28.4	29.6	30.4	30.3	34.6**	36.8**
<b>Had problems paying medical bills in past 12 months</b>	15.8	12.4*	15.4 <sup>^</sup>	17.3	15.8	15.2	17.1
<b>Have medical bills that are paying off over time</b>	17.2	14.5*	18.1 <sup>^</sup>	19.4	19.0	18.2	19.6
<b>Among those paying medical bills over time, amount of medical debt</b>							
– Don't know amount	0.2	0.2	0.2	0.1	0.2	0.2	0.5* <sup>^</sup>
– Less than \$2,000	10.7	10.1	11.1	11.8	10.7	10.5	10.6
– \$2,000 to \$9,999	5.7	3.6**	6.4 <sup>^^</sup>	6.6	7.4	6.3	7.7*
– \$10,000 or more	0.6	0.6	0.5	0.9	0.8	1.2*	0.9
<b>Had problems paying other bills in past 12 months</b>	21.0	19.6	22.6 <sup>^</sup>	24.5*	23.4	21.4	22.7
<b>Have a health care flexible spending account</b>	14.8	18.6*	19.6**	18.6*	20.3**	21.1**	20.9**
<b>Sample size</b>	2,159	2,350	3,357	2,657	2,584	2,855	2,795

Source: 2006–2013 Massachusetts Health Reform Survey. The survey was not fielded in 2011.

Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

<sup>^</sup>(<sup>^^</sup>) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

a. Because of the way the income information is collected in the survey, the measures of spending relative to family income cannot be constructed for adults with family income above 500 percent of FPL in all years.

- Also as was true for full-year insured adults overall, there were few significant changes in health care affordability between 2006 and 2013 for full-year insured adults at different income levels. The one exception to that was that there has been a significant increase in the share of those with higher incomes (family income between 400 and 500 percent FPL) who have had out-of-pocket spending that exceeds five percent of their family income; this share grew from 7.9 percent in 2006 to 15.4 percent in 2013 (Exhibit V.4).

**EXHIBIT V.4: SIMPLE (UNADJUSTED) TRENDS IN HEALTH CARE AFFORDABILITY FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, BY FAMILY INCOME, FALL 2006 TO FALL 2013**

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2012	Fall 2013
<b>ADULTS WITH FAMILY INCOME BELOW 300% OF THE FEDERAL POVERTY LEVEL</b>							
Out-of-pocket health care spending relative to family income over past 12 months was at or above 5%	25.2	17.3*	19.3	18.7*	20.1	23.3	23.2
Out-of-pocket health care spending relative to family income over past 12 months was at or above 10%	11.2	7.3*	10.3	7.9	6.8*	9.8	12.2
Had problems paying medical bills in past 12 months	25.8	20.4*	24.1	23.4	23.4	22.2	25.1
Have medical bills that are paying off over time	21.6	17.8	23.2 ^	22.2	20.9	18.9	23.0
– Have medical bills of more than \$1000 that are paying off over time	10.4	9.2	13.7 ^	12.3	13.3	10.8	13.8
– Have had problems with medical bills for one year or more	N/A	N/A	N/A	N/A	12.0	10.4	12.3
Had problems paying other (non-medical) bills in past 12 months	31.4	33.5	37.3*	38.1*	36.3	32.6	34.8
<b>Sample size</b>	813	880	1,531	1,119	1,111	1,159	1,184
<b>ADULTS WITH FAMILY INCOME 300-399% OF THE FEDERAL POVERTY LEVEL</b>							
Out-of-pocket health care spending relative to family income over past 12 months was at or above 5%	22.3	14.4	16.2	18.1	14.5	19.9	16.3
Out-of-pocket health care spending relative to family income over past 12 months was at or above 10%	3.7	1.1	2.6	5.7	3.8	4.2	5.4
Had problems paying medical bills in past 12 months	15.4	16.3	18.1	19.9	20.2	17.4	20.4
Have medical bills that are paying off over time	22.7	23.2	18.1	23.5	28.3	24.8	30.3
– Have medical bills of more than \$1000 that are paying off over time	12.7	8.0	9.6	12.8	14.9	17.1	19.5
– Have had problems with medical bills for one year or more	N/A	N/A	N/A	N/A	10.7	10.4	17.0
Had problems paying other (non-medical) bills in past 12 months	24.8	21.2	28.2	24.8	22.7	24.3	21.9
<b>Sample size</b>	323	290	377	325	274	336	298

(continued)

**EXHIBIT V.4: (CONTINUED)**

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2012	Fall 2013
<b>ADULTS WITH FAMILY INCOME AT OR ABOVE 400% OF THE FEDERAL POVERTY LEVEL <sup>a</sup></b>							
Out-of-pocket health care spending relative to family income over past 12 months was at or above 5%	7.9	9.2	15.9*	11.6	11.0	16.2**	15.4*
Out-of-pocket health care spending relative to family income over past 12 months was at or above 10%	2.5	2.3	2.1	1.5	2.5	0.3	2.1
Had problems paying medical bills in past 12 months	8.8	6.0	7.6	11.5 ^	7.9 ^	8.3	7.8
– Have medical bills that are paying off over time	12.2	10.2	14.0 ^	16.1*	15.4	15.8	13.5
– Have medical bills of more than \$1000 that are paying off over time	7.4	5.4	7.6	9.6	10.7*	11.4**	8.9
Have had problems with medical bills for one year or more	N/A	N/A	N/A	N/A	6.1	6.7	6.4
Had problems paying other (non-medical) bills in past 12 months	12.3	9.5	9.3	13.0 ^	11.7	10.5	9.9
<b>Sample size</b>	1,023	1,178	1,449	1,213	1,191	1,360	1,313

Source: 2006–2013 Massachusetts Health Reform Survey. The survey was not fielded in 2011.

Notes: These are simple (unadjusted) estimates. N/A indicates that the data are not available for that year.

\*(\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^(^^) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

a. Because of the way the income information is collected in the survey, the measures of spending relative to family income cannot be constructed for adults with family income above 500 percent of FPL in all years.

**AFFORDABILITY OF HEALTH CARE IN 2013 AMONG NONELDERLY ADULTS WITH CONTINUOUS HEALTH INSURANCE COVERAGE OVER THE PAST YEAR**

- Affordability of health care was a concern for many Massachusetts families in 2013, with 38.6 percent of full-year insured adults reporting that health care costs had caused financial and/or nonfinancial problems for them and their families over the past 12 months. Problems due to health care costs include going without needed care because of the cost of the care, problems paying medical bills, medical debt, and other issues (e.g., drawing down savings to pay medical bills) (Exhibit V.5).
- Financial and/or nonfinancial problems with health care costs were more of an issue for lower-income full-year insured adults than for higher-income full-year insured adults, with nearly half, 48.4 percent of lower-income adults, reporting problems due to health care costs over the past 12 months, as compared with 30.2 percent of higher-income adults) (Exhibit V.5).
- Different measures of health care affordability demonstrate similar patterns: 25.1 percent of full-year insured adults with family incomes below 300 percent of FPL reported problems paying medical bills over the past year, as compared with 10.1 percent of higher-income insured adults. Similarly, 29.8 percent of the lower-income full-year insured adults reported that health

care spending had caused financial problems for their family in the past 12 months, as compared with 21.1 percent of higher-income adults (Exhibit V.5).

- Affordability of health care was more of an issue for full-year insured adults with other (non-ESI) coverage than it was for adults with ESI coverage. About half (49.8 percent) of full-year insured adults with other (non-ESI) coverage reported that health care costs were a problem over the past year, as compared with 33.5 percent of those with ESI coverage. Similarly, 23.1 percent of insured adults with other (non-ESI) coverage had problems paying medical bills over the past year, as compared with 14.4 percent of insured adults with ESI coverage, and 31.4 percent of the adults with other (non-ESI) coverage reported that health care spending had caused financial problems for their family in the past 12 months, as compared with 22.3 percent of those with ESI coverage (Exhibit V.5). Those with lower incomes and those with other (non-ESI) coverage were more likely to report not getting needed care in the past 12 months because of cost, with 20.3 percent of lower-income adults and 22.6 percent of those with other (non-ESI) coverage reporting such problems. The most common types of care that were not received due to cost were dental services and prescription drugs.

**EXHIBIT V.5: AFFORDABILITY OF HEALTH CARE FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	FULL-YEAR INSURED ADULTS	BY FAMILY INCOME		BY HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level <sup>^</sup>	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI) <sup>^</sup>	Other (Non-ESI) Coverage
Health care costs had caused problems for the adult or family over the past 12 months	38.6	30.2	48.4**	33.5	49.8**
Out-of-pocket health care spending relative to family income over past 12 months was at or above 5%	21.0	15.9	23.2*	21.0	20.9
Out-of-pocket health care spending relative to family income over past 12 months was at or above 10%	9.7	3.8	12.2**	8.5	11.3
Had problems paying medical bills in past 12 months	17.1	10.1	25.1**	14.4	23.1**
Have medical bills that are paying off over time	19.6	16.6	23.0*	19.7	19.3
– Have medical bills of more than \$1000 that are paying off over time	12.2	10.9	13.8	13.0	10.5
– Have had problems with medical bills for one year or more	10.2	8.4	12.3*	9.9	10.9
Health care spending caused financial problems for family in past 12 months	25.2	21.1	29.8**	22.3	31.4**
– Contacted by collection agency because of medical bills in past 12 months	9.3	6.8	12.2*	9.5	8.7
– Declared bankruptcy due to health care spending in past 12 months	0.8	0.1	1.7*	0.8	1.0
Had problems paying other (non-medical) bills in past 12 months	22.7	12.2	34.8**	16.2	36.9**
Did not get needed care because of costs in the past 12 months	13.8	8.1	20.3**	9.8	22.6**
– Medical care	1.2	0.7	1.8	1.0	1.6
– Doctor care	1.6	0.6	2.8**	1.3	2.2
– Specialist care	1.4	1.0	1.9	1.4	1.6
– Medical tests, treatment, or follow-up care	3.3	3.1	3.4	3.2	3.5
– Preventive care screening	1.1	0.7	1.6	0.9	1.5
– Prescription drugs	6.0	3.3	9.1**	4.8	8.5*
– Dental care	8.7	4.8	13.3**	5.7	15.5**
Sample size	2,795	1,611	1,184	1,871	924
Share of population	89.4%	47.8%	41.6%	61.4%	28.0%

Source: 2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates. Problems due to health care costs include going without needed care because of the cost of the care, problems paying medical bills, medical debt, and other financial issues (e.g., drawing down savings to pay medical bills). Because of the way the income information is collected in the survey, the measures of out-of-pocket spending relative to family income cannot be constructed for adults with family income above 500 percent of FPL in all years.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

- Comparing affordability of health care by coverage type within higher- and lower-income group yields a mixed story: among higher-income adults, full-year insured adults with ESI coverage report significantly fewer problems with health care affordability than full-year insured adults with other (non-ESI) coverage, which is largely private nongroup coverage in this income group. For example, 27.9 percent of the adults with ESI coverage reported that health care costs were causing problems for them and their families over the past 12 months, as compared with nearly 50 percent of adults with other (non-ESI) coverage. Similarly, 7.3 percent of the adults with ESI coverage had unmet need for care because of costs in the past 12 months, as compared with 15.2 percent of those with other (non-ESI) coverage, although the small sample size for adults with other (non-ESI) coverage makes these estimates imprecise (Exhibit V.6).
- By contrast, among lower-income adults, full-year insured adults with ESI coverage are more likely to report problems with medical debt (28.5 versus 18.5 percent) but less likely to report unmet need due to cost (15.5 versus 24.2 percent) than full-year insured adults with other (non-ESI) coverage, which is largely public coverage among this group (Exhibit V.6).
- Between 2012 and 2013, there were no significant changes in affordability of health care for full-year insured adults overall, by family income level or by health insurance type (Exhibits V.7 and V.8).

**EXHIBIT V.6: AFFORDABILITY OF HEALTH CARE FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2013**

	FULL-YEAR INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI)^	Other (Non-ESI) Coverage
Health care costs had caused problems for the adult or family over the past 12 months	38.6	27.9	49.8**	46.7	49.8
Out-of-pocket health care spending relative to family income over past 12 months was at or above 5%	21.0	15.1	21.2	26.1	20.9
Out-of-pocket health care spending relative to family income over past 12 months was at or above 10%	9.7	4.1	2.3	12.4	12.1
Had problems paying medical bills in past 12 months	17.1	9.5	15.3	25.5	24.8
Have medical bills that are paying off over time	19.6	15.9	23.0	28.5	18.5**
– Have medical bills of more than \$1000 that are paying off over time	12.2	10.3	16.5	19.4	9.2**
– Have had problems with medical bills for one year or more	10.2	7.8	13.8	14.7	10.3
Health care spending caused financial problems for family in past 12 months	25.2	18.9	40.1**	30.2	29.5
– Contacted by collection agency because of medical bills in past 12 months	9.3	6.2	11.8	17.4	8.0**
– Declared bankruptcy due to health care spending in past 12 months	0.8	0.0	0.9	2.5	1.0
Had problems paying other (non-medical) bills in past 12 months	22.7	10.5	26.1**	29.2	39.2*
Did not get needed care because of costs in the past 12 months	13.8	7.3	15.2*	15.5	24.2*
– Medical care	1.2	0.6	1.1	1.9	1.7
– Doctor care	1.6	0.5	0.9	3.1	2.5
– Specialist care	1.4	1.1	0.4	2.0	1.9
– Medical tests, treatment, or follow-up care	3.3	3.0	4.5	3.6	3.3
– Preventive care screening	1.1	0.6	1.1	1.6	1.7
– Prescription drugs	6.0	3.2	3.9	8.6	9.5
– Dental care	8.7	4.3	9.3*	8.9	16.8**
Sample size	2,795	1,424	187	447	737
Share of population	89.4%	42.8%	5.0%	18.6%	23.0%

Source: 2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates. Problems due to health care costs include going without needed care because of the cost of the care, problems paying medical bills, medical debt, and other issues (e.g., drawing down savings to pay medical bills). Because of the way the income information is collected in the survey, the measures of out-of-pocket spending relative to family income cannot be constructed for adults with family income above 500 percent of FPL in all years.

\*(\*\*) Significantly different from the value for the reference category (indicated by ^) at the .05 (.01) level, two-tailed test.

**EXHIBIT V.7: CHANGES IN AFFORDABILITY OF HEALTH CARE FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2012 TO FALL 2013**

	FULL-YEAR INSURED ADULTS	BY FAMILY INCOME		BY HEALTH INSURANCE TYPE	
		At or Above 300% of Federal Poverty Level	Below 300% of Federal Poverty Level	Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage
Health care costs had caused problems for the adult or family over the past 12 months	-0.5	-2.5	0.3	-1.2	0.3
Out-of-pocket health care spending relative to family income over past 12 months was at or above 5%	-0.5	-2.2	-0.1	-2.9	2.8
Out-of-pocket health care spending relative to family income over past 12 months was at or above 10%	2.5*	1.5	2.5	2.1	3.1
Had problems paying medical bills in past 12 months	1.9	0.0	2.9	1.4	2.8
Have medical bills that are paying off over time	1.4	-1.0	4.1	-0.1	5.0
– Have medical bills of more than \$1000 that are paying off over time	0.4	-1.7	2.9	-0.3	2.1
– Have had problems with medical bills for one year or more	1.5	1.0	1.9	1.4	1.9
Health care spending caused financial problems for family in past 12 months	0.5	0.8	-0.9	-0.3	1.9
– Contacted by collection agency because of medical bills in past 12 months	1.3	-0.5	3.2	1.2	1.6
– Declared bankruptcy due to health care spending in past 12 months	-0.1	-0.6	0.6	-0.1	0.0
Had problems paying other (non-medical) bills in past 12 months	1.2	-1.1	2.1	1.1	0.8
– Did not get needed care because of costs in the past 12 months	-0.1	-0.1	-1.4	0.4	-1.8
– Medical care	0.2	-0.4	0.9	0.1	0.5
– Doctor care	0.0	-0.3	0.2	0.3	-0.7
– Specialist care	0.2	0.4	-0.2	0.8	-1.4
– Medical tests, treatment, or follow-up care	0.4	0.9	-0.3	0.3	0.8
– Preventive care screening	0.1	-0.4	0.8	0.0	0.4
– Prescription drugs	-0.2	0.0	-0.9	0.7	-2.2
Dental care	0.6	1.2	-1.0	1.0	-0.6
<b>Sample size</b>	5,650	3,307	2,343	3,816	1,834
<b>Share of population</b>	88.7%	49.4%	39.2%	61.4%	27.3%

Source: 2012-2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates. Problems due to health care costs include going without needed care because of the cost of the care, problems paying medical bills, medical debt, and other issues (e.g., drawing down savings to pay medical bills). Because of the way the income information is collected in the survey, the measures of out-of-pocket spending relative to family income cannot be constructed for adults with family income above 500 percent of FPL in all years.

\*(\*\*) Change between 2012 and 2013 is significantly different from zero at the .05 (.01) level, two-tailed test.

**EXHIBIT V.8: CHANGES IN AFFORDABILITY OF HEALTH CARE FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, OVERALL, BY FAMILY INCOME, AND BY CURRENT HEALTH INSURANCE TYPE, FALL 2012 TO FALL 2013**

	FULL-YEAR INSURED ADULTS	AT OR ABOVE 300% OF FEDERAL POVERTY LEVEL		BELOW 300% OF FEDERAL POVERTY LEVEL	
		Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage	Employer-sponsored Insurance (ESI)	Other (Non-ESI) Coverage
Health care costs had caused problems for the adult or family over the past 12 months	-0.5	-3.3	3.0	1.3	-0.2
Out-of-pocket health care spending relative to family income over past 12 months was at or above 5%	-0.5	-2.6	0.0	-5.1	3.1
Out-of-pocket health care spending relative to family income over past 12 months was at or above 10%	2.5*	1.6	0.7	1.3	3.2
Had problems paying medical bills in past 12 months	1.9	-0.6	5.5	4.0	2.2
Have medical bills that are paying off over time	1.4	-2.3	10.4	3.7	3.8
– Have medical bills of more than \$1000 that are paying off over time	0.4	-2.8	8.2	5.1	0.8
– Have had problems with medical bills for one year or more	1.5	0.4	5.6	2.7	1.1
Health care spending caused financial problems for family in past 12 months	0.5	-0.9	15.2	-0.9	-1.0
– Contacted by collection agency because of medical bills in past 12 months	1.3	-1.3	6.8	6.3*	0.5
– Declared bankruptcy due to health care spending in past 12 months	-0.1	-0.8	0.9	1.6	-0.2
Had problems paying other (non-medical) bills in past 12 months	1.2	-2.7	12.3*	8.5*	-1.9
– Did not get needed care because of costs in the past 12 months	-0.1	0.2	-3.3	-0.6	-1.5
– Medical care	0.2	-0.4	-0.4	1.3	0.7
– Doctor care	0.0	-0.2	-1.2	1.2	-0.6
– Specialist care	0.2	0.8	-3.2	0.6	-0.9
– Medical tests, treatment, or follow-up care	0.4	0.8	2.6	-1.3	0.4
– Preventive care screening	0.1	-0.4	-0.4	0.9	0.6
– Prescription drugs	-0.2	0.2	-2.2	1.0	-2.3
Dental care	0.6	1.3	-0.4	-0.9	-0.7
<b>Sample size</b>	5,650	2,955	352	861	1,482
<b>Share of population</b>	88.7%	44.5%	4.9%	16.9%	22.3%

Source: 2012–2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates. Problems due to health care costs include going without needed care because of the cost of the care, problems paying medical bills, medical debt, and other issues (e.g., drawing down savings to pay medical bills). Because of the way the income information is collected in the survey, the measures of out-of-pocket spending relative to family income cannot be constructed for adults with family income above 500 percent of FPL in all years.

\*(\*\*) Change between 2012 and 2013 is significantly different from zero at the .05 (.01) level, two-tailed test.

## FACTORS ASSOCIATED WITH PROBLEMS PAYING MEDICAL BILLS IN 2013 FOR NONELDERLY ADULTS WITH CONTINUOUS HEALTH INSURANCE COVERAGE OVER THE PAST YEAR

- Full-year insured adults reporting problems paying medical bills over the past year in Massachusetts tend to be somewhat older, minority, female, a parent, less well educated, and more likely to have a health problem than adults without problems paying medical bills. They are also more likely to have lower family incomes and to have other (non-ESI) coverage (Exhibit V.9).

**EXHIBIT V.9: DESCRIPTIVE ANALYSIS OF FACTORS ASSOCIATED WITH PROBLEMS PAYING MEDICAL BILLS OVER THE PAST 12 MONTHS FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**

	FULL-YEAR INSURED ADULTS	PROBLEMS PAYING MEDICAL BILLS	
		Adults Who Did Not Have Problems Paying Medical Bills	Adults Who Had Problems Paying Medical Bills
<b>Age</b>			
19 to 25 years	15.0	15.9	10.1 *
26 to 34 years	17.6	16.9	21.5
35 to 49 years	33.2	33.3	32.8
50 to 64 years	34.2	33.9	35.6
<b>Race/ethnicity</b>			
White, non-Hispanic	75.9	78.0	66.4 **
Other races, non-Hispanic	14.9	14.1	18.7
Hispanic	9.1	7.8	14.8 **
<b>Female</b>	53.1	51.2	62.6 **
<b>U.S. citizen</b>	92.4	93.0	89.4
<b>Speaks English at home</b>	87.5	88.7	81.4 **
<b>Marital status</b>			
Married	53.6	54.6	48.8
Living with partner	9.1	8.6	10.9
Divorced, separated, widowed	10.6	9.6	15.3 *
Never married	26.8	27.2	25.1
<b>Parent of one or more children under 18</b>	40.2	37.7	52.8 **
<b>Number of adults 19 or older in household</b>			
One	13.8	13.9	13.1
Two	51.8	51.9	51.1
Three or more	34.4	34.2	35.8
<b>Education</b>			
Less than high school	6.7	5.6	12.1 **
High school graduate (includes some college)	50.3	47.8	62.4 **
College graduate or higher	43.0	46.6	25.5 **

(continued)

**EXHIBIT V.9: (CONTINUED)**

	FULL-YEAR INSURED ADULTS	PROBLEMS PAYING MEDICAL BILLS	
		Adults Who Did Not Have Problems Paying Medical Bills	Adults Who Had Problems Paying Medical Bills
<b>Self-reported health status</b>			
Very good or excellent	59.4	63.6	38.7 **
Good	26.2	24.8	33.2 *
Fair or poor	14.5	11.6	28.0 **
<b>Has a health condition <sup>a</sup></b>	54.2	50.0	75.0 **
<b>Activities are limited by a health problem</b>	20.9	17.2	38.7 **
<b>Family income relative to the federal poverty level (FPL)</b>			
At or below 138% of FPL	23.4	22.4	28.4 *
139-299% of FPL	23.1	19.7	39.9 **
300-399% of FPL	10.1	9.6	11.9
At or above 400% of FPL	43.4	48.3	19.8 **
<b>Current health insurance coverage</b>			
Employer-sponsored insurance (ESI) coverage	68.7	70.9	57.7 **
Other (non-ESI) coverage	31.3	29.1	42.3 **
<b>Has high-deductible health plan</b>	22.7	21.7	27.9
<b>Region</b>			
Boston	12.5	12.2	13.4
Metro West	33.4	34.8	27.1 *
Northeast	11.2	11.7	8.9
Central	12.0	12.5	9.2
West	11.9	11.2	15.2
Southeast	19.1	17.7	26.2 *
<b>Sample size</b>	2,795	2,351	437
<b>Share of population</b>	89.4%	74.0%	15.3%

Source: 2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates. Provider access issues are defined in text.

\*(\*\*) Significantly different from value for remainder of sample at the .05 (.01) level, two-tailed test.

a. Includes adults who report they have ever been told by a doctor or other health professional that they have at least one of the following: hypertension or high blood pressure; heart disease or congestive heart failure; diabetes; asthma; any other chronic or long-term health condition or health problem; or are pregnant.

- The multivariate analysis shows that the strongest predictors of having problems paying medical bills among full-year insured adults are related to demographic and socioeconomic characteristics, health and disability status, and having a high-deductible health plan, all else equal. For example, insured women are 6.4 percentage points more likely to have problems paying medical bills than insured men, and insured parents are 9.4 percentage points more likely to have unmet need than insured childless adults. For adults with a health problem, the probability of having problems paying medical bills is 7.5 percentage points higher for adults with a health condition than for those without a health condition. Finally, having a high-

deductible health plan is associated with a 10.0 percentage point increase in the probability of having problems paying medical bills (Exhibit IV.10).

**EXHIBIT V.10: ESTIMATES OF CHANGE IN PROBABILITY OF HAVING PROBLEMS PAYING MEDICAL BILLS OVER THE PAST 12 MONTHS ASSOCIATED WITH A CHANGE IN INDIVIDUAL AND FAMILY CHARACTERISTICS FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**

**CHANGE IN PROBABILITY OF HAVING PROBLEMS PAYING MEDICAL BILLS ASSOCIATED WITH CHANGE IN CHARACTERISTIC**

<b>Age</b>	
19 to 25 years ^	
26 to 34 years	5.8
35 to 49 years	4.4
50 to 64 years	7.3
<b>Race/ethnicity</b>	
White, non-Hispanic ^	
Other race, non-Hispanic	1.6
Hispanic	2.3
<b>Female</b>	6.4 **
<b>U.S. citizen</b>	-3.5
<b>Speaks English at home</b>	-2.8
<b>Marital status</b>	
Married ^	
Living with partner	1.5
Divorced, separated, widowed	2.5
Never married	8.0
<b>Parent of one or more children under 18</b>	9.4 **
<b>Number of adults 19 or older in household</b>	
One ^	
Two	5.6 *
Three or more	5.2
<b>Education</b>	
Less than high school ^	
High school graduate (includes some college)	-0.3
College graduate or higher	-4.3
<b>Self-reported health status</b>	
Very good or excellent ^	
Good	4.8
Fair or poor	8.1
<b>Has a health condition <sup>a</sup></b>	7.5 **
<b>Activities are limited by a health problem</b>	6.8

(continued)

**EXHIBIT V.10: (CONTINUED)**

**CHANGE IN PROBABILITY OF HAVING PROBLEMS  
PAYING MEDICAL BILLS ASSOCIATED WITH  
CHANGE IN CHARACTERISTIC**

<b>Family income relative to the federal poverty level (FPL)</b>	
At or below 138% of FPL ^	
139-299% of FPL	8.5 *
300-399% of FPL	0.8
At or above 400% of FPL	-10.0 **
<b>Current health insurance coverage</b>	
Employer-sponsored insurance (ESI) coverage ^	
Other (non-ESI) coverage	-5.4
<b>Has high-deductible health plan</b>	10.0 **
<b>Region</b>	
Boston ^	
Metro West	2.6
Northeast	-0.7
Central	-0.3
West	5.5
Southeast	7.5
<b>Sample size</b>	2,639

Source: 2013 Massachusetts Health Reform Survey.

Note: Estimates are marginal effects from logit model.

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

^ Base category for categorical variables with more than two values.

a. Includes adults who report they have ever been told by a doctor or other health professional that they have at least one of the following: hypertension or high blood pressure; heart disease or congestive heart failure; diabetes; asthma; any other chronic or long-term health condition or health problem; or are pregnant.

**EXHIBIT V.11: DESCRIPTIVE ANALYSIS OF FACTORS ASSOCIATED WITH HEALTH CARE COSTS CAUSING FINANCIAL AND/OR NONFINANCIAL PROBLEMS OVER THE PAST 12 MONTHS FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**

	FULL-YEAR INSURED ADULTS	HEALTH CARE COSTS CAUSED PROBLEMS	
		Adults Who Did Not Have Problems With Health Care Costs	Adults Who Had Problems With Health Care Costs
<b>Age</b>			
19 to 25 years	15.0	18.2	9.5 **
26 to 34 years	17.6	17.9	17.5
35 to 49 years	33.2	31.2	36.4
50 to 64 years	34.2	32.6	36.6
<b>Race/ethnicity</b>			
White, non-Hispanic	75.9	77.9	72.8
Other race, non-Hispanic	14.9	15.0	14.8
Hispanic	9.1	7.0	12.3 *
<b>Female</b>	53.1	49.9	58.3 **
<b>U.S. citizen</b>	92.4	92.4	92.3
<b>Speaks English at home</b>	87.5	88.8	85.2
<b>Marital status</b>			
Married	53.6	54.3	52.7
Living with partner	9.1	8.0	10.7
Divorced, separated, widowed	10.6	8.8	13.3 *
Never married	26.8	29.0	23.3 *
<b>Parent of one or more children under 18</b>	40.2	35.8	47.2 **
<b>Number of adults 19 or older in household</b>			
One	13.8	13.4	14.4
Two	51.8	53.1	49.8
Three or more	34.4	33.5	35.8
<b>Education</b>			
Less than high school	6.7	5.2	9.1 *
High school graduate (includes some college)	50.3	45.5	57.6 **
College graduate or higher	43.0	49.3	33.3 **
<b>Self-reported health status</b>			
Very good or excellent	59.4	68.7	44.6 **
Good	26.2	22.8	31.4 **
Fair or poor	14.5	8.5	24.0 **
<b>Has a health condition <sup>a</sup></b>	54.2	47.2	65.9 **
<b>Activities are limited by a health problem</b>	20.9	14.3	31.5 **

(continued)

**EXHIBIT V.11:** (CONTINUED)

	FULL-YEAR INSURED ADULTS	HEALTH CARE COSTS CAUSED PROBLEMS	
		Adults Who Did Not Have Problems With Health Care Costs	Adults Who Had Problems With Health Care Costs
<b>Family income relative to the federal poverty level (FPL)</b>			
At or below 138% of FPL	23.4	21.5	26.4
139-299% of FPL	23.1	17.5	31.8 **
300-399% of FPL	10.1	8.5	12.5 *
At or above 400% of FPL	43.4	52.5	29.4 **
<b>Current health insurance coverage</b>			
Employer-sponsored insurance (ESI) coverage	68.7	74.3	59.5 **
Other (non-ESI) coverage	31.3	25.7	40.5 **
<b>Has high-deductible health plan</b>	22.7	18.3	30.0 **
<b>Region</b>			
Boston	12.5	11.9	13.1
Metro West	33.4	37.0	28.1 **
Northeast	11.2	9.8	13.1 *
Central	12.0	12.7	10.9
West	11.9	10.5	13.8
Southeast	19.1	18.0	21.1
<b>Sample size</b>	2,795	1,696	1,079
<b>Share of population</b>	89.4%	54.5%	34.3%

Source: 2013 Massachusetts Health Reform Survey.

Notes: These are simple (unadjusted) estimates. Problems due to health care costs include going without needed care because of the cost of the care, problems paying medical bills, medical debt, and other issues (e.g., drawing down savings to pay medical bills).

\*(\*\*) Significantly different from value for remainder of sample at the .05 (.01) level, two-tailed test.

a. Includes adults who report they have ever been told by a doctor or other health professional that they have at least one of the following: hypertension or high blood pressure; heart disease or congestive heart failure; diabetes; asthma; any other chronic or long-term health condition or health problem; or are pregnant.

- A multivariate analysis of the factors associated with health care costs causing problems for the adults and their families yielded similar findings, with the strongest predictors of health care costs causing problems among full-year insured adults related to demographic and socioeconomic characteristics, health status, and having a high-deductible health plan, all else equal. For example, insured adults aged 35 to 64 are about 16.0 percentage points more likely to report problems due to health care costs than young adults, insured women are 5.6 percent more likely than men, and insured parents are 11.0 percentage points more likely than childless adults to report such problems. For adults with a health problem, the probability of reporting problems due to health care costs is 19.9 percentage points higher for those in fair or poor health than for those in very good or excellent health. Finally, having a high-deductible health plan is associated with a 21.7 percentage point increase in the probability of having problems due to health care costs (Exhibit IV.12).

**EXHIBIT V.12: ESTIMATES OF CHANGE IN PROBABILITY OF HEALTH CARE COSTS CAUSING FINANCIAL AND/OR NONFINANCIAL PROBLEMS OVER THE PAST 12 MONTHS ASSOCIATED WITH A CHANGE IN INDIVIDUAL AND FAMILY CHARACTERISTICS FOR FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**

**CHANGE IN PROBABILITY OF HEALTH CARE COSTS CAUSING PROBLEMS ASSOCIATED WITH CHANGE IN CHARACTERISTIC**

<b>Age</b>	
19 to 25 years ^	
26 to 34 years	11.3 *
35 to 49 years	15.9 **
50 to 64 years	16.2 **
<b>Race/ethnicity</b>	
White, non-Hispanic ^	
Other race, non-Hispanic	-3.2
Hispanic	5.1
<b>Female</b>	5.6 *
<b>U.S. citizen</b>	-0.7
<b>Speaks English at home</b>	2.2
<b>Marital status</b>	
Married ^	
Living with partner	1.8
Divorced, separated, widowed	-2.5
Never married	1.3
<b>Parent of one or more children under 18</b>	11.0 **
<b>Number of adults 19 or older in household</b>	
One ^	
Two	1.4
Three or more	6.7
<b>Education</b>	
Less than high school ^	
High school graduate (includes some college)	5.3
College graduate or higher	2.0
<b>Self-reported health status</b>	
Very good or excellent ^	
Good	9.4 **
Fair or poor	19.9 **
<b>Has a health condition <sup>a</sup></b>	5.4
<b>Activities are limited by a health problem</b>	5.2

(continued)

**EXHIBIT V.12: (CONTINUED)**

**CHANGE IN PROBABILITY OF HEALTH CARE COSTS CAUSING PROBLEMS ASSOCIATED WITH CHANGE IN CHARACTERISTIC**

<b>Family income relative to the federal poverty level (FPL)</b>	
At or below 138% of FPL ^	
139-299% of FPL	9.0
300-399% of FPL	0.4
At or above 400% of FPL	-17.4 **
<b>Current health insurance coverage</b>	
Employer-sponsored insurance (ESI) coverage ^	
Other (non-ESI) coverage	3.0
<b>Has high-deductible health plan</b>	
	21.7 **
<b>Region</b>	
Boston ^	
Metro West	-0.6
Northeast	7.9
Central	-1.6
West	2.1
Southeast	3.2
<b>Sample size</b>	
	2,629

Source: 2013 Massachusetts Health Reform Survey.

Notes: Estimates are marginal effects from logit model. Problems due to health care costs include going without needed care because of the cost of the care, problems paying medical bills, medical debt, and other issues (e.g., drawing down savings to pay medical bills).

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

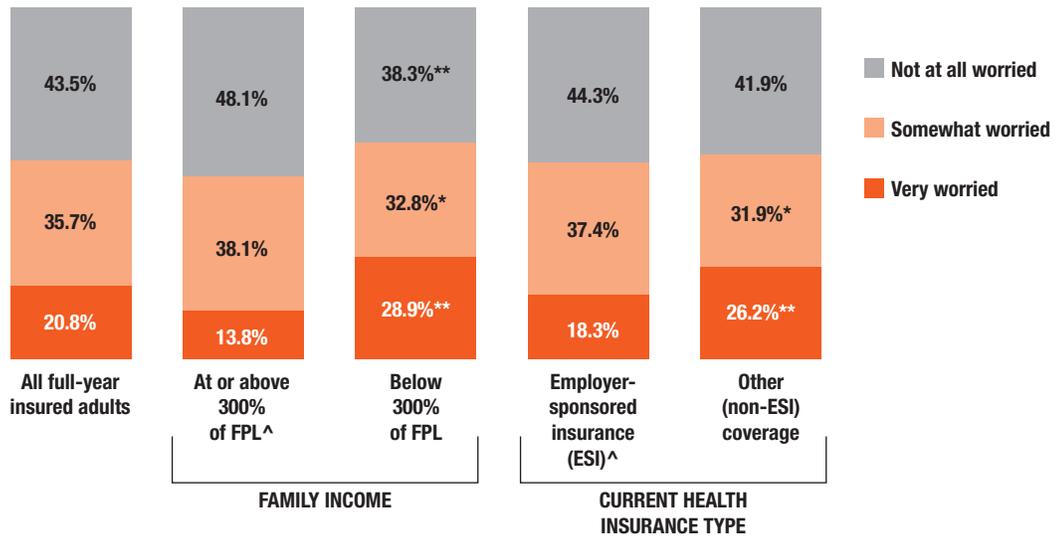
^ Base category for categorical variables with more than two values.

a. Includes adults who report they have ever been told by a doctor or other health professional that they have at least one of the following: hypertension or high blood pressure; heart disease or congestive heart failure; diabetes; asthma; any other chronic or long-term health condition or health problem; or are pregnant.

**WORRY ABOUT ABILITY TO PAY MEDICAL BILLS IN THE FUTURE AMONG NONELDERLY ADULTS WITH CONTINUOUS HEALTH INSURANCE COVERAGE OVER THE PAST YEAR IN 2013**

- More than half (56.5 percent) of full-year insured adults in Massachusetts were somewhat worried (35.7 percent) or very worried (20.8 percent) about their ability to pay their medical bills in the future (Exhibit V.13).
- Lower-income full-year insured adults were more likely to worry about paying medical bills in the future than higher-income full-year insured adults, with 61.7 percent somewhat or very worried among lower-income adults, as compared with 51.9 percent among higher-income adults (Exhibit V.13).
- While the overall level of worry was similar for full-year insured adults with ESI coverage and those with other (non-ESI) coverage at roughly 60 percent, full-year insured adults with ESI coverage were less likely to be very worried (18.3 versus 26.2 percent) (Exhibit V.13).

**EXHIBIT V.13: WORRY ABOUT ABILITY TO PAY MEDICAL BILLS IN THE FUTURE AMONG FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**

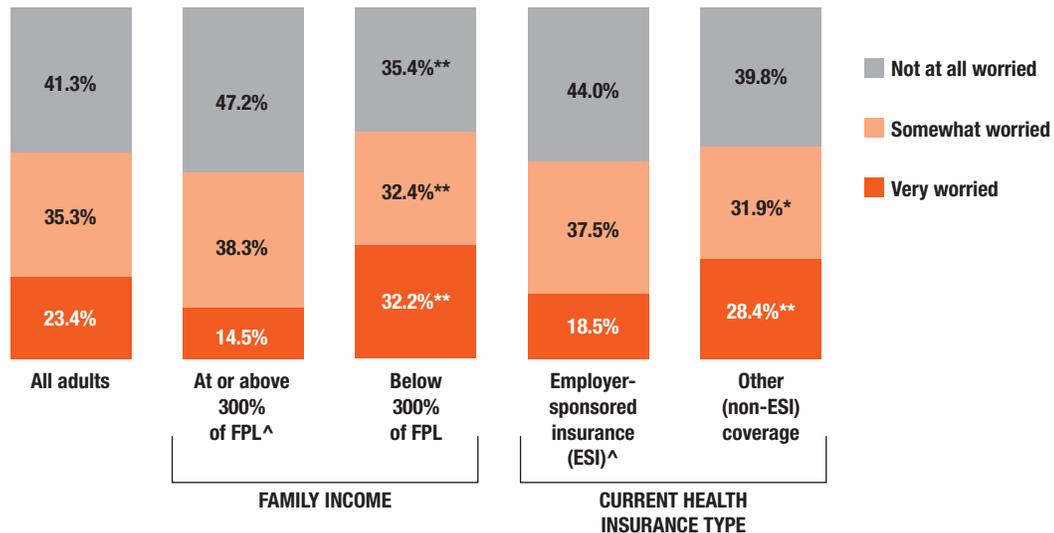


Source: 2013 Massachusetts Health Reform Survey (N=2,795).

Notes: These are simple (unadjusted) estimates. These estimates exclude a small share of respondents who did not respond to the question. FPL is Federal Poverty Level.

\*(\*\*) Significantly different from the value for the reference category (indicated by <sup>^</sup>) at the .05 (.01) level, two-tailed test.

**EXHIBIT V.14: WORRY ABOUT ABILITY TO PAY MEDICAL BILLS IN THE FUTURE AMONG ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**



Source: 2013 Massachusetts Health Reform Survey (N=2,795).

Notes: These are simple (unadjusted) estimates. These estimates exclude a small share of respondents who did not respond to the question. FPL is Federal Poverty Level.

\*(\*\*) Significantly different from the value for the reference category (indicated by <sup>^</sup>) at the .05 (.01) level, two-tailed test.

**APPENDIX EXHIBIT V.1: SIMPLE (UNADJUSTED) TRENDS IN HEALTH CARE SPENDING, MEDICAL BILLS, AND MEDICAL DEBT FOR ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**

	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2012	Fall 2013
<b>Out-of-pocket (OOP) health care spending over the past 12 months relative to family income for those below 500% of the federal poverty level (FPL) <sup>a</sup></b>							
At or above 5% of family income	21.7	15.6**	19.2 ^^	17.0*	18.8	22.7	21.1
At or above 10% of family income	8.7	5.7**	8.1 ^	6.2*	6.7	8.5	9.6
<b>OOP health care spending of \$500 or more in the past 12 months on:</b>							
Prescription drugs	26.7	23.5	25.3	25.0	24.7	26.8	27.2
Dental and vision care	33.4	31.9	34.1	31.9	31.9	35.1	34.9
Other medical expenses	28.2	27.9	28.9	29.7	30.2	34.2**	35.9**
<b>Had problems paying medical bills in past 12 months</b>	21.5	15.7**	17.7**	19.2	18.3*	18.1*	19.6
<b>Have medical bills that are paying off over time</b>	21.0	16.6**	19.5	19.7	20.6	20.2	20.8
<b>Among those paying medical bills over time, amount of medical debt</b>							
Don't know amount	0.1	0.2	0.3	0.1	0.2	0.1	0.6** ^^
Less than \$2,000	13.5	11.1*	11.4	11.9	11.3*	11.8	11.5
\$2,000 to \$9,999	6.6	4.5**	6.9 ^^	6.6	7.8	7.1	8.1
\$10,000 or more	0.7	0.8	1.0	1.0	1.3	1.2	0.8
<b>Had problems paying other bills in past 12 months</b>	26.0	22.0**	24.9 ^	26.2	26.5	24.3	24.4
<b>Have a health care flexible spending account</b>	13.8	17.3*	18.6**	17.7**	18.2**	19.0**	19.0**
<b>Sample size</b>	3,007	2,937	4,041	3,165	3,040	3,160	3,024

Source: 2006–2013 Massachusetts Health Reform Survey. The survey was not fielded in 2011.

Note: These are simple (unadjusted) estimates.

\*\* Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^^ Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

a. Because of the way the income information is collected in the survey, the measures of spending relative to family income cannot be constructed for adults with family income above 500 percent of FPL in all years..

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## VI. LOOKING FORWARD: COVERAGE AND OVERALL USE OF CARE ARE STRONG BUT OPPORTUNITIES PERSIST TO IMPROVE AFFORDABILITY

The Massachusetts Health Reform Survey (MHRS) has been conducted since 2006 to monitor and understand the state's health care system. The 2013 MHRS provides a new baseline for assessing the impacts of the state's efforts to improve the affordability of care and reduce health care spending under Chapter 224 (An Act Improving the Quality of Health Care and Reducing Costs Through Increased Transparency, Efficiency and Innovation), the state's new cost-containment legislation that was passed in 2012, and the roll-out of major changes under the Affordable Care Act (ACA) that began in January 2014.

The 2013 MHRS highlights the state's ongoing success at maintaining near universal health insurance coverage and high levels of health care use following the 2006 health care reform initiative, as well as the continued need to address the burden of health care costs on the state's residents.

**Health insurance coverage.** Massachusetts' 2006 health care reform law sought to move the state to near universal health insurance coverage. Massachusetts attained near universal coverage by the second year, an achievement that continues seven years after the initiative began. More than 95 percent of adults in Massachusetts aged 19 to 64 had health insurance at the time of the 2013 survey (Exhibit VI.1), a rate well above the 79.6 percent for adults in the nation as a whole.<sup>36</sup> Employer-sponsored insurance (ESI) coverage remained the dominant form of insurance in Massachusetts in 2013, covering 63.5 percent of adults (Exhibit VI.2). ESI coverage was at as high a level in 2013 as it was in 2006.

Stability of insurance coverage was also high in Massachusetts in 2013, with almost 90 percent of adults covered for all of the past year and 81 percent covered by the same insurance for all of the past year. Stable health insurance was more common for those likely to have higher levels of health care needs, including women and individuals with health limitations, and for those with greater financial resources, as indicated by a higher family income.

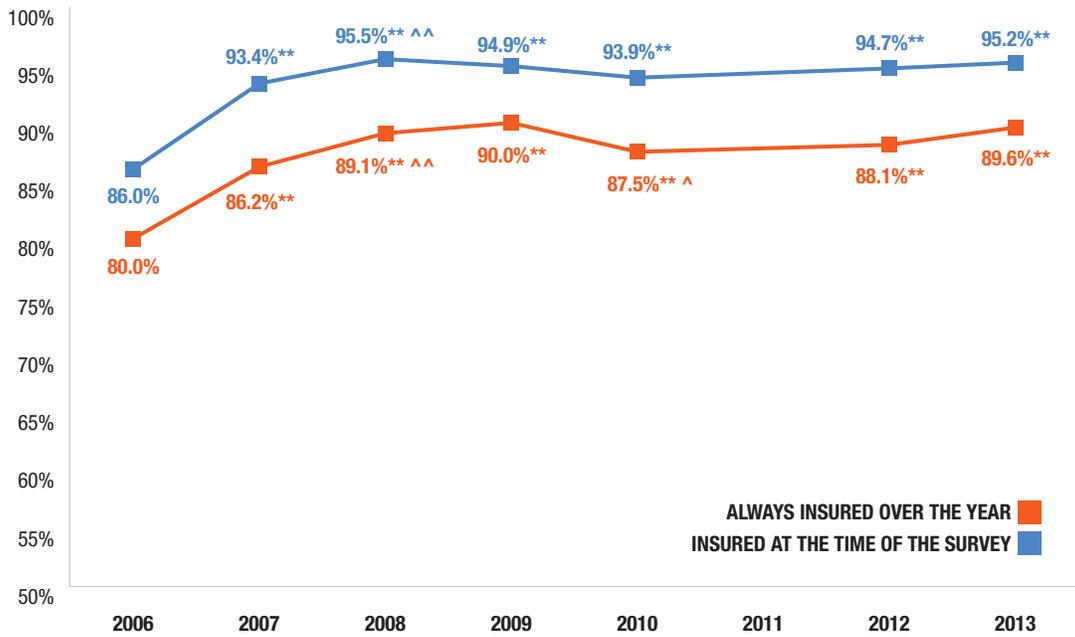
Insured adults in Massachusetts are generally satisfied with many but not all aspects of their coverage. Two-thirds rated their coverage as very good or excellent in terms of range of services available, choice of providers, location of providers, ability to get specialist care, and quality of care (Exhibit VI.3). However, only about half rated the financial protection against high medical bills under their health plan as very good or excellent. Adults with ESI coverage were more likely to provide high ratings for their coverage than were adults with non-ESI coverage.<sup>37</sup>

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<sup>36</sup> Cohen RA and Martinez ME. Health insurance coverage: Early release of estimates from the National Health Interview Survey, 2013. National Center for Health Statistics. <http://www.cdc.gov/nchs/nhis/releases.htm>.

<sup>37</sup> Non-ESI coverage includes Medicare, MassHealth, Medicaid, Commonwealth Care, CHIP, military-provided coverage, and insurance purchased directly from an insurance company or through Commonwealth Choice. Two-thirds of the adults with non-ESI coverage have public coverage.

**EXHIBIT VI.1: SIMPLE (UNADJUSTED TRENDS IN HEALTH INSURANCE COVERAGE FOR ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**



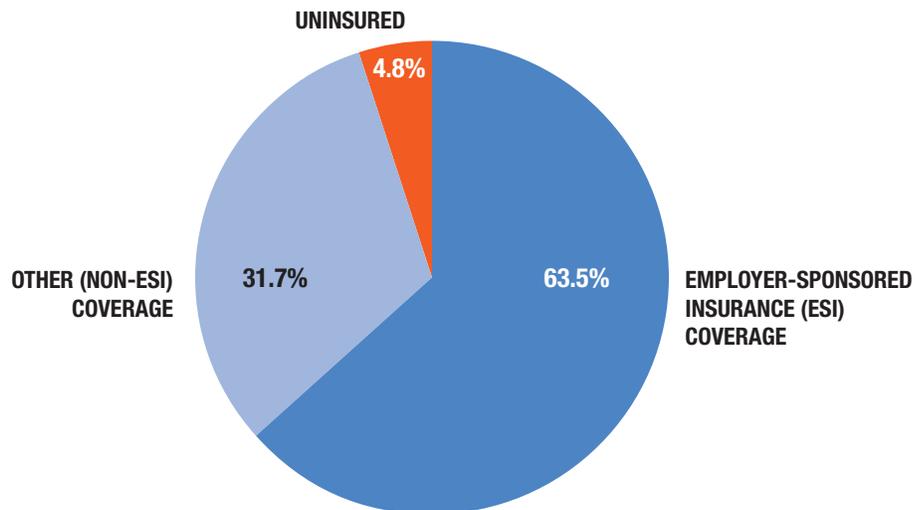
Source: 2006-2013 Massachusetts Health Reform Survey (N=22,374). The survey was not fielded in 2011.

Note: These are simple (unadjusted) estimates.

\*\* Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^^ Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

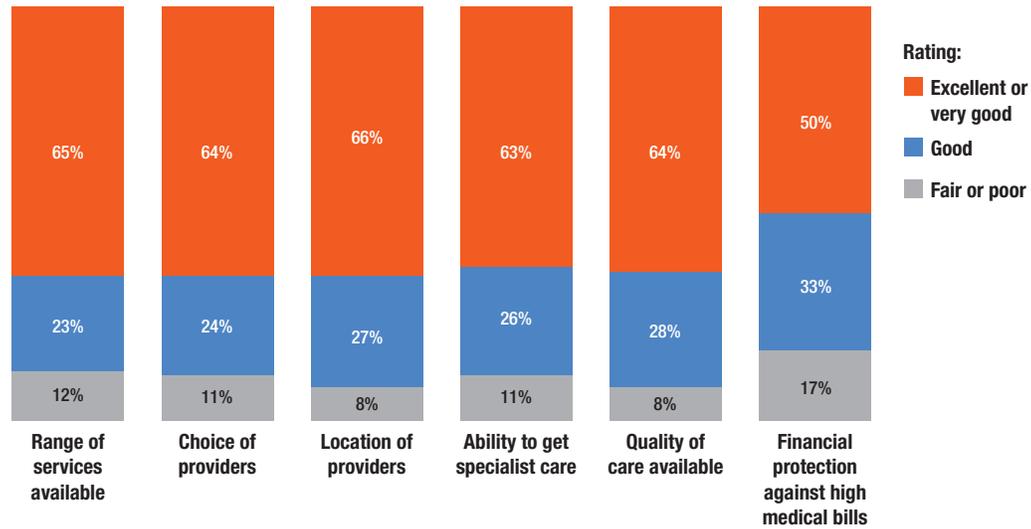
**EXHIBIT VI.2: HEALTH INSURANCE COVERAGE TYPE FOR ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**



Source: 2013 Massachusetts Health Reform Survey (N=3,024).

Note: These are simple (unadjusted) estimates.

**EXHIBIT VI.3: RATING OF CURRENT HEALTH INSURANCE COVERAGE BY CURRENTLY INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**

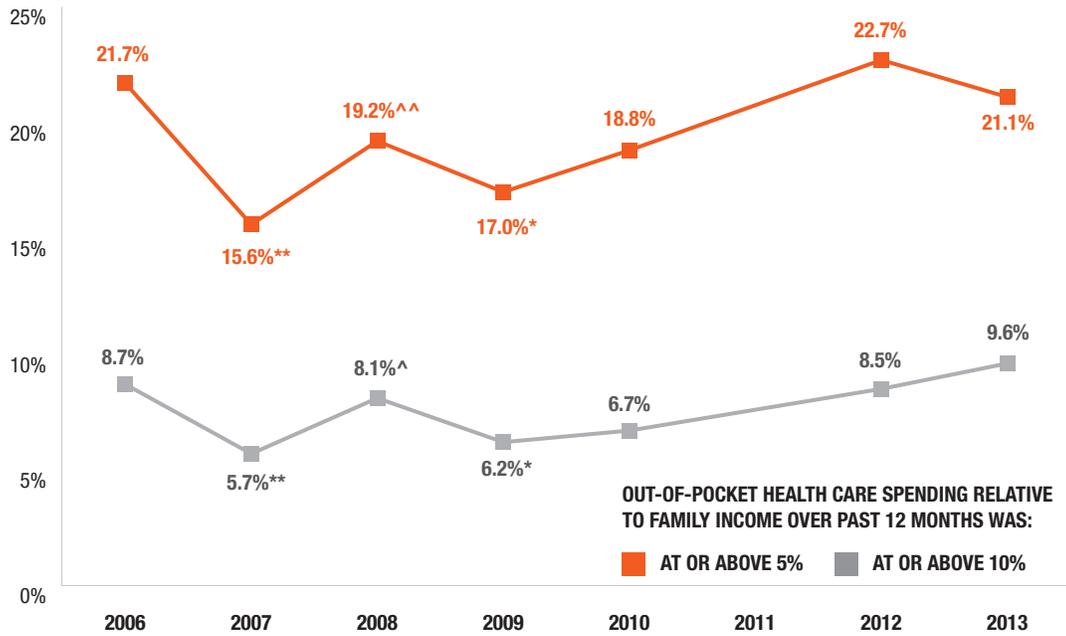


Source: 2013 Massachusetts Health Reform Survey (N=2,924).  
 Note: These are simple (unadjusted) estimates.

**Health care affordability.** Affordability of health care has long been an issue in Massachusetts and continued to be a problem for adults in 2013. Among adults with family income below 500 percent of the Federal Poverty Level (FPL), about one in five reported out-of-pocket health care spending at or above five percent of family income, and one in 10 reported spending at or above 10 percent of family income (Exhibit VI.4).<sup>38</sup> Among all adults, one in five reported problems paying their medical bills over the past year, and almost one in five reported having medical debt (Exhibit VI.5). These are similar to the levels in 2006, although higher than the levels in the period immediately following health reform in 2006. As in 2012, roughly 40 percent of adults reported that health care costs caused problems for them and their family in 2013 (42.8 percent in 2012 versus 40.8 percent in 2013).

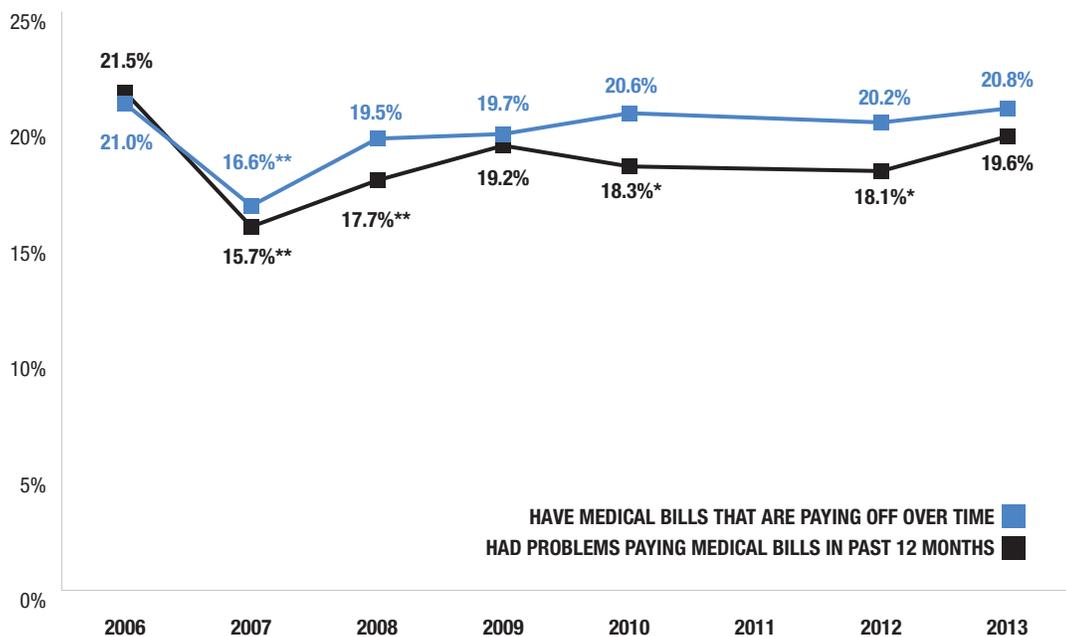
<sup>38</sup> Because of the way income information is collected in the survey, the measures of spending relative to family income cannot be constructed for adults with family income above 500 percent of FPL in all years.

**EXHIBIT VI.4: SIMPLE (UNADJUSTED) TRENDS IN OUT-OF-POCKET HEALTH CARE SPENDING FOR ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**



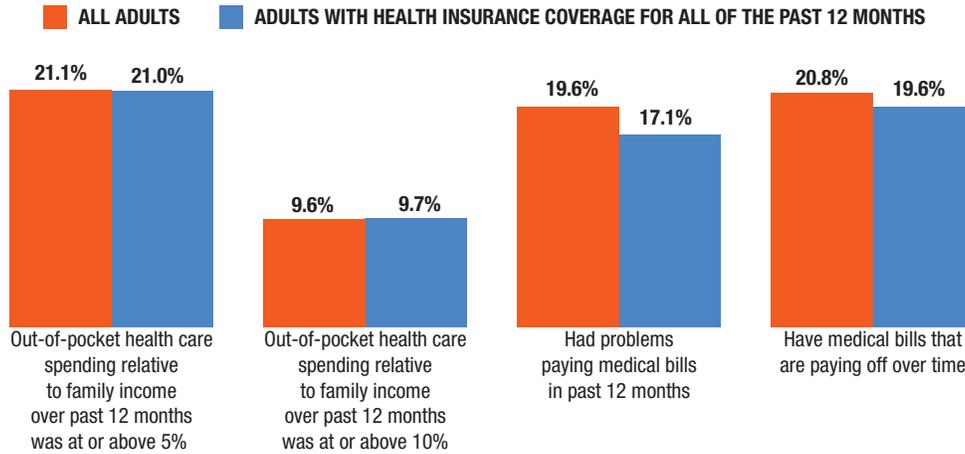
Source: 2006-2013 Massachusetts Health Reform Survey (N=22,374). The survey was not fielded in 2011.  
 Note: These are simple (unadjusted) estimates. Because of the way the income information is collected in the survey, the measures of spending relative to family income cannot be constructed for adults with family income above 500 percent of federal poverty level (FPL) for all years.  
 (\*\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.  
 ^^ Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

**EXHIBIT VI.5: SIMPLE (UNADJUSTED) TRENDS IN OUT-OF-POCKET HEALTH CARE SPENDING FOR ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**



Source: 2006-2013 Massachusetts Health Reform Survey (N=22,374). The survey was not fielded in 2011.  
 Note: These are simple (unadjusted) estimates.  
 (\*\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.  
 ^^ Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

**EXHIBIT VI.6: HEALTH CARE AFFORDABILITY FOR ALL ADULTS AND FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**



Source: 2013 Massachusetts Health Reform Survey (N=2,795).

Notes: These are simple (unadjusted) estimates. Because of the way the income information is collected in the survey, the measures of spending relative to family income cannot be constructed for adults with family income above 600 percent of federal poverty level (FPL).

\*(\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

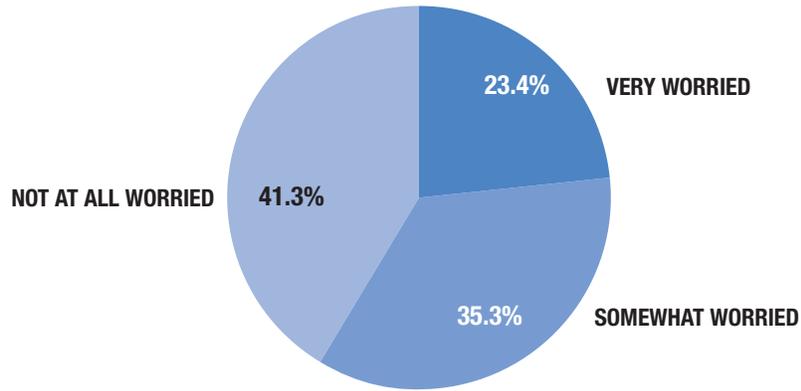
^(^^) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test.

Health insurance coverage does not guarantee affordable health care: the levels of high out-of-pocket health care spending, reported problems paying medical bills, and medical debt are also high for adults with full-year insurance coverage in 2013 (Exhibit VI.6). In 2013, 38.6 percent of full-year insured adults reported that health care costs had caused financial and/or nonfinancial problems for them and their families over the past 12 months. This compares with 39.1 percent of full-year insured adults in 2012.

Problems due to health care costs include going without needed care because of the cost of the care, problems paying medical bills, medical debt, and other issues (e.g., drawing down savings to pay medical bills). Based on the multivariate analysis, the strongest predictors of problems caused by health care costs were related to higher health care needs due to health and disability issues, lower family income, and higher out-of-pocket costs as an enrollee in a high-deductible health plan.

Overall, nearly 60 percent of adults in the Bay State in 2013 were somewhat or very worried about their ability to pay their medical bills in the future (Exhibit VI.7).

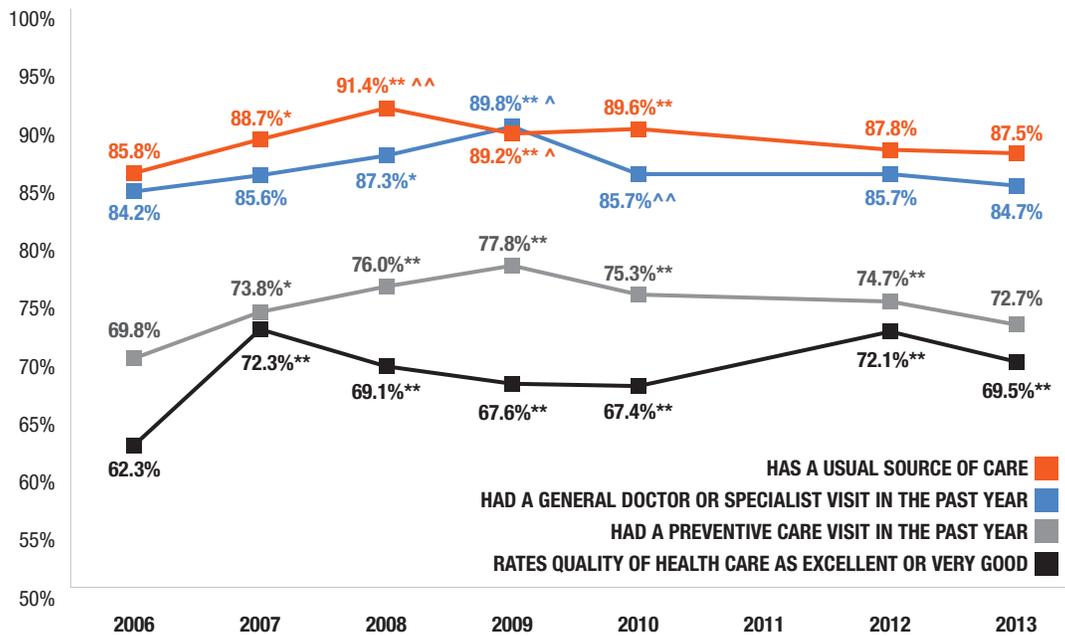
**EXHIBIT VI.7: WORRY ABOUT ABILITY TO PAY MEDICAL BILLS IN THE FUTURE BY ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**



Source: 2013 Massachusetts Health Reform Survey (N=3,024).  
 Note: These are simple (unadjusted) estimates.

**Health care access and quality.** Most adults (87.5 percent) in Massachusetts had an established relationship with a health care provider in 2013, and most (84.7 percent) had had a health care visit to a general doctor or specialist in the past year, including a preventive care visit (72.7 percent) (Exhibit VI.8). While quite similar to the levels in 2006, these levels are somewhat lower than the levels reported in the three years following the 2006 health reform legislation. However, the share of adults rating the quality of the health care that they received as very good or excellent continued to be higher in 2013 than in 2006, at 69.5 percent in 2013 as compared with 62.3 percent in 2006.

**EXHIBIT VI.8: SIMPLE (UNADJUSTED) TRENDS IN ACCESS TO HEALTH CARE OVER THE PAST YEAR FOR ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2006 TO FALL 2013**



Source: 2006-2013 Massachusetts Health Reform Survey (N=22,374). The survey was not fielded in 2011.

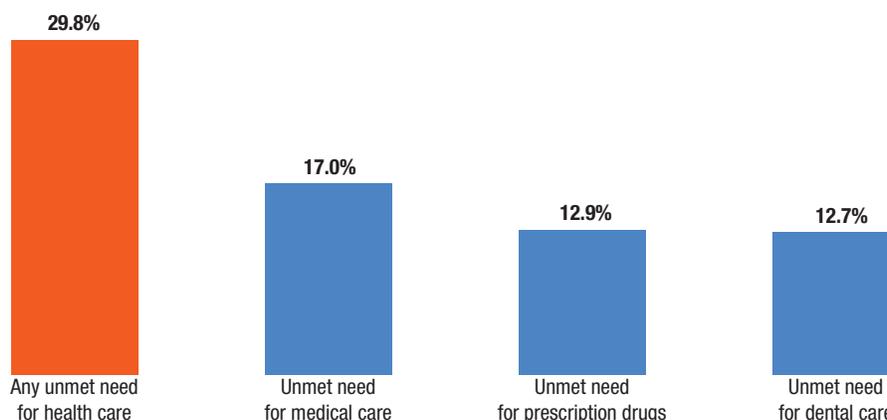
Note: These are simple (unadjusted) estimates.

\*(\*\*) Significantly different from the value in 2006 at the .05 (.01) level, two-tailed test.

^(^) Significantly different from the value in the prior year at the .05 (.01) level, two-tailed test. Since the survey was not fielded in 2011, this is not relevant for 2012.

Just as it does not guarantee affordability, insurance in Massachusetts does not guarantee access to health care. Almost one-third of adults in the state who had insurance for all of the past year reported unmet need for health care (29.8 percent), including unmet need for medical care (17.0 percent), prescription drugs (12.9 percent), and dental care (12.7 percent) (Exhibit VI.9). Almost half of those with unmet need overall reported the cost of care as a reason (13.8 percent).

**EXHIBIT VI.9: TYPES OF UNMET NEED FOR HEALTH CARE REPORTED BY FULL-YEAR INSURED ADULTS 19 TO 64 IN MASSACHUSETTS, FALL 2013**



Source: 2013 Massachusetts Health Reform Survey (N=2,795).  
 Note: These are simple (unadjusted) estimates.

Unmet need for health care was more common for lower-income full-year insured adults (family income below 300 percent of FPL) than for higher-income full-year insured adults (38.6 versus 22.1 percent) and for adults with non-ESI coverage than for adults with ESI coverage (44.5 versus 23.0 percent). The strongest predictors of unmet need from the multivariate findings were related to higher health care needs and being enrolled in a high-deductible health plan.

**Lower-income adults.** Between 2006 and 2013, the uninsurance rate for lower-income adults with family income below 300 percent FPL fell from 24.1 percent to 8.2 percent, so that by 2013, 91.8 percent of lower-income adults were insured at the time of the survey, 82.7 percent were insured all year, and 74.1 percent were insured all year with the same insurance coverage. The majority of lower-income adults (55.3 percent) were covered by other (non-ESI) coverage, which was largely public coverage in this group.

As with adults overall, most lower-income adults reported an established relationship with a health care provider (86.0) in 2013, and most (88.1 percent) had had a health care visit to a general doctor or specialist in the past year. However, lower-income adults reported more difficulties obtaining care and more unmet need for care in 2013 than did higher-income adults, with little change from 2012.

The lower-income adults also reported having more problems with health care costs and health care affordability than higher-income adults, including high out-of-pocket spending, problems paying medical bills, and medical debt. Nearly half (48.4 percent) of lower-income adults reported that health care costs had caused problems for their families over the past year. As a result, more

than two-thirds of lower-income adults were somewhat or very worried about their ability to pay their medical bills in the future.

For the lower-income adults with other (non-ESI) coverage, which was largely public coverage in this income group, barriers to obtaining care were quite common. More than one in four reported that they had been told by a doctor's office or clinic that the provider was not accepting the individual's insurance type, and more than one in five reported having been told that a doctor's office or clinic was not taking new patients. Nearly half of those with coverage all year (45.6 percent) reported going without needed care in the past 12 months, and half (49.8 percent) reported that health care costs had caused problems for them over the past year. While the levels of barriers to care have not increased between 2012 and 2013 for these adults, the prevalence of barriers for a lower-income population with public coverage is reason for concern.

**Opportunities.** While Massachusetts has been successful at expanding and maintaining gains in health insurance coverage following the 2006 health care reform initiative,<sup>39</sup> the evidence from 2013 suggests little progress so far at improving the affordability of health care for individuals since the passage of Chapter 224, the state's cost-containment legislation. The findings for 2013, which are unchanged from those for 2012, suggest that, at best, any moderating of health care cost trends in Massachusetts has maintained and not improved the state of affordability for individuals. This is consistent with findings from the Massachusetts Center for Health Information and Analysis (CHIA), which found that while growth in health care spending on insured services<sup>40</sup> in the state moderated between 2012 and 2013, it still exceeded inflation.<sup>41</sup>

While consumers might be the ultimate beneficiaries of moderating the growth of health care spending in Massachusetts, there is no evidence in the MHRs to suggest that they are seeing benefits in 2013, perhaps reflecting the shift of more of the direct costs of care onto consumers, such as through high-deductible health plans. Having a high-deductible health plan was often a strong predictor of access and affordability issues, including the probability of health care costs causing problems for the respondent and his/her family. Overall, nearly 40 percent of adults with coverage all year reported that health care costs had caused financial or nonfinancial problems for them and their families over the past year, with low-income adults and adults with non-ESI coverage more likely to report such problems. With such a large share of Massachusetts families reporting difficulties due to high health care costs, there are clear opportunities to improve the quality of life for Massachusetts families, particularly lower-income families, by addressing the burden of health care costs.

There are also opportunities to improve access to care in the state. While some of the access problems reported by Massachusetts residents are financial, nearly one in four Massachusetts adults reported difficulties obtaining care due to provider access issues, including difficulty finding a provider (both general doctors and specialists), difficulty getting an appointment as soon as

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39 Long SK, Stockley K, and Nordahl KW. "Coverage, Access and Affordability Under Health Reform: Learning from the Massachusetts Model." *Inquiry*, 2012/2013, 49 (Winter):303-16.

40 The measure of health care expenditures tracked by CHIA excludes products and services that consumers pay for outside their insurance policy, often including over-the-counter items, services not covered by the health plan, and vision and dental services.

41 Center for Health Information and Analysis. Annual Report on the Performance of the Massachusetts Health Care System. Boston, MA: Center for Health Information and Analysis, September, 2014, <http://www.mass.gov/chia/docs/r/pubs/14/chia-annual-report-2014.pdf>.

needed, and difficulty getting to the provider. As with the burden of health care affordability, gaps in health care access are more common for lower-income adults and adults with non-ESI insurance coverage. They were also common for adults with health and disability issues who rely most heavily on health care. In this case, improving access to care could lead to both cost savings and improved quality of care, if it leads to more effective care in the community and less reliance on the emergency department, especially for the adult with high health care needs and low financial resources.

As was true of the 2012 MHRS, the 2013 MHRS is a reminder that the goals of health care reform are not achieved by simply reducing the number of people in Massachusetts who are uninsured. Even with near universal health insurance coverage in Massachusetts, many insured residents of the state experience gaps in financial protection. Many are burdened by health care costs, either directly or indirectly, by going without needed care. With the strongest predictors of affordability problems in Massachusetts including being female, being a parent, having health and disability problems, and having a lower income, it is important that changes be introduced that remove unnecessary costs from the system, particularly for the Massachusetts residents with higher health care needs and lower economic resources. For these individuals, it is important to pay attention to the relative affordability of care, as deductibles and co-pays will be a much greater burden for an individual with lower income and for an individual who requires multiple visits to address high health care needs than for an individual with higher income or only occasional health care needs. Future work will delve more deeply into differences in affordability and access among adults with similar health care needs and socioeconomic status in Massachusetts.