Introduction

The Center for Health Information and Analysis (CHIA) contracted with SSRS and its subcontractor, the Urban Institute, to conduct the 2015 Massachusetts Health Insurance Survey (MHIS). The goal of the MHIS is to document health insurance coverage and access to and use of health care for the non-institutionalized population in Massachusetts. This report provides information about the methods used to collect and analyze the 2015 MHIS data as well as describe any changes made to the methodology and questionnaire since the 2014 survey was fielded.  

Overview of the MHIS

The MHIS questionnaire begins by establishing that the household is included in the survey sample frame, namely that it is in Massachusetts. The survey then asks for a person aged 18 or older who can answer questions about the health insurance coverage of the members of the household. That respondent is then asked questions that are used to create a roster of every individual in the household by age, gender, education, work status, and relationship to the respondent. Persons temporarily living away from home (including college students) are included in their usual household. Persons living in group quarters (e.g., dorms, nursing homes, and shelters) are excluded from the study as the focus is on the non-institutionalized population in the state.

From the household roster, one household member is randomly selected by the computer program to be the “target” person for the household. All detailed information is collected for this person, including socioeconomic characteristics and insurance status. Basic demographics such as age, gender, and education level are collected for all household members. Table 1 summarizes the topic areas covered in the MHIS for all members of the household and for the household member selected as the target individual for the survey. Prior to 2015, health insurance coverage information was collected for all members of the household. In 2015, this was limited to only one randomly selected household member in order to provide resources for asking more detailed questions about health access and affordability.

Completion of the survey instrument in 2015 took approximately 23 minutes on average.

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<table>
<thead>
<tr>
<th>Topics</th>
<th>Survey Respondent</th>
<th>All Household Members</th>
<th>Target Household Member</th>
<th>Target’s Spouse (if present) and Parents (if present and Target age&lt;26)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic characteristics (age, race/ethnicity, gender, marital status)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Socioeconomic characteristics such as education</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Nativity and citizenship status</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>Length of residency in Massachusetts</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>Health insurance coverage</td>
<td></td>
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<td>X</td>
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<tr>
<td>Long-term care insurance</td>
<td></td>
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<td>X</td>
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<tr>
<td>Health insurance churn</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>Detailed employment questions</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>Availability of employer sponsored insurance</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>Health status</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Access to and use of health care (including mental health care and non-physician health care)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Quality of health care</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Health care affordability</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>Medical debt</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Family income</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>Homeownership</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Household telephone status</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Sample Design

From its inception to 2007, the MHIS relied on a random-digit-dial (RDD) landline telephone survey. Due to the changing telephone environment in the United States, the methodology changed in 2008 to a hybrid address-based sample (ABS) combined with a landline RDD study, and this approach continued to be utilized until 2011. The MHIS was again fielded in 2014, using a dual-frame telephone sample design.

RDD landline telephone interviewing was the method of choice for most survey data collection efforts executed from the 1960s to the mid-2000s, given the strength of its randomization method (RDD), ease of administering complex questionnaires using computerized interviewing systems, thorough coverage of the overall population (given that less than 2% of Americans lived in a household without telephone service), and relatively low cost.

In the mid-2000s, the coverage of the overall population in RDD landline surveys began to change as increasing numbers of households began relying solely on cell phones. This shift away from landline telephones called for a change in sampling strategy. The MHIS moved to a dual sample frame design that combined an RDD landline telephone sample and an address-based sample (ABS). By the end of 2008, approximately 20% of households nationally no longer owned a landline telephone (Blumberg and Luke 2013). The goal of the ABS was to capture households without landline phones, such as cell phone-only households, and non-phone households, supplementing the landline sample of the traditional RDD landline survey.

Since 2008, there have been rapid changes in survey research, requiring another reevaluation of the sampling design. Cell phones have become more prevalent, with 44% of Massachusetts households in the U.S. estimated as cell-phone only in 2015. At the same time, concerns about cell phone interviewing that were commonplace in the mid-2000s, namely concerns about how to weight the data and whether interviewing on a cell phone was a generally viable method of data collection, have since been allayed.

Moreover, we have learned from studies examining the shift toward ABS samples in a number of surveys (including the MHIS), that ABS samples have tended to be significantly biased toward respondents with higher socioeconomic status (Link and Burks, 2013; Rapoport et al, 2012). Although weighting processes can do much to correct for this gap in the sample, it is still important to try to increase the number of interviews among lower socioeconomic status respondents, especially in a study where the main areas of interest, including health insurance coverage, correlate so highly with socioeconomic status.

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2 While most of the early MHIS relied on RDD samples, in 1998, the MHIS also included a small, in-person survey based on an area probability sample because of concerns that an RDD sample might produce biased estimates of the uninsurance rate in Massachusetts. In the 1998 survey the estimates of the uninsurance rate from the RDD sample and area probability sample were quite similar, at 7.8% and 8.2%, respectively (Roman 2007).

3 Survey coverage refers to the extent to which the sample frame for a survey includes all members of the target population. A survey design with a gap in coverage raises the possibility of bias if the individuals missing from the sample frame (e.g., households without landline telephones) differ from those in the sample frame.

4 One limitation of both the AB sample and the RDD sample, and all surveys that are conducted only through telephone, is that they will miss homeless persons in the state. This is estimated to be less than 1% of the population.
Therefore, for the 2014 survey, a dual-frame RDD landline and cell phone sample was used, and this design was repeated for the 2015 study.

While this design is better at facilitating interviews with the young as well as persons of low socioeconomic status, it is noted that such a design, at the state level, cannot cover residents of Massachusetts who purchased their cell phones out-of-state. Cell phone numbers for the study are sampled by telephone exchanges that are within the boundaries of the Commonwealth of Massachusetts. However, the potential bias from this omission is minimal since analysis of the SSRS large scale omnibus national dataset finds that only nine percent of cell phone owners in the state have cell phones with outside area codes, and three out of five such persons own a landline phone and so are covered by the landline frame. The overall loss in coverage is therefore about 4%, and research has shown that while there are some differences between such persons and persons with cell phone area codes consistent with their state of residence, they are small and largely corrected for in weighting (Dutwin, 2012).

Due to the very low incidence of being uninsured among the Massachusetts population, two other measures were employed in the sample design to increase the number of uninsured interviewed in the MHIS:

1) **Oversample of Prepaid Cell Phone Numbers**

Prepaid cell phones are different from a standard contract phone in that customers pay as they go, using a line of credit to use the phone. They are charged based on usage as opposed to paying a monthly fee as part of a long-term contract. Research conducted by SSRS nationwide finds that owners of prepaid cell phones are more than twice as likely to be uninsured, to have lower incomes, and to be non-white (Dutwin, 2014). By sampling these numbers at a higher rate than other cell phones, that is, oversampling the prepaid cell phone numbers, the number of respondents who fall within these categories is higher than a simple random sample.

2) **Stratification of Landline Sample by Income Level**

The landline sample is divided into three equivalent strata by landline telephone exchange: Lower Income, Middle Income, and Higher Income. These strata were created by listing all phone exchanges in MA in order by the mean income for the area covered by each telephone exchange. The lowest third comprise the low-income stratum, the middle third, the middle, and the highest third, the high income stratum. The three strata were sampled using a ratio of 50:30:20, again in order to oversample those most likely to report being uninsured by sampling members in lower-income areas. Survey weights corrected for oversampling in both the cell phone and landline frames.
Instrument Development

The survey instrument used for the MHIS relies on the Coordinated State Coverage Survey (CSCS), developed by the State Health Access Data Assistance Center (SHADAC) at the University of Minnesota. Modifications to the CSCS design were made to address issues specific to Massachusetts as well as to simplify the structure of the survey that was previously designed for a mail instrument as well (2008-2011). A number of the survey questions on access to and use of care in the MHIS were drawn from the Massachusetts Health Reform Survey (MHRS), a survey of working-age adults in Massachusetts conducted by the Urban Institute and SSRS since 2006, with funding from the Blue Cross Blue Shield of Massachusetts Foundation and, in some years, the Robert Wood Johnson Foundation and the Commonwealth Fund. Additional questions in 2015 were drawn from the Commonwealth Fund’s Biennial Health Insurance Survey and Consumerism in Health Care Survey. The MHIS survey instrument is pretested before each round of data collection as there are some changes made to the questionnaire between rounds.

Pretest

The pretest of the Massachusetts Health Insurance Survey 2015 took place on May 11 and 12, 2015. SSRS interviewers completed 19 interviews with respondents from households from listed low income, cell phone sample, and a small number of prescreened records from SSRS’s omnibus survey. The listed landline and prescreened sample was used in order to increase the likelihood of completing an interview with an uninsured person. However, after two nights of interviewing, SSRS was unable to complete an interview with an uninsured respondent. It was decided that we would monitor data collection in the early field period to identify the first uninsured interviews and listen to recordings.

Changes to the 2015 Instrument

A number of changes were made to the survey instrument prior to fielding in 2015. These changes reflected shifts in topic priorities over time and the need to account for changes in the health insurance landscape in Massachusetts and the nation resulting from the implementation of the Patient Protection and Affordable Care Act. The most significant changes involved eliminating the entire section of questions that asked about the health insurance status of household members other than the target of the interview. Below is a comprehensive list of modifications to the 2015 questionnaire.

Additions:
1. A question asking if the target has a private long term care insurance policy. This was asked about targets age 50 and older.
2. A follow up question for those targets 50 and older who do not have long term care insurance asking why they have not purchased it.
3. A question asking whether the target had any visits with a nurse practitioner, physician’s assistant, or midwife, apart from any doctor’s visits they might have had, in the past 12 months.

5 For a description of the CSCS, see http://www.shadac.org/content/coordinated-state-coverage-survey-cscs. We thank Kathleen Call at SHADAC for sharing the CSCS and helping to modify it for the MHIS.
6 For a description of the MHRS, see http://www.urban.org/health_policy/url.cfm?ID=411649.
4. A question asking if the target visited a mental health professional in the past 12 months.
5. Questions about quality of care from primary care physicians, specialists, and mental health care providers.
6. Added an attribute for problem of being unable to see a specialist in the past 12 months when target thought one was needed to questions about problems getting health care in the past 12 months.
7. Added categories of mental health care and dental care to unmet need for health care due to cost.
8. Follow up asking what types of services led to bills that families had difficulty paying if they had difficulty paying bills.
9. Questions asking whether target and family have medical bills that are being paid off over time and the amount of those bills.
10. Follow up asking when the family was first unable to pay those medical bills.
11. Questions about what actions family has taken to pay the bills.
12. Question asking whether target and family have had problems paying mortgage, rent, or utility bills.

Deletions:
1. Option of Temporary Coverage while application for coverage from the Health Connector or MassHealth is being processed in list of insurance types.
2. Option of Former Medical Security Program in list of insurance types.
3. Removal of those who said they were never uninsured from the question asking if the target was uninsured prior to obtaining current insurance or had some other type of insurance.
4. All questions related to the health insurance status of household members other than the target.
5. All detailed employment questions for the spouse and parents of the target.
6. Questions about the race/ethnicity of all household members other than target.

Modifications:
1. Reference to Commonwealth Care in list of insurance types was removed.
2. Combining all primary care providers (doctors, NPs, physician’s assistants, and midwives), into one question about whether any visits to these practitioners were for preventative care.

Data Collection Strategy

Data collection for the 2015 MHIS began on May 18, 2015, and was completed on August 2, 2015.

Languages

In the past, the MHIS was administered in three languages—English, Spanish, and Portuguese. Due to a decreasing number of respondents requesting to complete the survey in Portuguese, this language option was eliminated in 2014, and the survey was offered only in English and Spanish in 2014 and 2015. Table 2 shows the number of interviews conducted in each language between 2008-2011, 2014, and 2015. Spanish interviews were conducted by bilingual interviewers who are able to switch back and forth between languages as necessary. The increase in Spanish interviews in 2014 is the result of adding a cell phone frame to the sample design. In many landline/cell phone studies, the majority of Spanish-language interviews are
completed via cell phone given that Hispanics far outpace non-Hispanics in being cell phone only (Blumberg and Luke, 2013). Similarly, for the 2015 MHIS, 141 of the 180 Spanish-language interviews were conducted from the cell phone sample frame.

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Language of Interview</th>
<th>Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>English</td>
<td>Spanish</td>
</tr>
<tr>
<td>2008</td>
<td>4,817</td>
<td>77</td>
</tr>
<tr>
<td>2009</td>
<td>4,855</td>
<td>47</td>
</tr>
<tr>
<td>2010</td>
<td>4,436</td>
<td>37</td>
</tr>
<tr>
<td>2011</td>
<td>3,953</td>
<td>48</td>
</tr>
<tr>
<td>2014</td>
<td>3,883</td>
<td>141</td>
</tr>
<tr>
<td>2015</td>
<td>4,822</td>
<td>180</td>
</tr>
</tbody>
</table>

**Training Materials and Interviewer Training**

Interviewers received both written materials about the survey and formal training for conducting this survey. The written materials were provided prior to the beginning of the field period and included:

1. An annotated questionnaire that contained information about the goals of the study as well as detailed explanations of why questions were being asked, the meaning and pronunciation of key terms, clarification of any potential points of respondent confusion, and other problems that could be anticipated ahead of time as well as strategies for addressing them.
2. A list of frequently asked questions and the appropriate responses to those questions.
3. A script to use when leaving messages on answering machines.
4. Contact information for project personnel.

Call center supervisors and interviewers were walked through each question in the questionnaire. Interviewers were given instructions to help them maximize response rates and ensure accurate data collection. They were instructed to encourage participation by emphasizing the social importance of the project and to reassure respondents that the information they provided was confidential.

Interviewers were monitored during the first several nights of interviewing and provided feedback where appropriate to improve interviewer technique and clarify survey questions. The interviewer monitoring process was repeated periodically during the field period.

**Call Rules for the CATI Interviews**

For all sample members, the initial telephone interviewing attempt included one initial call plus six callbacks. If an interview was not completed at that point, the telephone number was set aside for at least two weeks to “rest.” After that rest period, an additional three callbacks were attempted.
To increase the probability of completing an interview, we established a differential call rule that required that call attempts be initiated at different times of the day and different days of the week.

**Refusal Avoidance and Conversion Strategies**

In addition to the call rules for the CATI interviews, we employed several other techniques to maximize the response rate for the survey. Respondents who refused to continue at the initiation of or during the course of the telephone interview were offered the opportunity to be re-contacted at a more convenient time to complete the interview.

Another method to increase responses rates is refusal conversions. Though all of SSRS’s interviewers regularly go through “refusal aversion” training, refusals are still a regular part of survey research. For the 2015 MHIS, SSRS used a core group of specially-trained and highly-experienced refusal conversion interviewers to call all respondents who initially refused the survey in an attempt to persuade them to complete the survey.

**Completed Interviews**

Table 3 shows the number of completed interviews for households that had only a cell phone, only a landline phone, or both a landline and cell phone in 2015. In 2015, we completed surveys with 897 cell phone-only households, 3,619 landline and cell phone households, and 344 landline-only households. One-hundred-forty-two respondents did not provide sufficient information to determine household phone status.

| Table 3: Phone Status of Survey Respondents in 2015 MHIS |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                 | Landline Only   | Cell Phone Only | Both Landline   | Other*          | Total           |
| Total Completed |                 |                 | and Cell Phone |                 |                 |
| Surveys         | 344             | 897             | 3,619          | 142             | 5,002           |
| Percent of Total| 6.9%            | 17.9%           | 72.4%          | 2.8%            | 100.0%          |

*This category includes those who said they did not know or refused to answer questions that would have determined their phone status.

**Data Processing and Preparation**

An analytical data file was created from the raw unedited survey data. This was a target-level file that included all data elements collected for the target person in the household along with data on the characteristics of the target's family and household. Although in past waves of the survey, a second file with cases arranged by individual household member was prepared and delivered, the elimination of most of the questions pertaining to other household members eliminated the need for this additional file. CATI range and logic checks were used to check the data during the data collection process. Additional data checks were implemented as part of the data file development work, checking for consistency across variables and family members, and developing composite measures of family and household characteristics.

Missing values for key demographic variables, such as age, race/ethnicity, health and disability status, and family income were replaced through imputation in both files. Missing values were also imputed for all variables provided in the tables generated from the data. For the variables
for which imputed data were created, the data files include both the original variable (with missing values) and a new variable that includes the imputed values for cases that had missing values. In general, the percent of respondents who answered don’t know or refused to any given question was quite low; however, item nonresponse for family income was somewhat higher. Roughly 12% of the total sample was missing all data on the income questions. About five percent provided information on whether family income was above or below 300% of the federal poverty level but not any additional information.

In imputing values for the variables, we rely on hot deck and regression imputation. More details on these procedures are provided in Appendix A.

Response Rates

Response rates are one method used to assess the quality of a survey, as they provide a measure of how successfully the survey obtained responses from the sample. The American Association of Public Opinion Research (AAPOR) has established standardized methods for calculating response rates (AAPOR, 2008). Overall response rates achieved for the landline and cell phone samples and the overall survey sample are reported below. Before presenting those estimates, methods for calculating the response rates are described.

While response rates provide an indicator of potential bias in a survey (which can arise when survey nonrespondents are significantly different than respondents), lower response rates are not, in and of themselves, an indicator of survey quality since lower response rates do not necessarily increase nonresponse bias in surveys (Groves 2006; Groves and Peytcheva 2008). This issue has been addressed in a number of studies, including, for example, Keeter and colleagues (2000), who compared the results of a 5-day survey fielding period (response rate of 36%) to the results from fielding the same survey for 8 weeks (response rate 61%), and found no significant differences between the two surveys in the outcomes of interest. Thus, differences in the response rate between the 2014 and 2015 MHIS, 30.9 percent and 24.6 percent, respectively, are not necessarily indicative of differences in the accuracy of the data available from the surveys.

The primary difference in survey responses over the two years is that nonresponse due to household answering machines/voicemails are fewer while direct refusals to the survey are higher. It is difficult to determine why more people chose to pick up the phone and then refuse to participate in the survey in 2015, rather than let the answering machine or voice mail pick up as they did in 2014. However, overall, the same percent of households who were contacted chose to participate in the survey in 2015 as in 2014. In addition, cell phone response rates are very similar across the two years while landline response rates declined, a trend which is pervasive in telephone survey research. Cooperation rates were similar on cell phones but dropped on landlines, while the contact rate remained similar between the two years.

Defining the Response Rate

AAPOR Response Rate #3 was calculated for this study. Response rate three is generally defined as the number of households in which an interview was completed divided by the estimated number of eligible households in the sample. With a landline number, the interviewer would ask to speak with someone in the household who was able to answer questions about health insurance for themselves and everyone else in the household. Cell phone numbers are considered to be a respondent’s personal communication device, and as such, if the respondent
could not answer questions about insurance in the household, the interview was terminated rather than handed off to another household member.

In estimating the response rate for the MHIS, AAPOR defines four categories of sample records (telephone numbers):

1. Eligible, completed interview
2. Eligible, no interview
3. Unknown if eligible
4. Not eligible

Cases in which no interview was attained from an eligible household include persons who refused to be interviewed and those who broke off the interview part way through, as well as any other sample record that was determined to be a household (e.g., an answering machine indicated that it was a household and not a business). AAPOR category three includes all sample records for which eligibility is unknown, such as sample records that result in a “no answer” (continuous ringing with no answering machine). In calculating a response rate, an eligibility quotient to this category is applied. This is a percent of the sample records in the category that was estimated to be eligible households. Finally, AAPOR category four includes sample records that are known to be ineligible, such as business numbers, fax machine numbers, non-working numbers, and vacant or second homes.

Final response rates are summarized in Table 4. The response rates for the landline and cell phone samples in the 2015 MHIS were 22.1% and 29.5%, respectively. The overall response rate for the 2015 MHIS was 24.6%.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landline Telephone</td>
<td>22.1%</td>
</tr>
<tr>
<td>Cell Phone</td>
<td>29.5%</td>
</tr>
<tr>
<td>Total</td>
<td>24.6%</td>
</tr>
</tbody>
</table>

### Survey Weights and Variance Estimation

#### Survey Weights

Survey data were weighted to adjust for differential sampling probabilities, to reduce biases due to differences between respondents and non-respondents (nonresponse bias), and to address gaps in coverage in the survey frame (coverage bias). Survey weights can reduce the effect of nonresponse and coverage gaps on the reliability of the survey results (Keeter et al. 2000, 2006; Groves 2006). Overall, the procedure executed for this study follows the essential two-step procedure detailed in Kalsbeek and Agans (2008), which is to first correct for any disproportionate probabilities of selection (base weighting), such as oversampling pre-paid cell phones as noted earlier, and second to then balance the sample to match official statistics for
persons living in Massachusetts on metrics such as age and gender (post-stratification). A more detailed explanation is provided below.

**Constructing the Base Weights**

The base weighting process is designed to correct for disproportionate probabilities of selection. While telephone numbers are generated by RDD, disproportionate probabilities are introduced into surveys because 1) the number of separate telephone landlines and cell phones answered by respondents differ by household and by telephone frame, 2) of the purposive disproportionate selection of sampling strata noted earlier (for landlines, high, medium and low income; for cell phones, prepaid and non-prepaid phones), and finally, 3) landlines are often shared by multiple respondents while cell phones are considered personal devices. Each of the sub-steps to base weighting that address these issues are provided below:

1. **Telephone frame and usage corrections**: A phone number’s probability of selection for the survey depends on the number of phone numbers selected out of the total sample frame. So for each landline number, the probability of selection is calculated as total landline numbers dialed divided by total numbers in the landline frame. For cell phones, probability is calculated as total cell phone numbers divided by total numbers in the cell phone frame. In addition, the probability that the sampling unit (households on landlines or respondents on cell phones) will be reached is a product of the number of phones (by type) a respondent or their household answer.

2. **Disproportionate stratification corrections**: The number of sample records utilized is balanced back to the percent of sample records that exist in each stratum. For example, while 16.4 percent of cell phones are prepaid phones in Massachusetts, 41 percent of the sample used for the project consisted of prepaid phones and thus the base weight correction here for prepaid phones is .4 (16.4 / 41).

3. **Probability of Respondent Selection**: In households reached by landline, a single respondent is selected. Thus, the probability of selection within a household is inversely related to the number of adults in the household. In respondents reached by a cell-phone, the probability of selection is one.

The final base weight is a product of the above noted corrections.

**Post-stratification**

With the base-weight applied, the sample was post-stratified using iterative proportional fitting (IPF) (Deming, 1943), whereby the sample was balanced to match known adult-population parameters based on the most recent U.S. Census Bureau’s American Community Survey (ACS), which was 2013 for the 2015 MHIS.

The targets used for post-stratification are the non-institutionalized population of Massachusetts for the following parameters: age (0-17; 18-29; 30-49; 50-64; 65+) by gender, region (Western MA; Southcoast; Northeast MA; Metro West; Metro South; Metro Boston; Central MA; Cape and Islands), education (less than high school, high school graduate; some college; four-year college; graduate degree), race/ethnicity (white non-Hispanic; black non-Hispanic; Hispanic; other race non-Hispanic), population density in zip/county(divided into quintiles), born in the
U.S., and phone-usage (cell phone only, landline only, both landline and cell phone). These parameters along with unweighted and weighted percents are listed in Table 5.

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7 The cell phone only rate for Massachusetts is based on a linear projection to 2014 from data on the percent of Massachusetts households that are cell-phone only as reported in the National Health Interview Survey in 2007, 2009, and 2011 (Blumberg et al. 2012).
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value Label</th>
<th>Benchmark (%)</th>
<th>Unweighted (%)</th>
<th>Weighted (%)</th>
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</thead>
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<tr>
<td>Age</td>
<td>0-17</td>
<td>20.8</td>
<td>11.2</td>
<td>20.6</td>
</tr>
<tr>
<td></td>
<td>18-29</td>
<td>17.4</td>
<td>11.9</td>
<td>17.1</td>
</tr>
<tr>
<td></td>
<td>30-49</td>
<td>26.5</td>
<td>18.8</td>
<td>26.0</td>
</tr>
<tr>
<td></td>
<td>50-64</td>
<td>20.5</td>
<td>30.2</td>
<td>20.1</td>
</tr>
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<td></td>
<td>65+</td>
<td>14.8</td>
<td>28.0</td>
<td>16.2</td>
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<td>Education</td>
<td>Less than High School</td>
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<td>7.2</td>
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<td></td>
<td>High School Graduate</td>
<td>20.8</td>
<td>22.8</td>
<td>20.8</td>
</tr>
<tr>
<td></td>
<td>Some College</td>
<td>21.2</td>
<td>21.8</td>
<td>21.0</td>
</tr>
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<td></td>
<td>College+</td>
<td>29.3</td>
<td>37.9</td>
<td>29.3</td>
</tr>
<tr>
<td></td>
<td>Target&lt;16</td>
<td>20.8</td>
<td>9.6</td>
<td>20.2</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>White</td>
<td>74.6</td>
<td>77.6</td>
<td>75.9</td>
</tr>
<tr>
<td></td>
<td>African American</td>
<td>6.4</td>
<td>5.8</td>
<td>6.6</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>10.5</td>
<td>10.1</td>
<td>10.9</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>2.4</td>
<td>3.5</td>
<td>2.6</td>
</tr>
<tr>
<td>Density</td>
<td>Quintile 1</td>
<td>20.0</td>
<td>22.7</td>
<td>19.5</td>
</tr>
<tr>
<td></td>
<td>Quintile 2</td>
<td>20.0</td>
<td>18.1</td>
<td>19.2</td>
</tr>
<tr>
<td></td>
<td>Quintile 3</td>
<td>20.0</td>
<td>18.4</td>
<td>19.4</td>
</tr>
<tr>
<td></td>
<td>Quintile 4</td>
<td>20.0</td>
<td>19.7</td>
<td>19.6</td>
</tr>
<tr>
<td></td>
<td>Quintile 5</td>
<td>20.0</td>
<td>18.2</td>
<td>19.4</td>
</tr>
<tr>
<td>Gender by Age</td>
<td>Male 0-17</td>
<td>10.6</td>
<td>5.6</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>Male 18-29</td>
<td>8.7</td>
<td>6.1</td>
<td>8.4</td>
</tr>
<tr>
<td></td>
<td>Male 30-49</td>
<td>12.9</td>
<td>9.3</td>
<td>12.8</td>
</tr>
<tr>
<td></td>
<td>Male 50-64</td>
<td>9.9</td>
<td>13.4</td>
<td>9.7</td>
</tr>
<tr>
<td></td>
<td>Male 65+</td>
<td>6.3</td>
<td>11.4</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>Female 0-17</td>
<td>10.1</td>
<td>5.7</td>
<td>10.1</td>
</tr>
<tr>
<td></td>
<td>Female 18-29</td>
<td>8.8</td>
<td>5.7</td>
<td>8.6</td>
</tr>
<tr>
<td></td>
<td>Female 30-49</td>
<td>13.5</td>
<td>9.5</td>
<td>13.3</td>
</tr>
<tr>
<td></td>
<td>Female 50-64</td>
<td>10.6</td>
<td>16.8</td>
<td>10.4</td>
</tr>
<tr>
<td></td>
<td>Female 65+</td>
<td>8.5</td>
<td>16.5</td>
<td>9.4</td>
</tr>
<tr>
<td>Phone Status</td>
<td>Cell phone only</td>
<td>44.3</td>
<td>18.2</td>
<td>44.1</td>
</tr>
<tr>
<td></td>
<td>Landline only</td>
<td>7.0</td>
<td>7.4</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td>Dual Frame</td>
<td>48.7</td>
<td>74.4</td>
<td>49.0</td>
</tr>
</tbody>
</table>
Weight Truncation

To minimize the potential impact of very large weights on survey estimates, the weights were truncated (or ‘trimmed’) so that they did not exceed 8.0 or fall below under 0.2. Weights were trimmed to the hard limits of 8 and .2, and then the difference in the sum of the weights of the trimmed weight and the untrimmed weight was proportionately redistributed to all cases.

Variance Estimation and the Average Design Effect

Complex survey designs and post-data collection statistical adjustments affect variance estimates and, as a result, tests of significance and confidence intervals. Variance estimates derived from standard statistical software packages that assume simple random sampling are generally too low, which leads significance levels to be overstated and confidence intervals to be too narrow.

The impact of the survey design on variance estimates is measured by the design effect. The design effect describes the variance of the sample estimate for the survey relative to the variance of an estimate based on a hypothetical random sample of the same size. In situations where statistical software packages assume a simple random sample, the adjusted standard error of a statistic is calculated by multiplying by the square root of the design effect. In 2015, the average design effect for estimates for the target person in the household is 2.23. Based on that design effect, the sampling error for estimates for outcomes that occur for about 50% of the sample will be +/-1.54 percentage points based on the target person sample in 2015. For outcomes that occur for 90% or 10% of the sample, the sampling error based on the target sample is 1.73 percentage points in 2015.

The samples selected for each year of the study are independent and therefore variation in design effects and hence the sampling error is expected from year to year. The design effect and sampling error are summarized in Table 6.
Table 6: Design Effect and Sampling Error

<table>
<thead>
<tr>
<th>Average Design Effect</th>
<th>Sampling Error with Design Effect (95% CI, Prob.=.5)</th>
<th>Sampling Error With Design Effect (95% CI, Prob.=.1)</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.23</td>
<td>2.07</td>
<td>1.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5,002</td>
</tr>
</tbody>
</table>

Variance estimation procedures have been developed for most standard software packages to account for complex survey designs. A replicate stratum (strata) variable on the survey data files that can be used with the appropriate weight variable to obtain corrected standard errors using a Taylor series approximation (or other related linearization method) is provided in the data file. Users interested in using a linearization method can choose to use SUDAAN, the “SVY” commands in Stata, the “PROC SURVEYMEANS” and “PROC SURVEYREG” commands in SAS, or the “CSELECT” complex samples procedures in the SPSS complex samples module.

Estimates of the Uninsurance Rate for Massachusetts

Table 7 shows the estimate of the uninsurance rate for Massachusetts residents based on the 2015 MHIS target sample, by sample frame and overall.

Table 7: Estimate of the Uninsurance Rate from the 2015 MHIS, by Sample Frame

<table>
<thead>
<tr>
<th></th>
<th>Landline Sample</th>
<th>Cell Phone Sample</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size</td>
<td>3,000</td>
<td>2,002</td>
<td>5,002</td>
</tr>
<tr>
<td>Number Uninsured</td>
<td>49*</td>
<td>81</td>
<td>130</td>
</tr>
<tr>
<td>Percent Uninsured</td>
<td>2.1%</td>
<td>5.0%</td>
<td>3.6%</td>
</tr>
<tr>
<td>(data are weighted)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: The estimate of the uninsurance rate is based on a small number of uninsured persons in both the landline sample (49) and the cell phone sample (81). Therefore, analysis of uninsured is more accurate when conducted on total overall sample only and not by frame.
References


Appendix A: Imputation

Missing data are ubiquitous throughout social science research and can be found in almost all large survey datasets. Replacing the missing values with plausible substitutes (imputation) occurred for survey data in the United States as early as the 1930s. A wide variety of techniques have been developed since that time. Two modern methods, hotdeck and modelled (regression) imputation, have emerged as general and widely used techniques for analysis in the presence of missing data.

Hotdeck imputation sorts data by user-entered variables and takes data from the “nearest neighbor” and imputes it into a missing case. The key idea of modelled imputation is that missing values are imputed with plausible values drawn from the conditional distribution of the missing data given the observed data under a specified model. These procedures can then produce a series of more “complete” datasets which can then be used for analysis.

Hotdeck imputation is standard procedure at SSRS for creating weighting variables devoid of missing data, to allow for iterative proportional fitting procedures for weighting as noted elsewhere in this report. For 2015, modelled imputation was added to key variables that were also created for the detailed tables.

Hotdeck was specifically utilized for race/ethnicity, age, region, U.S. born status, education, and population density. Data were sorted by phone status (landline only, dual user, and cell phone only).

The modelled imputation utilized the “impute missing values” procedure in SPSS advanced statistics, which employed regression for imputation with ten iterations specified. Because there were a number of variables to be imputed, a common model was developed with imputations generated in batches. The first model imputed the following variables: age, gender, race, ethnicity, citizenship, language of interview, health status, limited health activities, highest family education, family work status, family work status size, federal poverty level, health insurance status, time insured, and homeownership. These variables then became the basis for the common model that was utilized to impute subsequent variables. Variables were of course limited and constrained where necessary to avoid contradictory imputed values (for example, health disability is a combination variable of being disabled and being limited due to health, and thus if a case was imputed to be limited in the limited variable, that person should need to be limited in the health disability variable as well). Below is a report of the missing values of the variables that were imputed by either hotdeck or the modelled imputations.
<table>
<thead>
<tr>
<th>Description</th>
<th>Missing Values</th>
<th>Total Valid Responses</th>
<th>Missing Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of Target</td>
<td>104</td>
<td>5,002</td>
<td>2.1%</td>
</tr>
<tr>
<td>Gender of Target</td>
<td>5</td>
<td>5,002</td>
<td>0.1%</td>
</tr>
<tr>
<td>Race of Target</td>
<td>151</td>
<td>5,002</td>
<td>3.0%</td>
</tr>
<tr>
<td>Target's Citizenship Status</td>
<td>22</td>
<td>5,002</td>
<td>0.4%</td>
</tr>
<tr>
<td>Target's Health Status</td>
<td>27</td>
<td>5,002</td>
<td>0.5%</td>
</tr>
<tr>
<td>Has a Health-Related Disability</td>
<td>35</td>
<td>5,002</td>
<td>0.7%</td>
</tr>
<tr>
<td>Target Educational Attainment</td>
<td>38</td>
<td>4,519</td>
<td>0.9%</td>
</tr>
<tr>
<td>Federal Poverty Level</td>
<td>343</td>
<td>5,002</td>
<td>6.9%</td>
</tr>
<tr>
<td>Region of Massachusetts</td>
<td>88</td>
<td>5,002</td>
<td>1.8%</td>
</tr>
<tr>
<td>Highest Educational Attainment of Adults in Family</td>
<td>30</td>
<td>5,002</td>
<td>0.6%</td>
</tr>
<tr>
<td>Target is Limited by Health Problem</td>
<td>24</td>
<td>5,002</td>
<td>0.5%</td>
</tr>
<tr>
<td>Home Is Owned</td>
<td>129</td>
<td>5,002</td>
<td>2.6%</td>
</tr>
<tr>
<td>Health Insurance Status - 12 Months</td>
<td>9</td>
<td>5,002</td>
<td>0.2%</td>
</tr>
<tr>
<td>Had Insurance for Less than 6 Months</td>
<td>31</td>
<td>5,002</td>
<td>0.6%</td>
</tr>
<tr>
<td>Insured for All of Past 12 Months</td>
<td>9</td>
<td>5,002</td>
<td>0.2%</td>
</tr>
<tr>
<td>Insured Now, Uninsured at Some Time in Past 12 Months</td>
<td>9</td>
<td>5,002</td>
<td>0.2%</td>
</tr>
<tr>
<td>Insured Now and for All of the Past 2 Years</td>
<td>159</td>
<td>5,002</td>
<td>3.2%</td>
</tr>
<tr>
<td>Insured Now and for All of the Past 5 Years</td>
<td>159</td>
<td>5,002</td>
<td>3.2%</td>
</tr>
<tr>
<td>Target Became Insured After Being Uninsured</td>
<td>126</td>
<td>5,002</td>
<td>2.5%</td>
</tr>
<tr>
<td>Target Transitioned From One Type of Insurance to Another</td>
<td>126</td>
<td>5,002</td>
<td>2.5%</td>
</tr>
<tr>
<td>Target was Insured for Any of the Last 12 Months</td>
<td>31</td>
<td>5,002</td>
<td>0.6%</td>
</tr>
<tr>
<td>Target Uninsured for Less than Six Months</td>
<td>31</td>
<td>5,002</td>
<td>0.6%</td>
</tr>
<tr>
<td>Target Uninsured for Six Months or More</td>
<td>31</td>
<td>5,002</td>
<td>0.6%</td>
</tr>
<tr>
<td>Target Uninsured for All of the Past 12 Months</td>
<td>31</td>
<td>5,002</td>
<td>0.6%</td>
</tr>
<tr>
<td>Target Uninsured Now but Insured in Past 12 Months</td>
<td>31</td>
<td>5,002</td>
<td>0.6%</td>
</tr>
<tr>
<td>Target has a Reason for Uninsurance Related to Cost</td>
<td>12</td>
<td>130</td>
<td>9.2%</td>
</tr>
<tr>
<td>Usual Source of Healthcare is Not the ER</td>
<td>102</td>
<td>5,002</td>
<td>2.0%</td>
</tr>
<tr>
<td>Has Visited a General Doctor or Specialist in the Past 12 Months</td>
<td>16</td>
<td>5,002</td>
<td>0.3%</td>
</tr>
<tr>
<td>Has Visited a General Doctor in Past 12 Months</td>
<td>68</td>
<td>5,002</td>
<td>1.4%</td>
</tr>
<tr>
<td>Has Visited a Nurse Practitioner or Physician's Assistant in past 12 months</td>
<td>129</td>
<td>5,002</td>
<td>2.6%</td>
</tr>
<tr>
<td>Quality of Care Received by Health Professionals</td>
<td>22</td>
<td>4,431</td>
<td>0.6%</td>
</tr>
<tr>
<td>Had a Visit with Doctor for Preventive Care</td>
<td>45</td>
<td>5,002</td>
<td>0.9%</td>
</tr>
<tr>
<td>Visited a Specialist in the Past 12 Months</td>
<td>46</td>
<td>5,002</td>
<td>0.9%</td>
</tr>
<tr>
<td>Had a Visit for Mental Health Care in the Past 12 Months</td>
<td>41</td>
<td>5,002</td>
<td>0.8%</td>
</tr>
<tr>
<td>Quality of Mental Health Care</td>
<td>6</td>
<td>801</td>
<td>0.7%</td>
</tr>
<tr>
<td>Had a Dental Visit in Past 12 Months</td>
<td>31</td>
<td>5,002</td>
<td>0.6%</td>
</tr>
<tr>
<td>Took Prescription Drugs in Past 12 Months</td>
<td>40</td>
<td>5,002</td>
<td>0.8%</td>
</tr>
<tr>
<td>Had an ER visit in Past 12 Months</td>
<td>42</td>
<td>5,002</td>
<td>0.8%</td>
</tr>
<tr>
<td>Question</td>
<td>Count</td>
<td>Mean</td>
<td>Percent</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------</td>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td>Had More than One ER Visit in Past 12 Months</td>
<td>42</td>
<td>5,002</td>
<td>0.8%</td>
</tr>
<tr>
<td>Told By Doctor or Clinic that Insurance Wasn't Accepted in Past 12 Months</td>
<td>44</td>
<td>5,002</td>
<td>0.9%</td>
</tr>
<tr>
<td>Told By Doctor or Clinic that they Were Not Accepting New Patients In Past 12 Mos.</td>
<td>37</td>
<td>5,002</td>
<td>0.7%</td>
</tr>
<tr>
<td>Had Problem Getting an Apt. w/ Doctor/Clinic as Soon as Needed in Past 12 Mos.</td>
<td>40</td>
<td>5,002</td>
<td>0.8%</td>
</tr>
<tr>
<td>Visited ER for Non-Emergency Condition</td>
<td>47</td>
<td>1,586</td>
<td>3.0%</td>
</tr>
<tr>
<td>Visited ER Because Unable to Get Doctor's Appointment</td>
<td>6</td>
<td>554</td>
<td>0.1%</td>
</tr>
<tr>
<td>Visited ER Because Needed Care After Normal Doctor Hours</td>
<td>6</td>
<td>554</td>
<td>0.1%</td>
</tr>
<tr>
<td>When Choosing a Provider Gets Info from a Gov't Agency or the Internet</td>
<td>57</td>
<td>5,002</td>
<td>1.1%</td>
</tr>
<tr>
<td>Cost was a Major Factor in Choosing a Doctor</td>
<td>111</td>
<td>5,002</td>
<td>2.2%</td>
</tr>
<tr>
<td>A Quality Rating was a Major Factor in Choosing a Doctor</td>
<td>111</td>
<td>5,002</td>
<td>2.2%</td>
</tr>
<tr>
<td>Cost and Quality Or a Rating was a Major Factor in Choosing a Doctor</td>
<td>336</td>
<td>5,002</td>
<td>6.7%</td>
</tr>
<tr>
<td>Unmet Need for Medicine</td>
<td>28</td>
<td>5,002</td>
<td>0.6%</td>
</tr>
<tr>
<td>Unmet Need for Doctor Care</td>
<td>32</td>
<td>5,002</td>
<td>0.6%</td>
</tr>
<tr>
<td>Unmet Need for Specialist Care</td>
<td>24</td>
<td>5,002</td>
<td>0.5%</td>
</tr>
<tr>
<td>Unmet Need for Counseling</td>
<td>33</td>
<td>5,002</td>
<td>0.7%</td>
</tr>
<tr>
<td>Unmet Need for Dental Care</td>
<td>32</td>
<td>5,002</td>
<td>0.6%</td>
</tr>
<tr>
<td>Out of Pocket Costs Under $1,000</td>
<td>216</td>
<td>5,002</td>
<td>4.3%</td>
</tr>
<tr>
<td>Out of Pocket Costs Under $3,000</td>
<td>216</td>
<td>5,002</td>
<td>4.3%</td>
</tr>
<tr>
<td>Had Problems Paying Medical Bills in Past 12 Months</td>
<td>37</td>
<td>5,002</td>
<td>0.7%</td>
</tr>
<tr>
<td>Had Problems Paying ER Bills</td>
<td>8</td>
<td>728</td>
<td>1.1%</td>
</tr>
<tr>
<td>Had Problems Paying On-Going Treatment Bills</td>
<td>8</td>
<td>728</td>
<td>1.1%</td>
</tr>
<tr>
<td>Had Problems Paying Test or Procedure Bills</td>
<td>9</td>
<td>728</td>
<td>1.2%</td>
</tr>
<tr>
<td>Had Problems Paying Bills for Birth of a Child</td>
<td>3</td>
<td>728</td>
<td>0.4%</td>
</tr>
<tr>
<td>Had Problems Paying Dental Bills</td>
<td>4</td>
<td>728</td>
<td>0.6%</td>
</tr>
<tr>
<td>Had Problems Paying Prescription Bills</td>
<td>5</td>
<td>728</td>
<td>0.7%</td>
</tr>
<tr>
<td>Had Problems Paying Other Bills</td>
<td>6</td>
<td>728</td>
<td>0.8%</td>
</tr>
<tr>
<td>Has Bills Being Paid Over Time</td>
<td>61</td>
<td>5,002</td>
<td>1.2%</td>
</tr>
<tr>
<td>Medical Bills are Under $2K</td>
<td>71</td>
<td>786</td>
<td>9.0%</td>
</tr>
<tr>
<td>Medical Bills are Between $2K and $8K</td>
<td>71</td>
<td>786</td>
<td>9.0%</td>
</tr>
<tr>
<td>Medical Bills are Over $8K</td>
<td>71</td>
<td>786</td>
<td>9.0%</td>
</tr>
<tr>
<td>Medical Bills Paid Over Time Since Last Year</td>
<td>22</td>
<td>786</td>
<td>2.7%</td>
</tr>
<tr>
<td>Medical Bills Paid Over Time 1-5 Years</td>
<td>22</td>
<td>786</td>
<td>2.7%</td>
</tr>
<tr>
<td>Medical Bills Paid Over Time Over 5 Years</td>
<td>22</td>
<td>786</td>
<td>2.7%</td>
</tr>
<tr>
<td>Problems Paying Other Types of Bills</td>
<td>26</td>
<td>5,002</td>
<td>0.4%</td>
</tr>
<tr>
<td>Used Credit Card</td>
<td>7</td>
<td>1,095</td>
<td>6.4%</td>
</tr>
<tr>
<td>Were Contacted by a Collection Agency</td>
<td>14</td>
<td>1,095</td>
<td>1.3%</td>
</tr>
<tr>
<td>Cut Back on Savings</td>
<td>15</td>
<td>1,095</td>
<td>1.4%</td>
</tr>
<tr>
<td>Had to Declare Bankruptcy</td>
<td>3</td>
<td>1,095</td>
<td>0.3%</td>
</tr>
<tr>
<td>Changed to Lower Cost Doctor</td>
<td>12</td>
<td>1,753</td>
<td>0.7%</td>
</tr>
<tr>
<td>Went Without Needed Health Care</td>
<td>7</td>
<td>1,753</td>
<td>0.4%</td>
</tr>
<tr>
<td>Switched to a Lower Cost Insurance Plan</td>
<td>22</td>
<td>1,753</td>
<td>1.3%</td>
</tr>
<tr>
<td>Went Without Health Insurance</td>
<td>8</td>
<td>1,753</td>
<td>0.5%</td>
</tr>
<tr>
<td>Tried Harder to Stay Healthy</td>
<td>6</td>
<td>1,753</td>
<td>0.3%</td>
</tr>
<tr>
<td>Other Lower Spending Approach</td>
<td>15</td>
<td>1,753</td>
<td>0.8%</td>
</tr>
<tr>
<td>Person Who Had Insurance Lost Job or Changed Employers</td>
<td>8</td>
<td>130</td>
<td>6.2%</td>
</tr>
<tr>
<td>Person Who Had Insurance No Longer Member of Family</td>
<td>8</td>
<td>130</td>
<td>6.2%</td>
</tr>
<tr>
<td>Employer Does Not Offer Coverage</td>
<td>15</td>
<td>130</td>
<td>11.5%</td>
</tr>
<tr>
<td>Reason</td>
<td>Count</td>
<td>Total</td>
<td>Percentage</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>Lost Eligibility for Public Program</td>
<td>16</td>
<td>130</td>
<td>12.3%</td>
</tr>
<tr>
<td>Cost is Too High</td>
<td>12</td>
<td>130</td>
<td>9.3%</td>
</tr>
<tr>
<td>Doesn't Need Insurance</td>
<td>11</td>
<td>130</td>
<td>8.5%</td>
</tr>
<tr>
<td>Doesn't Know How to Get Insurance</td>
<td>8</td>
<td>130</td>
<td>6.2%</td>
</tr>
<tr>
<td>Traded Health Insurance for Another Benefit or Higher Pay</td>
<td>10</td>
<td>130</td>
<td>7.7%</td>
</tr>
<tr>
<td>Other Reason</td>
<td>6</td>
<td>130</td>
<td>4.6%</td>
</tr>
</tbody>
</table>
Appendix B: Survey Instrument

Massachusetts Health Insurance Survey

INTRO1.  Hello.  My name is __________ and I’m calling on behalf of the Commonwealth of Massachusetts.  I’m with SSRS.

(Interviewer should confirm that Respondent is 18 or older. Otherwise ask to speak with someone in the household who is 18 or older)

Ask Cell1, Cell2, Cell 2a, Cell3 of Cell Phone Sample Only)

Cell1.  Just so that I can ask you the right questions, could you please tell me if you are less than 18, 18 to 25, 26 to 64, or 65 or older?

1  Less than 18  THANK AND TERM, RECORD AS TQCELL1
2  18 to 25  CONTINUE TO CELL2
3  26 to 64  CONTINUE TO CELL2
4  65 or older  CONTINUE TO CELL2
D  (DO NOT READ) Don’t know  THANK & TERM, RECORD AS TQCELL1
R  (DO NOT READ) Refused  THANK & TERM, RECORD AS RQCELL1

If Cell1 = 1, D or R READ: Thank you. We are only interviewing people who are 18 years old or older.

(Ask if Cell Sample)

Cell2.  What is your zip code?

(IF NEEDED: If you have more than one residence, please tell me the zip code of your primary residence.)

_________________ (Enter Zip Code)

NN Outside of Massachusetts (not on list)
DD (DO NOT READ) Don’t know
RR (DO NOT READ) Refused

(Ask Cell2a if Cell2=NN, DD, RR)

Cell2a.  Is your home located in Massachusetts?

1  Yes  GO TO CELL 3
2  No  THANK AND TERM
3  (DO NOT READ) DON’T KNOW  RECORD AS TQCELL2a
R  (DO NOT READ) REFUSED  THANK & TERM. RECORD AS RQCELL2a
IF CELL2a = 2, D or R READ: Thank you. We are only interviewing people whose main residence is in Massachusetts. THANK & TERM. RECORD AS TQCELL3

CELL3. Before we continue, are you driving?

1  Not driving  GO TO INTRO2
2  Driving  SET UP CALL BACK AND RECORD AS SUSPENDED INTERVIEW

3  (DO NOT READ) This is NOT a cell phone  THANK & TERM. RECORD AS TQCELL3

R  (DO NOT READ) Refused  THANK & TERM. RECORD AS RCELL3

INTRO2. As you may know, Massachusetts is one of several states taking the lead in finding ways to make health care more affordable and easier to obtain. The state would like to better understand how to improve access to affordable health insurance.

Your telephone number was randomly selected from phone numbers in Massachusetts. Your participation in this study is voluntary and will be a great help. This study takes only about 15-20 minutes. (IF NEEDED: It tends to be a bit shorter for smaller households and a bit longer for larger households

INTRO3. Before we start, let me tell you that everything you say will be kept private. Your answers will be combined with those of other people in Massachusetts. The study will not be used for marketing purposes and your decision whether or not to participate will not have any effect on anything to do with your insurance coverage, health care, or your relationship with any state or Federal agencies. You may skip over questions or stop the interview at any time you wish.

IF RESPONDENT RAISES CONCERNS ABOUT THE INDIVIDUAL MANDATE: Since all of the information that you provide will be kept private, there is no way that anything you say could be used to determine whether you are complying with the individual mandate on insurance coverage.

INTRO4. If you have questions about the study, I can give you a phone number now or at the end of the survey that you can call to find out more about the study.

For questions about the survey, please call Kathy Langdale at X-XXX-XXX-XXXX.
S1a. What is your zip code?

(If needed: If you have more than one residence, please tell me the zip code of your primary residence.)

____________________ (Enter zip code)
NN Outside of Massachusetts (not on list)
DD (Do not read) Don't know
RR (Do not read) Refused

S1aa. Is your home located in Massachusetts?

1 Yes GO TO S2
2 No THANK AND TERM
     RECORD AS TQS1aa
3 (Do not read) Don't know THANK & TERM. RECORD
     AS TQS1aa
R (Do not read) Refused THANK & TERM. RECORD
     AS REFUSED S1aa
I’d like to begin by asking some questions about health insurance coverage for people in your household.

S2. Can you answer questions about health insurance for people in your household?

1. Yes
2. No
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused

(IF CELL PHONE SAMPLE AND S2=2, D, R, THANK AND TERMINATE)

(IF S2=2, D, R AND LANDLINE SAMPLE; ASK S3)
S3. Is another adult available who could answer questions about health insurance?

1. Yes
   GET PERSON ON PHONE AND CONTINUE [SKIP TO INTRO1]
2. No
   SET UP CALL BACK.
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused

S4. How many people currently live or stay in your household? Please include anyone temporarily away for school or the armed services.

(PROBE: Include in this number, children, foster children, roomers, or housemates not related to you, college students living away while attending college and National Guard members who are deployed.)
(Do not include people who live or stay at another place most of the time, people in a correctional facility, nursing home, or residential facility, or people in the regular Armed Forces living somewhere else.)

________ people (RANGE 1-9)
10 10 or more
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused

(THANK AND TERMINATE)
I need some general information about the people in this household so that one person can be picked at random to talk about their access to health insurance.

ASK S6 TO S9 IN SUCCESSION FOR EACH MEMBER OF THE HOUSEHOLD  
(PN: Questions S6 – S9 can be used to create a “HH Roster” listing each person in HH)

S6. Starting with yourself, what is your age?  
(INTERVIEWER IF RESPONDENT DK/REFUSES AGE: I understand your reluctance to give your age, but this information is totally confidential. It is very important that we gather this information accurately to help improve health insurance coverage for Massachusetts’ families. IF RESPONDENT STILL DK/REFUSES AGE, ASK Q.S6a1)

_________ (AGE)  
RR (DO NOT READ) Refused

(ASK Q.S6a1 IF LL SAMPLE AND Q.S6 = DD OR RR)

S6a1. Could you please tell me if you are...?  
(READ LIST. ENTER ONE ONLY)

1 Less than 18 years of age  
2 18 years of age or older  
D (DO NOT READ) Don’t know  
R (DO NOT READ) Refused

(If S6<18 OR Q.S6a1 = 1, D, OR R; ASK S6A)

S6A. Is there someone available who is 18 or older?

1 Yes  
2 No  
D (DO NOT READ) Don’t know  
R (DO NOT READ) Refused

(THANK AND TERMINATE)

S6aa. RECORD RESPONDENT GENDER

1 Male  
2 Female
S6(b-j). And the next person’s age?
   (INTERVIEWER IF RESPONDENT DK/REFUSES AGE: I understand your reluctance to give other household members’ ages, but this information is totally confidential. It is very important that we gather this information accurately to help improve health insurance coverage for Massachusetts’ families. IF RESPONDENT STILL DK/REFUSES AGE, ASK Q.S6b1)

__________ years (ENTER AGE 1-110)
   00  Less than 1 year old
   DD (DO NOT READ) Don’t know
   RR (DO NOT READ) Refused

(ASK Q.S6b1 FOR EACH Q.S6b-j = DD OR RR)
S6b1. Could you please tell me if this person is…?
   (READ LIST. ENTER ONE ONLY)

   1  Less than 18 years of age
   2  18 years of age or older
   D  (DO NOT READ) Don’t know
   R  (DO NOT READ) Refused

IF Q.S6(b-j) = 18+ OR Q.S6b1 = 2, INSERT “person” and “male or female”
IF Q.S6(b-j) IS <18 OR Q.S6b1 = 1, INSERT “child” and boy or girl
S7(b-j). Is this (child/person) (a boy or a girl/male or female)?

   1  Male/Boy
   2  Female/Girl
   R  (DO NOT READ) Refused
What is this person’s relationship to you?

(DO NOT READ. ENTER ONE ONLY. RESPONDENT CAN PROVIDE UP TO ONE PARTNER AND FOUR PARENTS, GUARDIAN AND WARD SHOULD BE CODED BEFORE ANY OTHER RELATIONSHIP EXCEPT PARENT OR STEPPARENT OR CHILD/STEPCHILD/FOSTER CHILD, SO A GRANDPARENT AND GUARDIAN SHOULD BE CODED AS GUARDIAN, CODE 04)

(INTERVIEWER IF RESPONDENT REFUSES RELATIONSHIP: I understand your reluctance to give your relationship to other members of your household, but this information is totally confidential. It is very important that we gather this information accurately to help improve health insurance coverage for Massachusetts’ families. IF RESPONDENT STILL REFUSES RELATIONSHIP, THANK AND TERMINATE.)

<table>
<thead>
<tr>
<th>Code</th>
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<tr>
<td>01</td>
<td>Spouse (wife/husband)</td>
</tr>
<tr>
<td>02</td>
<td>Unmarried partner / significant other</td>
</tr>
<tr>
<td>03</td>
<td>Child / stepchild / foster child/ward</td>
</tr>
<tr>
<td>04</td>
<td>Parent / Stepparent / foster parent/guardian</td>
</tr>
<tr>
<td>05</td>
<td>Sibling / Stepsister / Stepbrother</td>
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<tr>
<td>07</td>
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</tr>
<tr>
<td>08</td>
<td>Son-in-law / Daughter-in-law</td>
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<tr>
<td>09</td>
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</tr>
<tr>
<td>10</td>
<td>Other relative</td>
</tr>
<tr>
<td>11</td>
<td>Employer</td>
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<tr>
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<td>Employee (maid, nanny, au pair, housekeeper, etc.)</td>
</tr>
<tr>
<td>13</td>
<td>Professional caregiver (nurse, aide, etc.)</td>
</tr>
<tr>
<td>14</td>
<td>Other non-relative</td>
</tr>
<tr>
<td>DD</td>
<td>(DO NOT READ) Don’t know</td>
</tr>
<tr>
<td>RR</td>
<td>(DO NOT READ) Refused</td>
</tr>
</tbody>
</table>
(ASK IF S6 >= 16)
S9. What is the highest level of school [you have/she has/he has] completed or the highest degree [you have/she has/he has] received?

(DO NOT READ. ENTER ONE ONLY)

1. Less than high school (grades 1-11, grade 12 but no diploma)
2. High school graduate or equivalent (e.g. GED)
3. Some college but no degree (incl. 2 year occupational or vocational programs)
4. Associates Degree (not occupation or vocational programs)
5. College graduate (e.g. BA, AB, BS)
6. Postgraduate (e.g. MA, MS, MEng, Med, MSW, MBA, MD, DDs, PhD, JD, LLB, DVM)

D (DO NOT READ) Don't know
R (DO NOT READ) Refused

(IF Q.S7=1 INSERT “he”; IF Q.S7=2, INSERT “she”, ELSE INSERT “they”)
(If S6(a-j) = >16 ASK)
S9a. [Are you /Is she /Is he] currently working for pay?

1. Yes, working
2. No, not working

D (DO NOT READ) Don’t know
R (DO NOT READ) Refused
S10. I will be asking some specific insurance coverage questions about one randomly chosen person from your household. For those questions my computer has selected [you/TARGET].
(I will be asking some specific questions about your insurance coverage)

INTERVIEWER RECORD

1   Respondent
2   Target

(P.N. – IF RANDOM PERSON CHOSEN IS TARGET AND Q.S6b1 = D OR R FOR THAT PERSON OR Q.S8b-j = RR FOR THAT PERSON, THANK AND TERMINATE)

S10a. What is the first name or initials of the person I selected?

   1   Answer given (SPECIFY) ______________
   R   Refused

IF AGE >=17, ASK Q.S11 AND IDENTIFY SPOUSE/PARTNER (S11=1 OR 2) IN THE ROSTER (TSPOUSE)
INSERT “is this person” IF Q.S10 = 2
IF TARGET IS RESPONDENT’S SPOUSE/PARTNER, GEN IN CODE 1 OR CODE 02 (RESPONDENTS WHO ARE ALSO TARGETS SHOULD BE ASKED THIS QUESTION IF Sba-j NE 01)
IF ONE PERSON HOUSEHOLD, (S4 =1) DO NOT SHOW CODE 2, LIVING WITH PARTNER)

S11. Are you (is this person) currently:

   1   Married
   2   Living with partner
   3   Divorced
   4   Separated
   5   Widowed
   6   Never Married
   D  (DO NOT READ) Don’t know
   R  (DO NOT READ) Refused
IF TARGET IS THE RESPONDENT, SKIP TO SETUP 1
(ASK Q.S12 OF EVERYONE EXCEPT FOR RESPONDENT)

S12(b-j). It would be helpful to know the relationship between the other members of your household and (INSERT NAME OR INITIALS FROM Q.S10a OR RELATIONSHIP FROM Q.S8[b-j])? What is the relationship of your (RELATIONSHIP FROM Q.S8[b-j] [INSERT AGE/GENDER FROM Q.S6[b-j] AND S7 [b-j] if multiple members with same relationship code] to the TARGET)?

(DO NOT READ, ENTER ONE ONLY, GUARDIAN AND WARD SHOULD BE CODED BEFORE ANY OTHER RELATIONSHIP EXCEPT PARENT OR STEPPARENT OR CHILD/STEPCHILD/FOSTER CHILD, SO A GRANDPARENT AND GUARDIAN SHOULD BE CODED AS GUARDIAN))

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</tr>
<tr>
<td>DD</td>
<td>(DO NOT READ) Don’t know</td>
</tr>
<tr>
<td>RR</td>
<td>(DO NOT READ) Refused</td>
</tr>
</tbody>
</table>
ASK S12-1 IF (S12(b-j) NE 04) AND (S8 NE 03 FOR TARGET) AND ((TAGE<18) OR S6A1=1 FOR TARGET)
S12-1. Are any members of your household the legal guardian or caretaker of (TARGET)?

1  Yes
2  No
D  (DO NOT READ) Don't know
R  (DO NOT READ) Refused

ASK IF Q.S12-1=1
S12-2. Which household member (or members) is (TARGET’s) legal guardian or caretaker?
(DO NOT READ, ALLOW MULTIPLE)
PN: SHOW HOUSEHOLD MEMBERS FROM S12 (b-j)

02 Household member 2
03 Household member 3
04 Household member 4
05 Household member 5
06 Household member 6
07 Household member 7
08 Household member 8
09 Household member 9
DD (DO NOT READ) Don’t know
RR (DO NOT READ) Refused

(PROGRAMMER NOTE: WE WOULD LIKE TO ADD A CHECK SCREEN TO GO BACK OVER THE ROSTER WITH RESPONDENT AND CONFIRM RELATIONSHIPS.)

[PN: ALL HH MEMBERS CODED AS GUARDIAN SHOULD = 04 IN S12]

SETUP1:
P.N. - Create the following variables to be used in remainder of survey

HH_COUNT – Number of people in household (S4)
TMARR – 1 if TARGET is married/partner; 0 otherwise
TPAR – 1 if TARGET is parent; 0 otherwise
TAGE – TARGET’s age
TFEM – 1 if TARGET is female; 0 otherwise
TFAM_COUNT – Number of people in TARGET’s family.
IF TAGE<26 & TMARR=0 & TPAR=0: TARGET+PARENTS+SIBLINGS<26 FROM ROSTER
IF TAGE<26 & (TMARR=1 OR TPAR=1): TARGET+SPOUSE+CHILDREN<26 FROM ROSTER
IF TAGE=>26: TARGET+SPOUSE+CHILDREN<26 FROM ROSTER

HEALTH INSURANCE- TARGET PERSON
H1. I am going to read you a list of different types of health insurance coverage. Please tell me if (you / TARGET) currently (have/has) any of the following types of insurance. Please exclude any health insurance plans that cover only ONE type of service, like plans for dental care or prescription drugs. (Do you/does TARGET) currently have (READ LIST)? IF RESPONDENT ASKS TO SKIP THROUGH INSURANCE QUESTIONS, SAY: I’m sorry, but I have to read all of the insurance categories.”

1 Yes
2 No
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

a. DELETED
b. Health insurance through (your/TARGET’s) work or union. (PROBE: This insurance could be through COBRA or, through a former employer or a retiree benefit.)
c. Health insurance through someone else’s work or union (Probe: This insurance could be through COBRA through a former employer or a retiree benefit.)
d. Medicare (PROBE: Medicare is the health insurance for persons 65 years old and over or persons with disabilities. For many people this is a red, white and blue card.)
f. Veteran’s Affairs, Military Health, TRICARE or CHAMPUS
g. DELETED
h. MassHealth or Medicaid (PROBE: This is a Massachusetts program for low- and moderate-income individuals families with children, seniors, and people with disabilities. You may know it as MassHealth Standard, CommonHealth, Family Assistance, CarePlus, or the Insurance Partnership or Small Business Employee Premium Assistance. (You/TARGET) may have coverage under MassHealth through a health insurance plan.)

i. DELETED IN 2015
j. DELETED IN 2014 Commonwealth Choice
p. DELETED IN 2014
q. Health Connector Plan This is insurance purchased through the Health Connector. (You/TARGET) would have coverage through a health insurance plan
k. A qualifying student health insurance plan? (PROBE: A QSHIP is a health insurance plan that is sponsored by a college or university.)
l. Health insurance bought directly by (you / TARGET) (PROBE: For example, bought directly from Blue Cross Blue Shield or another company or bought through an insurance broker.)
m. Health insurance bought directly by someone else

(ASK Q.H1ba IF Q.H1b = 1)
H1ba. Is this an individual policy or is it a family policy? (READ IF NECESSARY: The health insurance through (your/TARGET’s) work or union?)

1 Individual policy
2 Family policy (covers more than one person)
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused
(ASK Q.H1la IF H1I=1 IMMEDIATELY AFTER H1I)
H1la. Is this an individual policy or is it a family policy?
(READ IF NECESSARY: The health insurance through (your/TARGET’s) work or union?)

1 Individual policy
2 Family policy (covers more than one person)
D (DO NOT READ) Don't know
R (DO NOT READ) Refused

(ASK IF H1c=1 & TAGE<26)
H1ca. Is this through (your/TARGET’s) parent or guardian?
(READ IF NECESSARY: The health insurance through someone else’s work or union?)

1 Yes
2 No
D (DO NOT READ) Don't know
R (DO NOT READ) Refused

(Q.H1maa DELETED)

(ASK IF H1m=1)
H1ma. Is this an individual policy or is it a family policy?
(READ IF NECESSARY: The health insurance bought directly by someone else?)

1 Individual policy
2 Family policy (covers more than one person)
D (DO NOT READ) Don't know
R (DO NOT READ) Refused

(ASK IF H1m=1 & TAGE<26)
H1mb. Is this through (your/TARGET’s) parent or guardian?
(READ IF NECESSARY: The health insurance bought directly by someone else?)

1 Yes
2 No
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

(DELETE Q.H1N 4-3-14)
(ASK IF ALL IN H1=2, D, OR R)
INSERT “you” IF Q.S10 = 1
INSERT “TARGET” IF Q.S10 = 2
H2. Do (you/TARGET) currently have any other type of insurance? (DO NOT READ, ALLOW MULTIPLE)

1  Workers compensation for specific injury/illness
2  Employer pays for bills, but not an insurance policy
3  Family member pays out of pocket for any bills
4  Other Non Insurance Payment Source
5  Indian Health Service (IHS)
6  Free Care/Health Safety Net/Medical Hardship
7  Other Insurance (SPECIFY) __________
N  No other insurance
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused

(IF Q.H1 = 2, D OR R TO ALL AND Q.H2 = 1-4 ONLY, READ:)
For the purposes of this survey, we’ll assume that (you do/TARGET does) not have health insurance.”
NOW GO TO Q.H6
IF H2=5 ONLY SKIP TO H3C

(ASK Q.H3 IF Q.H1 = 2, D, R FOR ALL AND Q.H2 = N, D OR R)
INSERT “you do” IF Q.S10 = 1
INSERT “NAME/INITIALS/RELATIONSHIP does…” IF Q.S10 = 2
H3. Just to be sure I have this right, (you do/TARGET does) not have health insurance coverage. Is that correct?

1  Yes
2  No
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused
H3a. What insurance do (you/they) have? (DO NOT READ, ENTER ONE ONLY) (Probe: if you can, it might be helpful to look at (your/their) insurance card to help identify the type of insurance.)

01 DELETED
02 Health insurance through (your / TARGET’s) work or union
03 Health insurance through someone else’s work or union
04 Medicare
05 Railroad Retirement Plan
06 Veteran’s Affairs, Military Health, TRICARE or CHAMPUS
07 Indian Health Service
08 MassHealth or Medicaid
09 DELETED AND REPLACED IN 2015 Commonwealth Care or Connector Care
10 Student health plan
11 Health insurance bought directly by (you / TARGET)
12 Health insurance bought directly by someone else
13 Free Care/Health Safety Net/Medical Hardship
14 Workers compensation for specific injury/illness
15 Employer pays for bills, but not an insurance policy
16 Family member pays out of pocket for any bills
17 DELETED IN 2015
18 Other Non Insurance Payment Source
19 Other Insurance (SPECIFY) __________

DD (DO NOT READ) Don’t know
RR (DO NOT READ) Refused

(IF Q.H3a = 14-18, READ:) INSERT “you do” IF Q.S10 = 1
INSERT “TARGET does” IF Q.S10 = 2
For the purposes of this survey, we'll assume that (you do/TARGET does) not have health insurance.
NOW GO TO Q.H6
(ASK Q.H3b IF Q.H3a = DD OR RR)
INSERT “you/your” IF Q.S10 = 1
INSERT “they/their” IF Q.S10 = 2
H3b When (you/they) go to a doctor, health clinic, or hospital, does anyone else pay for some or all of (your / their) medical bills?

1 Yes
2 No
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

(ASK Q.H3c IF Q.H2=5 OR 6 OR IF Q.H3a = 07,14)
IF Q.H2 = 5 OR Q.H3a = 07, INSERT “Indian Health Service”
IF Q.H2=6 OR Q.H3a = 14, INSERT “Free Care/Health Safety Net/Medical Hardship”
INSERT “you receive/your/you” IF Q.S10 = 1
INSERT “TARGET receives/TARGET’s/they” IF Q.S10 = 2
H3c. I understand that (you receive / TARGET receives) services through the (Indian Health Service/Free Care/Health Safety Net/Medical Hardship) In addition to this, does anyone else pay for (your / TARGET’s) bills when (you/they) go to a doctor or hospital?

1 Yes
2 No
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

(IF Q.H3c = 2, D, OR R, READ:)
IF Q.H1g = 1 OR Q.H3a = 07, INSERT “Indian Health Service”
IF Q.H3a = 14, INSERT “Free Care/Health Safety Net/Medical Hardship”
INSERT “you do” IF Q.S10 = 1
INSERT “TARGET does” IF Q.S10 = 2
For the purposes of this survey, (Indian Health Service/Free Care/Health Safety Net/Medical Hardship) is not considered comprehensive insurance. For our survey, we’ll assume that (you do/TARGET does) not have health insurance.
NOW GO TO Q.H6
H4. And who is that?

(ASK Q.H4 IF Q.H3b=1 OR Q.H3c = 1)

(DELETES, ENTER ONE ONLY)

01 DELETED
02 Health insurance through (your / TARGET's) work or union
03 Health insurance through someone else’s work or union
04 Medicare
05 Railroad Retirement Plan
06 Veteran’s Affairs, Military Health, TRICARE or CHAMPUS
07 Indian Health Service
08 MassHealth or Medicaid
09 DELETED AND REVISED in 2015 Commonwealth Care or Connector Care
10 DELETED 2014 Commonwealth Choice
11 Student health plan
12 Health insurance bought directly by (you / TARGET)
13 Health insurance bought directly by someone else
14 Free Care/Health Safety Net/Medical Hardship
15 Workers compensation for specific injury/illness
16 Employer pays for bills, but not an insurance policy
17 Family member pays out of pocket for any bills
19 DELETED in 2015
20 DELETED
21 DELETED in 2015
22 Health Connector Plan
18 Other Non Insurance Payment Source
97 Other Insurance (SPECIFY) __________
DD (DO NOT READ) Don’t know
RR (DO NOT READ) Refused
(IF Q.H4 = 07 OR 14-18, READ:)
INSERT "you do" IF Q.S10 = 1
INSERT "TARGET does" IF Q.S10 = 2
For purposes of this survey, we'll assume (you do/TARGET does) not have insurance.
NOW GO TO Q.H6

(ASK Q.H-4a IF Q.H3a = 2 OR 3 OR Q.H4 = 2 OR 3)
INSERT "your" IF Q.S10 = 1
INSERT "TARGET's" IF Q.S10 = 2
H4a. Is this an individual policy or is it a family policy?
(READ IF NECESSARY IF Q.H3a OR Q.H4 = 2: The health insurance through
(your/TARGET's) work or union?)
(READ IF NECESSARY IF Q.H3a OR Q.H4 = 3: The health insurance through
someone else's work or union?)
1 Individual policy
2 Family policy (covers more than one person)
D (DO NOT READ) Don't know
R (DO NOT READ) Refused

(ASK Q.H4b IF Q.H3a OR Q.H4 = 13 AND IF TARGET<26 [Q.S6 <26 OR
Q.S6(b-j) <26])
INSERT "your" IF Q.S10 = 1
INSERT "TARGET's" IF Q.S10 = 2
H4b. Is this through (your/TARGET's) parent or guardian?
(READ IF NECESSARY IF H3a or H4 = 13: The health insurance bought directly by
someone else?)
(READ IF NECESSARY IF H3a or H4 = 3: The health insurance through someone else's
work or union?)
1 Yes
2 No
D (DO NOT READ) Don't know
R (DO NOT READ) Refused

SETUP2
P.N.: CREATE VARIABLES FOR INSURANCE STATUS to use in rest of survey

TINS for 2015
1 TARGET is insured (Q.H1 b,c,d,f,h,i,k,l,m,q= 1 OR H2 = 7 OR
H3a = 02-06, 08,09,11-13, 22, 97 OR H4 = 02-06, 08,09,11-13, 22, 97)
0 NOT insured [(Q.H1 = 2, D, OR R TO ALL AND Q.H2 = 1-4 AND
H3 = 2] OR [Q.H3a = 14-17,18, D, R OR Q.H3c = 2, D, OR R OR Q.H4 = 07
OR 14-18 OR D OR R])

P.N.: CREATE VARIABLES FOR INSURANCE STATUS TO USE IN REST OF SURVEY
(ASK IF TINS=1)
IF TAGE>=1 USE 1\textsuperscript{st} VERBIAGE IN PARENS
IF TAGE<1 USE 2\textsuperscript{nd} VERBIAGE IN PARENS
INSERT "Have you" IF Q.S10 = 1
INSERT "Has TARGET " IF Q.S10 = 2

H5. [(Have you/Has TARGET) had insurance coverage for all of the past 12 months?]
[Has TARGET had insurance coverage for all of the time since he/she was born?]

1 Yes
2 No
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused
H5a. How many years has it been since [you/TARGET] [were/was] last uninsured? (READ LIST IF NECESSARY)
   1  1 year
   2  2 years
   3  3 years
   4  4 years
   5  5 years
   6  More than five years
   7  Never uninsured
   D  (DO NOT READ) Don’t Know
   R  (DO NOT READ) Refused

H6a. [Were you/Was TARGET] uninsured just before [you/TARGET] obtained [your/their] current insurance coverage or did [you/TARGET] have some other type of health insurance coverage?

   1  Uninsured
   2  Had some other type of health insurance
   3  (DO NOT READ) Always had the same coverage
   D  (DO NOT READ) Don’t Know
   R  (DO NOT READ) Refused
H6. How many months during the past 12 months were (you / TARGET) without health insurance coverage?

__________ months (RANGE 1-12)

00 Less than 1 month
DD (DO NOT READ) Don't know
RR (DO NOT READ) Refused

H7. How long has it been since (you/TARGET) had any health insurance? (PROBE FOR MONTHS IF LESS THAN 2 YEARS)

01 ANSWER GIVEN IN YEARS __________# (2-50) years
02 ANSWER GIVEN IN MONTHS __________# (1-24) months

LL Less than 1 month
NN NEVER HAD COVERAGE
DD (DO NOT READ) Don't know
RR (DO NOT READ) Refused
I’m going to read a list of reasons that people sometimes give for why they don’t have health insurance. Please tell me if these are reasons that (you/target) (do/does) not have health insurance? How about (INSERT)?

1 Yes
2 No
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

a. The person in family who had health insurance lost job or changed employers
b. The person in family who had health insurance is no longer part of the family because of divorce, separation or death
c. Family member’s employer does not offer coverage or not eligible for employer’s coverage
d. Lost eligibility for MassHealth
e. Cost is too high
g. Don’t need insurance
h. Don’t know how to get insurance
i. Traded health insurance for another benefit or higher pay
j. Some other reason (SPECIFY) __________________
H9. Thinking back to the last time (you/TARGET) had health insurance, what type of insurance did (you/TARGET) have? (DO NOT READ LIST. UP TO 5 RESPONSES ALLOWED)

01 DELETED
02 Health insurance through (your / TARGET's) work or union
03 Health insurance through someone else’s work or union
04 Medicare
05 Railroad Retirement Plan
06 Veteran's Affairs, Military Health, TRICARE or CHAMPUS
07 Indian Health Service
08 MassHealth or Medicaid
09 Commonwealth Care
10 Commonwealth Choice
11 Student health plan
12 Health insurance bought directly by (you / TARGET)
13 Health insurance bought directly by someone else
14 Free Care/Health Safety Net/Medical Hardship
15 Temporary coverage from the Health Connector and MassHealth
16 Connector Care
17 Former Medical Security Program
18 Health Connector Plan
19 Other Non Insurance Payment Source
95 Other Insurance#1 (SPECIFY) __________
96 Other Insurance#2 (SPECIFY) __________
97 Other Insurance#3 (SPECIFY) __________
98 Other Insurance#4 (SPECIFY) __________
99 Other Insurance#5 (SPECIFY) __________
DD (DO NOT READ) Don't know
RR (DO NOT READ) Refused
H10. (Do you/does TARGET) have a private long-term care insurance policy, that is, insurance that pays for nursing home or home care services over a long period of time?

1 Yes
2 No
D (DO NOT READ) Don’t Know
R (DO NOT READ) Refused

H11. What would you say is the major reason (you do/TARGET does) not have long-term care insurance? (ACCEPT ONE RESPONSE ONLY)

01 Costs too much
02 Don’t think it is needed
03 Medicare will cover long-term care
04 Medicaid will cover long-term care
05 Family will take care of (my/TARGET’s) long-term care needs
06 Have sufficient resources to take care of long-term care
08 Don’t think current long-term care policies cover enough
10 Didn’t think of it
11 Too young to purchase
12 Too old to purchase
97 Other (Specify)_______
DD (DO NOT READ) Don’t Know
RR (DO NOT READ) Refused

(Q.S13 DELETED IN 2015)

(SECTION I DELETED IN 2015)

(SETUP3 VARIABLES DELETED IN 2015)
EMPLOYMENT

INSTRUCTIONS FOR SEQUENCE E1 TO E12:

ASK IF TAGE>14

My next questions ask about employment.

I’d like to ask about (you/TARGET)

INSERT “Are you” IF PERSON ASKING ABOUT IS RESPONDENT
INSERT “Is TARGET” IF PERSON ASKING ABOUT IS “TARGET PERSON”

E1. (Are you /Is TARGET) currently…

1 Self-employed
2 Employed by military
3 Employed by someone else
4 Unpaid worker for a family business
5 Retired
6 Unemployed and looking for work
7 Unemployed and not looking for work
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

(ASK Q.E2 IF Q.E1 = 1-3)
INSERT “Do you” IF PERSON ASKING ABOUT IS RESPONDENT
INSERT “Does TARGET” IF PERSON ASKING ABOUT IS “TARGET PERSON”

E2. (Do you/Does TARGET) have more than one job, including part-time, evening or weekend work?

1 Yes
2 No
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

(ASK Q.E3 IF Q. E2 = 1)
INSERT “Do you” IF PERSON ASKING ABOUT IS RESPONDENT
INSERT “Does TARGET” IF PERSON ASKING ABOUT IS “TARGET PERSON”

E3. Altogether, how many jobs (do you/does TARGET) have?

1 2 jobs
2 3 jobs
3 4 or more jobs
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused
(ASK Q.E4 IF Q.E1 = 1-3)
INSERT "Do you/your/you/work" IF PERSON ASKING ABOUT IS RESPONDENT
INSERT "Does TARGET/their/he/works" IF PERSON ASKING ABOUT IS "TARGET PERSON" AND Q.S7 = 1
INSERT "Does TARGET/their/she/works" IF PERSON ASKING ABOUT IS "TARGET PERSON" AND Q.S7 = 2
E4. How many hours per week (do you /does TARGET) usually work at (your/their) (READ IF E2=1: main) job? IF NEEDED: By main job, I mean the one at which (you/he/she) usually (work/works) the most hours.

__________ hours (1-100)
DD (DO NOT READ) Don’t know
RR (DO NOT READ) Refused

(ASK Q.E5 IF Q.E2 = 1)
INSERT "Do you/your" IF PERSON ASKING ABOUT IS RESPONDENT
INSERT "Does TARGET/their" IF PERSON ASKING ABOUT IS "TARGET PERSON"
E5. How many hours per week (do you /does TARGET) usually work at (your/their) other jobs?

__________ hours (ENTER # OF HOURS 1-100)
DD (DO NOT READ) Don’t know
RR (DO NOT READ) Refused

(ASK Q.E6 IF Q.E1=1-3)
INSERT "have you/your" IF PERSON ASKING ABOUT IS RESPONDENT
INSERT "has TARGET/their" IF PERSON ASKING ABOUT IS "TARGET PERSON"
E6. How long (have you/has TARGET) worked for (your/their) (READ IF E2=1: main) job? PROBE FOR MONTHS IF LESS THAN 2 YEARS

01 ANSWER GIVEN IN YEARS (ENTER # OF YEARS 2-60)
02 ANSWER GIVEN IN MONTHS (ENTER # OF MONTHS 1-24)
LL Less than 1 month
DD (DO NOT READ) Don’t know
RR (DO NOT READ) Refused
E7. Counting all locations where this employer operates, are there more than 50 people working for (your/TARGET's) employer?
   (Including (you/TARGET) are there more than 50 people working for this business?)
   
   1 Yes
   2 No
   D (DO NOT READ) Don’t know
   R (DO NOT READ) Refused

E8. Which category best represents the total number of persons who work for (your/TARGET's) employer/business? Would it be…?

   1 Just one
   2 Between 2 and 10
   3 Between 11 and 50
   D (DO NOT READ) Don’t know
   R (DO NOT READ) Refused

E9. Which category best represents the total number of persons who work for (your/TARGET's) employer/business? Would it be…?

   1 Between 51 and 100
   2 Between 101 and 500
   3 Between 501 and 1000
   4 Over 1000
   D (DO NOT READ) Don’t know
   R (DO NOT READ) Refused
(ASK Q.E10 IF TESI = 0 AND E1 = 1 – 3)
INSERT “you work/your” IF PERSON ASKING ABOUT IS Respondent
INSERT “TARGET works/their” IF PERSON ASKING ABOUT IS “TARGET PERSON”
E10. Does the place where (you work/TARGET works) at (your/their) (main) job offer health insurance as a benefit to any of its employees? INTERVIEWER: ASK ABOUT PRIMARY EMPLOYER IF HAVE MULTIPLE EMPLOYERS

1  Yes
2  No
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused

(ASK E11 IF E10=1,D,R)
INSERT “Are you” and “in your” IF PERSON ASKING ABOUT IS Respondent
INSERT “Is he/she” and “in his/her” IF PERSON ASKING ABOUT IS “TARGET PERSON”
E11. (Are you /Is TARGET offered health insurance through (your/their) work? (PROBE: Could (you/they) get health insurance through (your/their) work?)

1  Yes
2  No
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused

(ASK E12 IF TESI=1 OR IF E11=1, D, R)
(IF TARGET AND TESI=1 AND H1ba=1,D,R “Earlier you mentioned that…” AND INSERT “you/your” IF PERSON ASKING ABOUT IS Respondent
INSERT “TARGET/their” IF PERSON ASKING ABOUT IS “TARGET PERSON”
(IF TARGET AND TESI=1 AND H1ba=1,D,R OR IF E11=1,D,R, ASK “Could dependents be covered under that health insurance.”)
E12. Earlier you mentioned that (you / TARGET) had health insurance coverage through (your/their) employer. Could dependents be covered under that health insurance?

1  Yes
2  No
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused
ASK IF TAGE OR S6 > 16 or S6a1 = 2
INSERT “Are you” IF PERSON ASKING ABOUT IS RESPONDENT
INSERT “Is TARGET” IF PERSON ASKING ABOUT IS “TARGET PERSON”
E13. (Are you/Is TARGET) a veteran of the United States military?

1 Yes
2 No
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

(ASK EVERYONE)
INSERT “Are you” IF PERSON ASKING ABOUT IS RESPONDENT
INSERT “Is TARGET” IF PERSON ASKING ABOUT IS “TARGET PERSON”
E14. (Are you/Is TARGET) currently a full-time student?
(IF NECESSARY: greater than three-fourths time)?

1 Yes
2 No
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

ACCESS, USE AND COST

(ASK EVERYONE)
INSERT “your/you/go/are/need” IF PERSON ASKING ABOUT IS RESPONDENT
INSERT “TARGET’s/goes/he/she/is/his/her/needs” IF PERSON ASKING ABOUT IS “TARGET PERSON”
INSERT “they/are/need/their” IF PERSON IS TARGET & DO NOT KNOW GENDER
A1. My next questions ask about [your/ TARGET’s/this person’s] recent health care experiences. Is there a place where [you/ TARGET] usually [go/goes] when [you/(he/she)/they] [are/is] sick or when [you/(he/she)/they] (need/needs) advice about [your/(his/her)/their] health?

1 Yes
2 No
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused
A2. What kind of place is it? Is it….? (READ LIST. ENTER ONE ONLY)

1 A doctor’s office or private clinic
2 A community health center or other public clinic
3 A hospital outpatient department
4 A hospital emergency room
5 An urgent care center that is not part of a community health center
6 Or, some other place
7 (DO NOT READ) Doesn’t go to one place most often
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

(ASK ALL)

INSERT “you” IF Q.s10=1
INSERT “TARGET” If Q.s10=2
INSERT “did you” IF Q.S10 = 1
INSERT “did he/she” IF Q.S10 = 2
INSERT “themselves/did they/their” IF PERSON IS TARGET & DO NOT KNOW GENDER

SCRAMBLE LIST WITH f ALWAYS LAST

A2a. When (you/TARGET) last chose a doctor or other health care provider (for himself/herself/for themselves), where (did you/did {he/she}/did they) go to get information. (Did you/Did {he/she}/Did they) get information (INSERT)…?

1 Yes
2 No
3 (DO NOT READ) Did not chose a provider
D (DO NOT READ) Don’t Know
R (DO NOT READ) Refused

a. From (your/his/her/their) health plan
b. From a doctor or other health care provider
c. From friends or relatives
d. From a state or government agency
e. From internet websites
f. From somewhere else (SPECIFY ____________________)
A2b. I’m going to read a list of different factors people may consider in choosing a doctor or other health care provider. For each one, please tell me if it was a major factor, a minor factor, or not a factor for (you/TARGET/this person) the last time (you/he/she/they) chose a doctor or other health care provider (for yourself/for himself/for herself/for themselves). Was (INSERT) a...?

(READ LIST. ENTER ONE ONLY)

1. Major factor
2. Minor factor
3. Not a factor
4. (DO NOT READ) Do not choose a provider
D. (DO NOT READ) Don’t know
R. (DO NOT READ) Refused

a. the cost of care
b. the quality of care
c. the doctor or other provider’s ranking or rating

(ASK EVERYONE)
INSERT “you” IF PERSON ASKING ABOUT IS RESPONDENT
INSERT “TARGET” IF PERSON ASKING ABOUT IS “TARGET PERSON”

A3. The next questions are about the health care [you/ TARGET/this person] received in the past 12 months. In the past 12 months, how many times did [you/ TARGET/this person] receive care in a hospital emergency room?

(READ LIST IF NECESSARY. ENTER ONE ONLY)

0. None
1. 1 time
2. 2 times
3. 3 times
4. More than 3 times
D. (DO NOT READ) Don’t know
R. (DO NOT READ) Refused
A3a. The last time (you/TARGET/this person) went to a hospital emergency room, was it for a condition that (you/TARGET/TARGET’S parent/this person/this person’s parent) thought could have been treated by a regular doctor if he or she had been available?

1   Yes
2   No
D   (DO NOT READ) Don’t know
R   (DO NOT READ) Refused

A3b. I’m going to read you a list of reasons why some people go to the emergency room. Please tell me if any of these were important reasons for (your/TARGET’S) last visit to a hospital emergency room. (INSERT) Was this an important reason?

1   Yes
2   No
D   (DO NOT READ) Don’t know
R   (DO NOT READ) Refused

a. (You were/TARGET was/TARGET’s parent was) unable to get an appointment at the doctor’s office or clinic as soon as (you/TARGET) thought one was needed
b. (You/TARGET) needed care after normal operating hours at the doctor’s office or clinic
c. (You/TARGET/TARGET’S parent) owed money to the doctor’s office or clinic
d. It was more convenient to go to the hospital emergency room
In the past 12 months, how many times did [you/ TARGET] visit a general doctor who
treats a variety of illnesses? For example, a doctor (or pediatrician) in general
practice, family medicine or internal medicine. Please do not include care you received
when you were hospitalized overnight or in hospital emergency rooms.

(READ LIST IF NECESSARY. ENTER ONE ONLY)

0 None
1 1 time
2 2 times
3 3 times
4 More than 3 times
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

(ASK ALL)

(READ LIST IF NECESSARY. ENTER ONE ONLY)

0 None
1 1 time
2 2 times
3 3 times
4 More than 3 times
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused
(ASK Q.A5a IF Q.A5 = 1-4 or Q.A5aa. = 1-4)
(If only A5 = 1 OR A5 = 1, INSERT "Was this visit”; IF A5 AND A5aa=1 OR
A5=2-4 OR A5aa=2-4 INSERT "Were any of those visits")
INSERT “or midwife” ONLY IF TFEM = 1 AND Q.S6 OR Q.S6(b-j) >/=12
A5a. (Was this visit/Were any of those visits) (IF TFEM=0) to a general doctor, nurse
practitioner or physician’s assistant) (IF TFEM=1) to a general doctor, nurse
practitioner, physician’s assistant [or midwife]) for a check-up, physical examination or
for other preventive care?

1  Yes
2  No
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused

(ASK Q.A5b IF Q.A5 = 1-4 or Q.A5aa. = 1-4)
INSERT “you” IF PERSON ASKING ABOUT IS RESPONDENT
INSERT “TARGET” “he/she” IF PERSON ASKING ABOUT IS “TARGET PERSON”
IF TAGE<18 OR TAGE2=1 INSERT "TARGET’s parent"
INSERT “or midwife” ONLY IF TFEM = 1 AND Q.S6 OR Q.S6(b-j) >/=12
A5b. Thinking about all of the health care that (you/TARGET) received from (IF TFEM=0) a
general doctor, nurse practitioner or physician’s assistant) (IF TFEM=1) to a general
doctor, nurse practitioner, physician’s assistant [or midwife]) in the past 12 months,
would (you/he/she/target’s parent) say that the quality of care (you/he/she) received
was…? (READ LIST. ENTER ONE ONLY)

1  Excellent,
2  Very good,
3  Good,
4  Fair, or
5  Poor
N  (DO NOT READ) Did not receive care
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused
In the past 12 months, did [you/ TARGET] visit a specialist? Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors and others who specialize in one area of health care. Please do not include care [you/ TARGET] received when [you/ TARGET] were hospitalized overnight or in hospital emergency rooms.

1. Yes
2. No
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

Thinking about all of the health care that (you/TARGET) received from specialists in the past 12 months, would (you/he/she/they/TARGET’s parent) say that the quality of that care (you/TARGET) received was…? (READ LIST. ENTER ONE ONLY)

1. Excellent,
2. Very good,
3. Good,
4. Fair, or
5. Poor
N (DO NOT READ) Did not receive care
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

In the past 12 months, did (you/ TARGET) visit a mental health professional such as a psychiatrist, psychologist, psychiatric nurse, or clinical social worker?

1. Yes
2. No
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused
A6bb. Thinking about all of the health care that (you/TARGET) received from mental health professionals in the past 12 months, would (you/he/she/they/TARGET's parent) say that the quality of care (you/he/she) received was…? (READ LIST. ENTER ONE ONLY)

1 Excellent,
2 Very good,
3 Good,
4 Fair, or
5 Poor
N (DO NOT READ) Did not receive care
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

A7. In the past 12 months, did [you/ TARGET] see a dentist or a dental hygienist?

1 Yes
2 No
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

A8. In the past 12 months, did [you/ TARGET] take any prescription drugs?

1 Yes
2 No
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused
A9. Still thinking about the past 12 months, was there any time that [you/ TARGET/ this person did (INSERT)?

1  Yes
2  No
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

a. Not fill a prescription for medicine (for TARGET/for themselves) because of cost
b. Not get doctor care that (you/TARGET/this person) needed because of cost
d. Not get specialist care that (you/TARGET/this person) needed because of cost (IF NEEDED: Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors and others who specialize in one area of health care.)
e. Not get mental health care or counseling that (you/TARGET/this person) needed because of cost
f. Not get dental care that (you/TARGET/this person) needed because of cost
(ASK EVERYONE)
(If TAGE<18 or TAGE2=1 INSERT "TARGET'S parent")
INSERT “You were” "you" "your" IF PERSON ASKING ABOUT IS RESPONDENT
INSERT "TARGET was" “TARGET” IF PERSON ASKING ABOUT IS "TARGET
PERSON"
INSERT “this person has/this person/this person was” IF DO NOT HAVE
NAME/INITIAL FOR TARGET

(SCRAMBLE)
A9b. Next, I’m going to read you a list of problems some people experience when they try to
get health care. Please tell me if (you have/TARGET has/this person has/this person's
parent has) had these problems in the past 12 months. (INSERT). Has this happened
to (you/TARGET/this person) in the past 12 months?

1  Yes
2  No
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused

a. (You were/TARGET was/this person was/this person's parent was) unable to get an
appointment at a doctor's office or clinic as soon as (you/TARGET/this person/this
person's parent) thought one was needed

d. (You were/TARGET was/this person was/this person's parent was) unable to get an
appointment with a specialist as soon as (you/TARGET/this person/TARGET's
parent/this person's parent) thought one was needed

b. (You were/TARGET was/this person was/TARGET’s parent was/this person’s parent
was) told by a doctor’s office or clinic that they weren’t accepting patients) [IF TINS=1
with (your/TARGET’s) type of health insurance/IF INS=0 without health insurance

c. (You were/TARGET was/This person was/TARGET’s parent was/This person’s parent
was) told by a doctor’s office or clinic that they weren't accepting new patients.
A10. "My next questions are about the health care costs that [you/(your family)/TARGET/TARGET's family] had in the past 12 months. First, I'd like to ask about how much was spent "out of pocket" for health care in the past 12 months for [you/TARGET] (and your family/and [his/her] family). "Out of pocket" is the amount of money you pay that is not covered by any insurance or special assistance that you might have. It does not include any premiums that you pay for your health insurance or any health care costs that will be reimbursed. Please include costs for prescription medicines, dental and vision care, and all other medical expenses, including for doctors, hospitals, tests and equipment. Please include co-pays in your estimate. Finally, please include costs that are covered by a flexible spending account.

"How much was spent "out of pocket" for health care in the past 12 months for [you/TARGET] (and your family/and [his/her] family)? Was it....?"

(READ LIST. ENTER ONE ONLY)

1 Less than $200
2 $200 to under $500
3 $500 to under $1,000
4 $1,000 to under $3,000
5 $3,000 to under $5,000
6 $5,000 or more
7 (DO NOT READ) DID NOT USE CARE
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused
A11c. In the past 12 months, did (you/TARGET)/(your family/TARGET’s family) have any problems paying or (were you/was he/she)/(was your family/was his/her family) unable to pay any medical bills? This would include doctor or hospital bills, dentist bills, bills for prescription drugs, nursing home bills, or home care bills.

1  Yes
2  No
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused

(ASK Q.A11e IF A11c = 1)
(SCRAMBLE A-F, ASK G LAST)
A11e. What types of medical services led to those medical bills? Was it (INSERT)...

1  Yes
2  No
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused

a. Emergency care
b. An on-going treatment for a chronic or long-term health condition or health problem
c. A medical test or surgical procedure
d. The birth of a child
e. Dental care
f. Prescription drugs
g. Something else (SPECIFY)
A11f. (Do you/Does TARGET) (Do you and your family/Does TARGET and [his/her] family) currently have any medical bills that are being paid over time? This could include medical bills (you are/target is/target’s parent is) paying off with your credit card, through personal loans, or bill paying arrangements with hospitals or other providers.

1   Yes
2   No
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused

(ASK A11g IF A11f = 1)
A11g. How much are the medical bills that are being paid off over time?
PROBE: Your best estimate is fine.

______________ AMOUNT ($1-$9999)
LL $10,000 or more
DD (DO NOT READ) Don’t know
RR (DO NOT READ) Refused

(ASK A11h IF A11g = DD OR RR)
A11h. Was it...?
(READ LIST. ENTER ONE ONLY)

1   Less than $2,000
2   $2,000 to under $4,000
3   $4,000 to under $8,000
4   $8,000 to under $10,000
5   $10,000 or more
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused
A11i. When (were you/were you and your family/was TARGET/was TARGET and his/her family) first unable to pay the medical bills that (you are/target is/target’s parent is) now paying off over time? Was it within the last year, a year to less than 2 years ago, 2 to less than 5 years ago, or 5 years ago or more?

1. Within the last year  
2. A year to less than 2 years ago  
3. 2 to less than 5 years ago  
4. 5 years ago or more  
D (DO NOT READ) Don’t know  
R (DO NOT READ) Refused

A11j. In the past 12 months, (have you/has TARGET/have you and your family/has target and [his/her/their]/has TARGET’s parents)  

1. Yes  
2. No  
D (DO NOT READ) Don’t know  
R (DO NOT READ) Refused

a. cut back on savings or had to take money out of savings to pay medical bills  
b. had to borrow or take on credit card debt to pay medical bills  
c. been contacted by a collection agency about owing money for medical bills  
d. had to declare bankruptcy because of medical bills
At any time in the past 12 months, did (you/ TARGET) (and your family/and (his/her) family) have any problem paying mortgage, rent or utility bills?

1. Yes
2. No
D. (DO NOT READ) Don’t know
R. (DO NOT READ) Refused

People sometimes try different approaches to lower their health care spending, such as using lower cost providers, going without needed care, changing insurance coverage or going without coverage, or trying harder to stay healthy. Over the past year, have [(you/TARGET)/(you and your family)/(TARGET and TARGET’s family)] tried to lower [your/TARGET’s] health care spending?

1. Yes
2. No
D. (DO NOT READ) Don’t know
R. (DO NOT READ) Refused
A13. I’m going to read a list of different approaches people sometimes use to try to lower their health care spending. For each one, please tell me whether [(you/TARGET)/(you and your family)/(TARGET and TARGET’s family)] have used that approach over the past year to try to lower health care spending? Did [you/they] (or someone in your family/or someone in their family) (INSERT)…?

1. Yes
2. No
D (DO NOT READ) Don’t Know
R (DO NOT READ) Refused

- a. Change to a lower cost doctor or other health care provider
- b. Go without needed health care
- c. Switch to a lower cost health insurance plan
- d. Go without health insurance coverage
- e. Try harder to stay healthy, for example by eating better or exercising more or by stopping smoking
- f. Something else (SPECIFY) __________
HEALTH STATUS

My next questions are about (your/TARGET’s) health.

(ASK EVERYONE)
INSERT “your” IF PERSON ASKING ABOUT IS RESPONDENT
INSERT “TARGET’s” IF PERSON ASKING ABOUT IS “TARGET PERSON”
HS1. Would you say (your / TARGET’s) health, in general, is excellent, very good, good, fair, or poor?

1   Excellent
2   Very good
3   Good
4   Fair
5   Poor
D   (DO NOT READ) Don’t know
R   (DO NOT READ) Refused

(ASK EVERYONE)
INSERT “Are you/your” IF PERSON ASKING ABOUT IS RESPONDENT
INSERT “Is TARGET/his/her” IF PERSON ASKING ABOUT IS “TARGET PERSON”
HS2. (Are you/ Is TARGET) limited in any way in (your/his/her) activities because of a physical, mental, or emotional problem?

1   Yes
2   No
D   (DO NOT READ) Don’t know
R   (DO NOT READ) Refused
(ASK EVERYONE)
INSERT "Are you" IF PERSON ASKING ABOUT IS RESPONDENT
INSERT "Is TARGET" IF PERSON ASKING ABOUT IS "TARGET PERSON"

D1. (Are you/IsTARGET) Hispanic or Latino?

   1. Yes
   2. No
   D (DO NOT READ) Don’t know
   R (DO NOT READ) Refused

(ASK EVERYONE)
INSERT "your" IF PERSON ASKING ABOUT IS RESPONDENT
INSERT "TARGETs" IF PERSON ASKING ABOUT IS “TARGET PERSON”

D2. Which one or more of the following would you say is (your/TARGETs) race?
(READ LIST. ENTER ALL THAT APPLY)

   1. White
   2. Black or African American
   3. Asian
   4. Native Hawaiian or Other Pacific Islander
   5. American Indian or Alaska Native
   7. Or some other race (SPECIFY)____________
   D (DO NOT READ) Don’t know
   R (DO NOT READ) Refused
D3. Which one of these groups would you say best represents (your/TARGETs) race?

PN: ONLY INCLUDE RESPONSES FROM D2

1. White
2. Black or African American
3. Asian
4. Native Hawaiian or Other Pacific Islander
5. American Indian or Alaska Native
6. Or some other race (SPECIFY) ___________
7. (DO NOT READ) Don't know
8. (DO NOT READ) Refused

D4. Which best describes (your/TARGETs) ancestry or heritage? Would you say

(READ LIST)

01. Puerto Rican
02. Dominican
03. Mexican
04. Salvadorian
05. Chinese
06. Filipino
07. Cambodian
08. Vietnamese
09. Japanese
10. Indian (Asian)
94. Other Central American (SPECIFY) ___________
95. Other South American (SPECIFY) ___________
96. Other Asian (SPECIFY) ___________
97. Some other ancestry or heritage (SPECIFY) ___________
98. (DO NOT READ) Don't know
99. (DO NOT READ) Refused
D16. Is the phone number I have reached you on a cell phone number?

1  Yes  
2  No  
D  (DO NOT READ) Don’t know  
R  (DO NOT READ) Refused

D16a. Excluding cell phone numbers or phone numbers that are strictly used for business purposes how many landline or voice over internet phone numbers can be used to contact your household?

(IF NECESSARY: We need this information to determine whether your household could have been reached on different phone numbers for the survey)

__________ (0-3)  
4  four or more  
D  (DO NOT READ) Don’t know  
R  (DO NOT READ) Refused

(INsert “and other adults 18 or older in your household” IF S6(b-j) =>18 OR S6b1=2)

D16b. And how many working cell phones do you (and other adults 18 or older in your household) use?

_________________ (0-9)  
10  10 or more  
D  (DO NOT READ) Don’t know  
R  (DO NOT READ) Refused

(ASK EVERYONE)  
INSERT “Do you/your” IF PERSON ASKING ABOUT IS RESPONDENT  
INSERT “Does TARGET/their” IF PERSON ASKING ABOUT IS “TARGET PERSON”

D10. Next I have a few more questions about your residence. Is this residence?

(INTERVIEWER: READ LIST. ENTER ONE RESPONSE.)

1  Owned by or being bought by you or someone in your household  
2  Rented for cash  
3  Occupied without payment of rent  
D  (DO NOT READ) Don’t know  
R  (DO NOT READ) Refused
(ASK EVERYONE)
INSERT "Were you" IF PERSON ASKING ABOUT IS RESPONDENT
INSERT "Was TARGET" IF PERSON ASKING ABOUT IS "TARGET PERSON"
D12. (Were you/Was TARGET) born in the United States?

1  Yes
2  No
  D  (DO NOT READ) Don't know
  R  (DO NOT READ) Refused

(ASK Q.D13 IF Q.D12 = 2)
INSERT "Are you" IF PERSON ASKING ABOUT IS RESPONDENT
INSERT "Is TARGET" IF PERSON ASKING ABOUT IS "TARGET PERSON"
D13. (Are you/Is TARGET) a citizen of the United States?

1  Yes
2  No
  D  (DO NOT READ) Don't know
  R  (DO NOT READ) Refused

(ASK D12=2,D,R))
D14. [Do you/Does target] speak a language other than English at home?

1  Yes
2  No
  D  (DO NOT READ) Don't know
  R  (DO NOT READ) Refused

(ASK IF Q.D14=1)
D15. What is that language?

Specify ________________
IN1. My final questions are about income. This information is important because it helps the state understand how to make health care more affordable.

(IF TAGE<26 & TMARR=0 & TPAR=0 & RESPONDENT IS PARENT AND RESPONDENT IS MARRIED, READ :)  
(IF HH_COUNT IS GREATER THAN FAM_COUNT INCLUDE VERBIAGE IN PARENS)
I’m interested in your family income, that is your income PLUS the income of your immediate family. (By immediate family I mean your spouse and the children or stepchildren under 26 who are living with you). For these questions, I’d like you to think back to 2014. During 2014 did you or any of your family members receive any income from wages or salary?

(IF TAGE <26 & TMARR=0 & TPAR=0 & RESPONDENT IS PARENT AND RESPONDENT IS NOT MARRIED, READ :)  
(IF HH_COUNT IS GREATER THAN FAM_COUNT INCLUDE VERBIAGE IN PARENS)
I’m interested in your family income, that is your income PLUS the income of your immediate family. (By immediate family I mean the children or stepchildren under 26 who are living with you). For these questions, I’d like you to think back to 2014. During 2014, did you or any of your family members receive any income from wages or salary?
I'm interested in TARGET’s family income, that is the income from his/her parents PLUS the income of any immediate family. (By immediate family I mean parents and siblings under 26 who are living with TARGET). For these questions, I’d like you to think back to 2014. During 2014, did any of TARGET’s family members receive any income from wages or salary?

IF TMARR=1 & FAM_COUNT = 2, READ :)
INSERT “your/you” IF PERSON ASKING ABOUT IS RESPONDENT
INSERT “TARGET’s/his/her/TARGET” IF PERSON ASKING ABOUT IS “TARGET PERSON”
I’m interested in (your/ TARGET’s) family income, that is [your/ TARGET’s] income PLUS the income of [your/his/her] spouse. For these questions, I’d like you to think back to 2014. During 2014, did [you/TARGET] or any of [your/his/her] family members receive any income from wages or salary?

IF TMARR=0 & TPAR=1 & FAM_COUNT>=2, READ :) 
INSERT “your/you” IF PERSON ASKING ABOUT IS RESPONDENT
INSERT “TARGET’s/his/her/TARGET” IF PERSON ASKING ABOUT IS “TARGET PERSON”
I’m interested in [your/TARGET’s] family income, that is [your/ TARGET’s] income PLUS the income of the children or stepchildren under 26 who are living with [you/TARGET]. For these questions, I’d like you to think back to 2014. During 2014, did [you/TARGET] or any of [your/(his/her)] family members receive any income from wages or salary?
I'm interested in your family income, that is the income from you and your parent(s) PLUS the income of any immediate family. (By immediate family I mean parents and siblings under 26 who are living with you. For these questions, I’d like you to think back to 2014. During 2014, did any of your family members receive any income from wages or salary?

During 2014, did [you/ TARGET] receive any income from wages or salary?

1  Yes
2  No
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused

During 2014, did [you/ TARGET] (or any of [your/ his/her] family members) receive (INSERT)?

1  Yes
2  No
D  (DO NOT READ) Don’t know
R  (DO NOT READ) Refused

- Any dividend income or any interest income from bonds, money market accounts, CDs or other investments
- Social Security benefits or any type of cash assistance
- Income from any other sources, such as self-employment, alimony, child support, contributions from family or others, unemployment compensation, worker’s compensation or veteran’s payments, pensions, disability benefits, or anything else
Thinking about all the different sources of income [you/ TARGET] (and [your/ TARGET’s] immediate family) received in 2014, what was the combined total income from all sources before taxes and other deductions? Was it under (INSERT AMT5 FOR FAMILY SIZE) or was it (INSERT AMT5 FOR FAMILY SIZE) or more?

PROBE: Your best estimate is fine.

1. Under (INSERT AMT5)
2. (INSERT AMT5) or more
3. (DO NOT READ) Don’t know
4. (DO NOT READ) Refused

(IF NEEDED, PROBE: Your best estimate is fine)

(READ LIST. ENTER ONE ONLY)

1. Less than (INSERT AMT1)
2. (INSERT AMT1) to (INSERT AMT1A)
3. (INSERT AMT1A) to (INSERT AMT2)
4. (INSERT AMT2) to under (INSERT AMT2)
5. (INSERT AMT3) to under (INSERT AMT4)
6. (INSERT AMT4) to under (INSERT AMT5)
7. (DO NOT READ) Don’t know
8. (DO NOT READ) Refused

NOW GO TO Q.IN6
(ASK Q.IN5 IF Q.IN3 = 2)
INSERT "your" IF PERSON ASKING ABOUT IS RESPONDENT
INSERT "TARGET"s" IF PERSON ASKING ABOUT IS "TARGET PERSON"
INSERT "family" IF FAM_COUNT > 1
IN5. Now, just stop me when I get to the right category. Was [your/ TARGET’S] total (family) income …?

PROBE: Your best estimate is fine.
(READ LIST. ENTER ONE ONLY)

1   (INSERT AMT5) to under (INSERT AMT6)
2   (INSERT AMT6) to under (INSERT AMT7)
2   (INSERT AMT7) to under (INSERT AMT8)
3   (INSERT AMT8) or more
D   (DO NOT READ) Don’t know
R   (DO NOT READ) Refused

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Q.X. We may follow-up with some survey participants to gather more in-depth information on their health care experiences in Massachusetts. Could we contact you again to ask a few more questions?

1. Yes
2. No
D (DO NOT READ) Don’t know
R (DO NOT READ) Refused

Q.X2. What would be the best way to reach you in the future?
(RECORD ALL INFORMATION ACCURATELY)

Name: ___________________
Phone number for recontact: __________________________
Email for recontact: ________________________________

(EVERYONE:)
FINAL: That was my last question. Do you have any questions for me?
IF NEEDED READ

For more information on health care coverage in Massachusetts, I can give you two customer service numbers:

For MassHealth, call 1-800-841-2900

For Connector Care through the Health Connector, call 1-877-623-6765

FOR INTERVIEWER (CELL PHONE RESPONDENTS ONLY):
INT1. DO NOT READ. Did respondent request money for using their cell phone minutes?

1   Yes, requested money
2   No, did not request money – GO TO END OF INTERVIEW

(ASK IF INT1 = 1):
That’s the end of the interview. We’d like to send you $5 for your time. Can I please have your full name and a mailing address where we can send you the money?

INTERVIEWER NOTE: If R does not want to give full name, explain we only need it so we can send the $5 to them personally.

1   [ENTER FULL NAME] – INTERVIEWER: PLEASE VERIFY SPELLING
2   [ENTER MAILING ADDRESS]
3   [City]
4   [State]
5   CONFIRM ZIP from above
R   (VOL.) Respondent does not want the money