

Findings from the 2021 Massachusetts Health Insurance Survey

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Methodology Report



THE 2021
MASSACHUSETTS
HEALTH
INSURANCE
SURVEY
METHODOLOGY
REPORT

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INTRODUCTION

The Center for Health Information and Analysis (CHIA) contracted with SSRS to conduct the 2021 Massachusetts Health Insurance Survey (MHIS), which is the 15th year the survey has been fielded. The goal of the MHIS is to document health insurance coverage, access to and use of health care, and health care affordability for the noninstitutionalized population of Massachusetts. The MHIS has been fielded periodically since 1998. Beginning in 2015, it has been fielded biennially in odd years—that is, in 2015, 2017, 2019, and 2021. From its inception in 1998 until 2007, the MHIS relied on a random-digit-dial (RDD) landline telephone sample, as shown in Table 1.¹ This report describes the methods used to collect and analyze the 2021 MHIS data, including an overview of changes to the survey over time. More details on prior years of the MHIS are provided in earlier versions of the MHIS Methodology Report, which are available on the [CHIA website](#). Of most relevance is the [2019 MHIS Methodology Report](#).

This report is organized as follows: Section A describes the MHIS sample design and Section B explains the operational approach to the MHIS. The 2021 MHIS instrument is discussed in Section C, with the instrument included in Appendix B. Data processing and preparation are described in Section D, with details about imputation in Appendix A, and survey response rates in Section E. The final section addresses the creation of the MHIS survey weights and variance estimation.

A. MHIS SAMPLE DESIGN

Because of the decline of landline phones as cell phone use increased in the United States over the early 2000s, the MHIS methodology changed in 2008 to a hybrid design that included an address-based sample (ABS) combined with a RDD landline sample. The goal of the ABS was to capture households without landline phones who would be missed in the RDD landline sample, such as cell phone-only households and non-telephone households.² This sample design was used from 2008 to 2011. The MHIS was not fielded in 2012 or 2013.

¹ While most of the early years of the MHIS relied on RDD landline samples, in 1998, the MHIS also included a small, in-person survey based on an ABS because of concerns that an RDD sample might produce biased estimates of the uninsurance rate in Massachusetts. In the 1998 MHIS the estimates of the uninsurance rate from the RDD landline sample and ABS were quite similar, at 7.8% and 8.2%, respectively (Roman, 2007).

² Non-telephone households will, by definition, be missed in all RDD samples.

Table 1: Overview of MHIS Design, by Year

Survey Year	Random-digit-dial Sample (RDD)			Address-based Sample (ABS)
	Landline phones	Cell phones	Pre-paid cell phones	
1998-2007	X			
2008-2011	X			X
2014-2015, 2017	X	X	X	
2019	X	X	X	X
2021			X	X

Note: The MHIS was not fielded in 2012 or 2013. In 2015, the MHIS shifted to an every-other-year fielding and so the survey was not fielded in 2016, 2018, or 2020.

As the share of cell phone-only households continued to grow and evidence grew that ABS tended to be biased toward respondents with higher socioeconomic status (Link and Burks, 2013; Rapoport et al, 2012), the 2014 MHIS shifted to an RDD sample comprised of both landline phones and cell phones, including prepaid cell phones. Prepaid cell phones are different from a standard contract cell phone in that customers pay as they go based on usage as opposed to paying a monthly fee as part of a long-term contract. Research has found 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 prepaid cell phone numbers at a higher rate than other cell phone numbers (i.e., oversampling prepaid cell phone numbers), the number of MHIS respondents who fall within these categories will be higher than would occur in a simple random sample of all cell phones (contract and prepaid). This sample design was repeated for the 2015 and 2017 MHIS.

Unfortunately, response rates for RDD telephone surveys dropped rapidly in the late 2010s, making it cost-prohibitive to continue with a RDD-only sample design. As a result, the 2019 MHIS shifted to a hybrid design that included the RDD samples of landline phones, cell phones and prepaid cell phones that was used in the 2017 MHIS design and added an ABS. The ABS generally has a higher response rate, which helps combat the costs associated with RDD. It also provides a high coverage rate since it uses the United States Postal Service (USPS) Delivery Sequence File (DSF), which contains all delivery point addresses serviced by the USPS.

The RDD sample in 2019 continued to have a low response rate while the operation costs continued to rise. To rein in costs, while attempting to halt the decline in response rates and also obtain adequate representation of traditionally harder-to-reach subgroups in ABS, the 2021 MHIS shifted to rely primarily on an ABS, with a small RDD sample of prepaid cell phones. As mentioned earlier, prepaid cell phones are more likely to be used by individuals who are non-White, uninsured, and have lower income, who are often underrepresented in ABS. Despite low response rates, the sample of prepaid cell phones was thus continued as a way to bolster the representation of these harder-to-reach groups.

In the remainder of this section, we describe the sample design for the 2021 MHIS.

1. Sample Design

In line with previous years, the goal of the 2021 MHIS was to obtain a representative sample of Massachusetts residents by key demographic and economic attributes and the eight Health Service Regions (HSR) of Massachusetts. As described above, to efficiently achieve this goal, the 2021 MHIS relies on a hybrid design with an ABS and an RDD prepaid cell phone sample. The key difference between the 2019 and 2021 MHIS is that the 2021 MHIS no longer sampled RDD landline and non-prepaid cell phones due to the low response rates and high costs associated with these samples.

The MHIS has long relied on stratified random samples to obtain more representative samples of Massachusetts residents across key attributes. For example, the 2014 to 2019 MHIS design divided the RDD landline sample into three strata for higher, middle, and lower income based on telephone exchanges to oversample households living in low- and middle-income areas as a way to target harder-to-reach residents (e.g., low-income and uninsured residents). With the shift to the ABS sample in 2019, it was possible to add additional levels of sample stratification based on address for the ABS sample. Thus, in the second wave of 2019 MHIS, the ABS sampling approach added strata based on predictive models using external data (described in the 'ABS Methods' section below) to identify and sample households based on key demographic and economic attributes of interest to CHIA. The 2021 MHIS continued to incorporate such predictive models, though the modeling and the resulting stratification were re-done based on an evaluation of the 2019 MHIS data. This process is explained in the 'ABS Methods' section below.

To maximize the total number of completed interviews, optimize the number of interviews completed with key demographic and economic subgroups, and monitor survey costs, the 2021 MHIS, like prior years of the MHIS, continued to incorporate an adaptive design. Surveys are frequently designed with a great deal of uncertainty about key parameters, such as the yield. Yield is the number of sample pieces (e.g., phone numbers for RDD samples and addresses for ABS) fielded to obtain one completed interview. Adaptive survey design is a strategy for dealing with this uncertainty, by making use of data collected during early phases of the survey to inform decisions made about the sample design in later phases. To this end, the ABS was conducted in two waves (waves 1 and 3)³, allowing the third wave to be modified based on the results of the first wave to achieve the requisite 4,200 interviews, with representative samples for key demographic and economic subgroups. The first wave's target was 1,400 completed interviews, while the third wave targeted 2,800 completed interviews. The prepaid cell sample was released in two waves to match the progress of waves 1 and 3 of the ABS, with a target of 800 completed prepaid cell phone interviews. The final goal for the 2021 MHIS was to gather 5,000 total interviews, with a target of 4,200 completes from the ABS and 800 completes from the prepaid cell sample.

2. ABS Methods

As mentioned earlier, ABS tends to reach respondents with higher socioeconomic status. ABS respondents are also more likely to be White, English speakers and better educated (Link and Burks, 2013; Rapoport et al, 2012). However, one of the goals of the 2021 MHIS was to obtain a representative sample of Massachusetts residents by key demographic and economic attributes. To manage differential response across households with the

³ Wave 2 was a replacement wave implemented due to an error in the instrument that occurred during Wave 1 (see MHIS Operational approach).

underrepresented attributes, the ABS design for the 2021 MHIS sought to identify and oversample key harder-to-reach households via predictive modeling using external data, as had been done with the second wave of 2019 MHIS.

Previous research has demonstrated the value of using external data to build predictive models of household attributes such as demographics, spoken languages, and even attitudinal metrics (Djangali et al., 2019; Dutwin, 2020; McPhee et al., 2019). The process begins by appending external data from commercial and geographic sources to a portion of previously collected survey data to create the “training” dataset. The external data is then used to build models that predict self-reported survey outcomes in that training dataset. The external data serve as independent variables (referred to as “predictors” in this report) in the prediction models, while the self-reported attributes (demographic and economic attributes, etc.) in the prior survey data serve as the dependent variables (referred to as “targeted attributes” in this report). The targeted attributes are characteristics that are likely to be strong predictors of harder-to-reach households. The predictive models are then evaluated on a “test” dataset, which usually comprises the portion of prior survey data that has not been used as the training dataset. Based on this evaluation, the predictor variables and prediction models that will be retained for each targeted attribute are determined.

Based on the analytical goals of the 2021 MHIS, the predictive models for the 2021 MHIS sought to identify targeted attributes that could be used to oversample the following types of harder-to-reach households:

1. Households with children (0-17)
2. Households with young adults (18-29)
3. Households with non-White and/or Hispanic members
4. Households with low-income families (<139 FPL/ <\$35,000)
5. Households with uninsured individuals (both at the time of survey or at any point in the past 12 months)

In operationalizing the predictive models for these harder-to-reach household subgroups, multiple targeted attributes (dependent variables) were tested for use in identifying these types of households.

Oversampling households with the above attributes also required identifying sample households that did not share these attributes so they could be assigned to a different sampling stratum and undersampled per the goals of the 2021 MHIS. For instance, the 2021 MHIS did not seek to oversample households with adults aged 65+, but it was critical to identify those households so they could be sampled at a lower fraction compared with households with the targeted attributes.

In the final stratification plan, all sample households for the 2021 MHIS are assigned to one of a set of mutually exclusive sampling strata, with sampling ratios assigned to increase the likelihood of completing interviews with harder-to-reach households.

Developing the Predictive Models for the 2021 MHIS

The process for developing the predictive models for the targeted attributes in the 2021 MHIS ABS entailed the following nine steps:

1. All available external data from voter registration databases, consumer databases, Marketing Systems Group (MSG) database information (which provided sample and surname flags), and Census Planning Database (PDB) data (which provided population attributes at the Census block group level), were acquired.
2. A training dataset was created based on data collected from other SSRS health interview studies that used a similar design to that proposed for the 2021 MHIS, including an ABS design (with push-to-web fielding) and phone follow-up. After experimenting with several potential surveys, the final training data used data from the 2019-2020 California Health Interview Survey (CHIS), which included approximately 40,000

completed interviews. The CHIS, with its large sample size, was found to be the most effective set of training data for building the predictive statistical models for the 2021 MHIS. The 2019 MHIS, although a closer match on the targeted attributes to the 2021 MHIS, provided only 4,873 households for predictive modeling. Although not used as the training data, the 2019 MHIS formed the test dataset that was used to test and evaluate the predictive models based on the CHIS training file.

3. Each address in the CHIS training data and the 2019 MHIS ABS test data were matched to available external data for that address. As the external data match is based on characteristics associated with the address, there could be measurement error in the data match for addresses with changes in occupancy over the data collection period.
4. Analysis files were built for the CHIS training data and the 2019 MHIS ABS test data with observations for each address-data match combination. This meant creating separate observations within each address for person-level data from the external data match (e.g., voter registration information). Each address-person observation was treated as a separate observation in the files. Addresses without any external data matches were excluded from the data files for the development of the predictive models. The outcome variables in the CHIS training data were the self-reported attributes of the survey respondent rather than a selected individual target person due to the data collection methods in CHIS. In CHIS, a quasi-random selection procedure was used for choosing an adult respondent within households with two or more adults, based on the assumption that the random within household selection allows for the set of respondents on aggregate to be representative of the adult population, regardless of whether they are representative of the other adults in the household. For the CHIS training data only adult respondents 18 and older were included in the prediction models. Child and teen data were not used for the training data, but variables such as the presence of a child and/or teen in the household were included as household-level targeted attributes. In the ABS for the 2019 MHIS test data, the model was evaluated using the target person (child or adult) for whom detailed information was collected rather than the survey respondent. The MHIS target person was randomly selected from among all household members (adults and children) in the MHIS sample. The slight difference in methodology between the two studies proved to have minimal impact on the effectiveness of the models at predicting the presence of individuals in the MHIS 2019 test dataset with the targeted attributes. In an ideal world, predictive models would be trained using the exact same data structure as that of the test dataset. However, the analysis conducted as these models were being built demonstrated that having a larger training data set containing a greater number of individuals with the targeted attributes is more important for predictive accuracy than using more similar data with fewer individuals with the targeted characteristics.
5. Predictions were developed for the attributes that are related to CHIA's targeted household subgroups using two approaches:
 - a. In the first approach, a machine learning algorithm called random forest was used to generate predictive models for each targeted attribute where the dependent variable for each model is the self-reported respondent characteristics (e.g., respondent self-reports as Asian; respondent conducted the interview in one of the Asian languages offered in CHIS⁴; respondent lives in a household with children under 18, etc.) and the independent variables are the external data appended to the CHIS training database. The goal of the random forest is to identify the best predictors and a classification model using those predictors for each targeted respondent attribute for the individuals in the CHIS training data. Predicted probabilities for each of these targeted attributes were then estimated on the MHIS test data set in order to evaluate the

⁴ Asian survey languages offered by CHIS are Mandarin, Cantonese, Korean, Vietnamese, Cambodian, and Tagalog.

accuracy of the predictive models. A person-address record was classified as having a particular characteristic (e.g., Hispanic) if the random forest model assigned a probability of being that characteristic above a pre-determined threshold.

- b. The second approach used two additional external data sources to create flags for each address that identify households likely to have one or more of the targeted attributes. These flags differ from the modeled predictions generated from the Random Forests because they are based on single external indicator variables rather than predictive models. The two sources for these flags are external data that is appended to the ABS frame by the sample vendor and population data provided by the Census Bureau at the Census Block Group (CBG) level. The sample vendor provides several different types of variables for an address including surname flags, household composition indicators, and household-level demographic variables. Surname flags identify sample addresses with matched external data that indicates someone at the address has a surname associated with a particular subgroup. For instance, a person at an address with a common Asian surname such as 'Lee' or 'Yang' would be assigned a value of 1 for the predicted indicator of being Asian based on the Asian surname flag. Similarly, other Sample frame flags use information on the presence of children and young adults at the address to create flags for households that include children and flags for households that include young adults, based on the presence of the sample frame variable. H. The CBG data identifies geographic areas by density of certain subgroup attributes, such as the proportion of households in a particular CBG with African American members or with members with limited English proficiency. Based on the geographic characteristics of their address, an address located in a CBG with a high proportion of Asians would be assigned a value of 1 for the CBG-based Asian flag. Similarly, a person with an address in a high proportion Black/African American CBG would be assigned a value of 1 for the CBG-based indicator of being Black/African American as determined by the CBG.
6. All possible approaches to identifying households with these targeted attributes (i.e., the random forest model-based predictions, the frame file flags, and the CBG-based indicators) were then evaluated using the 2019 MHIS test data.
 - a. The predictive models developed in the CHIS training data were at the person level. To evaluate them in the context of the 2019 MHIS test data, the individual-level predictions were aggregated up to the household level. For example, if any member of a household in the ABS was predicted to be Hispanic, the household was flagged as "Predicted to be Household with Hispanic members".

To assess the accuracy of the predictive models as well as the non-modeled indicators, the predicted attributes of each address was compared to the actual reported attributes of the MHIS target person at that address. As noted above, unlike the CHIS training data, where the address attributes used are those of the adult survey respondent, the testing of the MHIS data was performed using the attributes of the target person in the MHIS sample. The MHIS target person is selected at random from the members of the household and may be either an adult or a child.⁵ The assumption here, like the assumption about adults in the CHIS database, is that a random member of the household (adult or child) is representative of the overall household. The incidence and coverage for each of the 25 predictive indicators that were developed for the 8 targeted

⁵ For the MHIS, a target person is selected at random from all the people enumerated in the household. This target person may be a child or an adult, and may or may not be the respondent.

household subgroups were examined within the 2019 MHIS (Table 2). Incidence for a targeted attribute is the share of MHIS addresses in the test file that are predicted to have that attribute and actually have a target person with that attribute. Coverage is the proportion of the MHIS addresses in which the target person has a particular attribute that are predicted to have that attribute. The higher the incidence for a predictive indicator, the more efficient the stratification of the sample based on that predictive indicator will be at reaching the population that actually has the attribute. The higher the coverage for a subgroup of addresses with a targeted attribute, the greater the share of the total population with that attribute that will be included in the stratum based on that predictive indicator. Incidence and coverage are typically at odds with each other, so finding the best balance is key. An assignment model may have a good incidence (if, for example, 75% of the addresses the model predicts to be Hispanic are Hispanic), but poor coverage (if, for example, the model only predicts Hispanic for 10% of the entire Hispanic population). That suggests that while a stratum could be oversampled based on predictive indicators (for example, predicted to be Hispanic), the representativeness of that stratum would nevertheless be poor if the coverage of the targeted attribute is low. The process involved evaluating each predictor and targeted attribute independently on incidence and coverage. Predictors that were judged to be ineffective at predicting a particular target attribute were excluded from further use and are not part of the sampling strata.

As shown in Table 2, 12 of the 25 predictive indicators that were examined failed to provide the level of incidence and coverage required for use as part of the 2021 MHIS sampling strata. For two of the eight targeted household subgroups (those with low income and those with individuals not covered by health insurance), there were no predictive indicators that provided the level of incidence and coverage required for use as part of the 2021 MHIS sampling strata. Thus, those targeted household subgroups are not explicitly targeted in the 2021 MHIS sampling strata.

Table 2: Assessment of 2021 MHIS Predictive Models by Targeted Household Attribute in the 2019 MHIS Data

Targeted Household Subgroup	Predictive Indicator	Incidence	Coverage	Assessment
Asian	Vietnamese Surname Flag	71.40%	8.70%	Pass
Asian	Korean Surname Flag	55.60%	14.50%	Pass
Asian	Asian Language Interview Predictive Model	21.80%	30.20%	Pass
Asian	Asian Surname Flag	60.00%	38.40%	Pass
Asian	Self-reported Asian Predictive Model	27.20%	33.70%	Pass
Asian	High Density Asian Block Group Flag	10.20%	43.00%	Fail
Hispanic	Spanish Language Interview Predictive Model	29.90%	24.40%	Pass
Hispanic	High Density "Other Language" Block Group Flag	17.10%	44.70%	Pass
Hispanic	Hispanic Surname Flag	44.30%	45.90%	Pass
Hispanic	Self-reported Hispanic Predictive Model	38.10%	3.30%	Fail
Hispanic	High Density Hispanic Block Group Flag	19.90%	48.40%	Fail
Black/African American	Self-reported Black/African American Predictive Model	10.90%	70.80%	Fail
Black/African American	High Density Black/African American Block Group Flag	20.70%	62.50%	Pass
Low Income	No High School Diploma Predictive Model	4.40%	18.50%	Fail
Low Income	Low Income (Household income<=133% FPL) Predictive Model	15.00%	61.80%	Fail
Low Income	Low Income (Household income < \$35,000) Predictive Model	42.20%	27.40%	Fail
Uninsured	Ever Uninsured Predictive Model	4.60%	57.00%	Fail
Uninsured	Not U.S. Citizen Predictive Model	3.10%	64.30%	Fail
Household with Child (Age 0-17)	Presence of Child (Age 0-11) Predictive Model	37.80%	74.90%	Pass
Household with Child (Age 0-17)	Presence of Teen (Age 12-17) Predictive Model	42.70%	55.50%	Pass
Household with Child (Age 0-17)	Presence of Child (Age 0-17) Sample Frame Flag	42.80%	29.50%	Fail

Household with Young Adult (Age 18-29)	Presence of Young Adult (Age 18-29) Predictive Model	25.50%	65.50%	Fail
Household with Young Adult (Age 18-29)	Presence of Young Adult Sample (Age 18-29) Frame Flag	37.00%	48.90%	Fail
Household with Elderly Adult (Age 65+)	Presence of Elderly Adult (Age 65+) Predictive Model	57.10%	78.90%	Pass
Household with Elderly Adult (Age 65+)	Presence of Elderly Adult (Age 65+) Sample Frame Flag	57.80%	76.90%	Pass

7. After evaluating each predictive indicator independently, combinations of indicators were examined. For instance, the incidence and coverage of the targeted attribute of Asian using just the indicator based on the Asian surname flag or just the indicator derived from the self-reported Asian Predictive model were compared with the incidence and coverage of being Asian when both of those indicator variables were used together. The goal was to determine which indicator variables could be combined to form the mutually exclusive final stratification for the 2021 MHIS. The combinations of indicators were thus evaluated to determine if there was predictive overlap between the attribute variables. In other words, did different indicators for the same targeted attribute identify the same or different households? If there is significant overlap in the households they identify, the indicator with the better incidence and coverage was used. However, if they identified different households, both indicators were used to form a stratum. Based on this analysis, the predictive indicators were combined into a set of mutually exclusive (hierarchical) strata, and incidence and coverage of that aggregate strata variable was reassessed. The goal was to keep each stratum as homogenous as possible as this enabled efficient oversampling or undersampling of the targeted household subgroups. This strata formation was thus comprised of the following stages:

- a. The predictive indicator variables in Table 2 that passed the assessment for targeting each household subgroup were combined into a stratum designed to primarily target that group. For example, the stratum targeting households with Asian members were defined as all addresses meeting any one of the following criteria:
 - Address was modeled as Asian if any individual in the household was predicted via the random forest model as Asian.
 - Address is modeled as Asian if any individual in the household is predicted via the random forest model as a speaker of one of the Asian languages offered as an interview language in CHIS, but not speak English fluently.⁶

⁶ It should be noted that the MHIS does not conduct interviews in any Asian languages. However, the predictive model based on Asian language interviews in CHIS identifies households in Massachusetts who share similar characteristics to the households who requested an Asian-language interview. The Asian language interview predictive model successfully identified addresses where the target person was Asian in the MHIS 2019.

- Address is modeled as Asian if external data linked to the address includes anyone with an Asian surname.
 - b. Once the final strata were determined the next step was to create possible stratification schemes for combining the predictive strata into a single hierarchical stratification variable. For each stratification scheme considered, strata that had a high incidence and were unlikely to overlap with other targeted household subgroups were placed higher up in the hierarchy.
 - c. The final stratification variable (under all evaluated stratification schemes) included two residual strata for addresses that: (1) match external data but were not predicted to be associated with households containing members with the targeted attributes, or (2) did not match to external data.
 - d. Once the alternate stratification schemes for the strata hierarchy were built, incidences and coverage across all the strata (e.g., what is the total incidence of “Asian-identified targets” under stratification scheme X) were reassessed. At this step, the incidences and coverage were based on all ABS completes in 2019 MHIS (i.e., not just those matched to the external data). The stratification schemes were thus tested to identify the hierarchy that maximized the incidence of the key targeted household attribute, including attributes not identified through a single stratum (e.g., uninsured) for that scheme.
 - e. The sampling fractions with each stratification scheme were then adjusted within each stratum to boost representation, while controlling the unequal weighting effect. When more cases are sampled from the frame disproportionately, more cases also need to be weighted differently from each other to create a weighted sample representative of the population. Widely different weights can lead to a high design effect or the loss in statistical efficiency of the final estimates.
 - f. The final stratification scheme was thus one that best controlled the design effect while also maximizing the incidence of the key targeted attributes.
8. The 2021 MHIS sample was then “scored” using the final predictive indicators selected based on the 2019 MHIS. “Scoring” is the process of applying the predictive models to a new set of data (in this case a newly drawn ABS for the 2021 MHIS) to generate a prediction for each address. Thus, the target predictions were created in the 2021 MHIS.
 9. Using these predictions and the predetermined stratification scheme, the final sampling stratification variable was developed for the 2021 MHIS.

Table 3 enumerates the strata that were included in the stratification variable for the 2021 MHIS. The number of the stratum reflects the hierarchy of assignment to the stratum. An address that met the criteria for multiple strata was assigned the lowest numbered stratum.

Table 3: Stratification Groups for 2021 MHIS

Targeted Attribute	Predictor	Stratum
Asian	Vietnamese Surname Flag	Stratum 1
Asian	Korean Surname Flag	Stratum 1
Asian	Asian Language Interview Predictive Model	Stratum 1
Asian	Other Asian Surname Flag	Stratum 5
Asian	Self-reported Asian Predictive Model	Stratum 5
Hispanic	Spanish Language Interview Predictive Model	Stratum 2
Hispanic	High Density "Other Language" Block Group Flag	Stratum 4
Hispanic	Hispanic Surname Flag	Stratum 3
Black/African American	High Density Black/African American Block Group Flag	Stratum 6
Household with Child (Age 0-17)	Presence of Child (Age 0-11) Predictive Model	Stratum 7
Household with Child (Age 0-17)	Presence of Teen (Age 12-17) Predictive Model	Stratum 7
Household with Elderly Adult (Age 65+)	Age 65+ Predictive Model	Stratum 8
Residual Addresses	Match on external data	Stratum 9
Residual Addresses	No match on external data	Stratum 10

Table 4 shows the final relative sampling fractions used for drawing the 2021 MHIS sample based on the evaluation described above.

Table 4: Strata Sampling fractions

Stratum	Stratum Description	Relative Sampling Fraction
1	Asian interview or Asian race/ethnicity	1.6
2	Spanish-language interview	2
3	Hispanic	2
4	Other high-density non-English	1.3
5	Other Asian	1.3
6	High density Black/African American	1.1
7	Household with children	1.2
8	Other 65+	0.5
9	Residual – Match	1
10	Residual – Nonmatch	1

The final sample design crossed the modeling-based strata with the eight HSR to ensure representative sampling of the HSRs. Tables 5 and 6 show the estimated incidence of each of the targeted household attributes, i.e. the estimated proportion of a given attribute within the 2021 MHIS sample, and HSR under the final sample design, as well as the population benchmark for comparison. The estimates for the final proportion of targeted household attributes with the proposed modeling scheme are calculated by considering the response rate and incidence of the targeted household attribute within each stratum, along with the sampling fraction for the stratum.

Table 5: Estimated Survey Incidence and Number of Estimated Survey Completes for Targeted Household Attributes from the ABS in 2021 MHIS

Targeted Household Attribute	Estimated Incidence	Population Benchmark Source-American Community Survey (ACS) 2019	Estimated Survey Completes	Actual Incidence	Actual Survey Completes
Black/African American	8.2%	7.0%	344	5.5%	233
Hispanic	10.1%	12.4%	424	8.0%	337
Asian	5.9%	6.7%	248	9.6%	405
Age 18-29	13.6%	15.5%	571	10.9%	460
Uninsured	1.7%	3.0%	71	1.0%	42
Low income (<=138 FPL)	13.5%	13.3%	567	10.2%	427
Low income (<=200 FPL)	19.7%	20.0%	827	14.7%	618

Table 6: Estimated Incidence by HSR from the ABS in 2021 MHIS

Targeted Household HSR	Estimated Incidence	Population Benchmark Source – ACS 2019	Estimated Survey Completes	Actual Incidence	Actual Survey Completes
1 Western	11.7%	11.9%	491	11.0%	464
2 Central	10.7%	11.3%	449	9.5%	399
3 Northeast	20.4%	21.7%	857	20.6%	867
4 Metro West	9.4%	10.1%	395	10.1%	425
5 Metro Boston	26.4%	24.3%	1109	28.6%	1201
6 Metro South	11.8%	12.3%	496	12.1%	507
7 Southcoast	5.5%	5.0%	231	4.8%	202
8 Cape and Islands	4.1%	3.5%	172	3.4%	141

Because there was uncertainty about the yield of the ABS, the ABS was released in two waves to allow for adjustments to the sample design over time. The first wave targeted roughly 30 percent of the expected sample size needed to reach the targeted number of completed interviews for the 2021 MHIS. The first wave was allowed

to run its course, and then, based on the sample responses from that wave, the sample design of the second wave was modified to attain the requisite number of completed interviews.

At the end of the first wave, we evaluated the first sample release for performance in terms of overall survey yield, incidence for key targeted household attributes, and the performance of the priority mail used for some of the harder-to-reach groups.

The yield for the first wave was higher than what we had estimated, coming in at 9 sample addresses released:1 completed interview compared with the estimated 7:1 that was assumed prior to the sample release. To attain the targeted number of completed interviews we increased assumption for the yield for the next wave of sample to be 8.5:1.

We then evaluated the incidence for key targeted attributes overall and by modeled strata. This combined incidence with ABS and prepaid cell sample compared well with the benchmarks from ACS 2019. The incidences within modeled strata were also mostly in line with what we expected. The incidences for households with Black/African American residents and households with children were slightly lower than anticipated, likely due to a lower response rate within these strata. To bolster the numbers for households with these attributes, we recommended increasing the sample from the Black/African American and Households with children strata by 10% after the modeling stage. Since the random sampling fractions for these strata were lower than the highest sampling fraction, no additional sample had to be purchased for this step. After the modeling process, 10% of the sample were added back to these strata.

For the first wave, 15% of the Hispanic, Black/African American and low income modeled strata were sent a priority mailing for their third mailing. The low-income priority mailing was based on census block groups. A stratification of census block groups in MA was created based on the percentage of the population below poverty. Strata where more than 10% were below poverty were considered low-income for this effort. When we compared those who received their third mailing via priority vs. not, we found that the response in the priority mail group was almost double that of those who received a USPS First Class mail.

Table 7: Response with or without priority mail among households with key targeted attributes

	Priority Eligible Sample, no priority mail	Priority Eligible Sample, priority mail
Response	3.5%	6.7%
Yield	29	15
Hispanic	2.4%	5.0%
Black/African American	5.5%	8.3%
Low-Income	3.8%	7.7%

Looking at the incidence of key targeted household attributes between priority and not priority groups by modeled strata, the results were mixed. Our conclusion was that the priority mail increased the response rates within those strata but not evenly across demographics. Based on our evaluation, we recommended continuing the priority mailing for the harder-to-reach groups for subsequent waves.

3. Prepaid Cell Phone

As noted above, the prepaid cell phone sample was used to compliment the interviews from the ABS frame for the 2021 MHIS. This hybrid design enhanced the representativeness of the overall sample and brought total completed interviews with households from underrepresented groups closer to desired targets. Table 8 below shows the estimated incidence and survey completes for 2021 the MHIS from the prepaid cell sample. The projections are based on the prepaid cell sample subgroup incidences in 2019 MHIS.

Table 8: Estimated Incidence and Survey Completes for Targeted Household Attributes from the Prepaid Cell Sample

Targeted Household Subgroups	Estimated Incidence	Estimated Interview Counts (n=800)	Actual Incidence	Actual Interview Counts (n=794)
Black/African American	17.9%	144	17.8%	141
Hispanic	16.4%	131	28.2%	224
Asian	6.7%	53	6.0%	48
Age 18-29	12.8%	144	12.8%	102
Uninsured	4.6%	37	5.5%	44
Low-Income	43.6%	349	37.2%	295

B. MHIS OPERATIONAL APPROACH

1. Prepaid Cell Phone Operational Approach

The protocol for the prepaid cell sample for the 2021 MHIS was as follows: All sample members received an initial call plus five callbacks. Calls were initiated at different times of the day and on different days of the week to increase the probability of completing an interview. Sample members who initially refused to complete the survey were offered the opportunity to be re-contacted at a more convenient time to complete the survey. Bilingual interviewers were available for participants who wished to conduct the interview in Spanish.

2. ABS Operational Approach

Sample was released in three waves. Each wave followed the contact protocol described below.

1. All sample members received an initial invitation letter that included a \$2 bill in a visible cash envelope. The letter requested that the respondent complete the survey online and included a link that directed web respondents to log on to a .gov URL (www.mahealthsurveys.gov), where they could review materials

regarding the purpose of the survey. Upon choosing ‘Take the Survey/Complete la Encuesta,’ they were redirected to the SSRS Confirmit Survey, where they were instructed to enter the unique user ID provided in the mailing materials. The letter alerted those without Internet access to call a toll-free 1-800 number to conduct the survey by phone with a live interviewer. All mailings to the “Household with person with Hispanic/Latino surname” and “Household in CBG with high share of Hispanic/Latino persons” also received a Spanish version of the invitation letter (on the back side of the letter). All other letters had a sentence in a box in Spanish with the survey URL and the 1-800 number. The letter was printed in two colors and mailed with a live stamp to increase the likelihood that it would be opened and read.

2. After approximately 7 days, all households in the ABS received a postcard reminder following the initial letter of invitation. The postcard also provided the 1-800 number for call-in surveys as well as Spanish content for the Hispanic/Latino strata.
3. Approximately 14 days after the postcard mailing, all remaining nonrespondents were sent a reminder letter that was the same as the initial invitation letter but without the \$2 incentive. Like with other mailings, the Hispanic/Latino strata were sent a bilingual version. This letter was sent via USPS Priority mail for strata classified as harder-to-reach populations.
4. An optional last mailing had been planned in the protocol development to be used if needed. This postcard was used in all three waves. The postcard reminded the respondent to complete the survey. The postcard was available in English-only, but a box in Spanish provided the URL and 1-800 number for those who preferred to participate in Spanish.
5. Due to the low response and the holiday season, a fifth postcard was mailed to Wave 3 sample. This postcard was designed as a holiday greeting from the survey team and a reminder to participate in the survey.
6. Those sample members who had not responded by the second mailing and for whom a telephone number could be matched to their address were then called. A matched telephone number was dialed six times, when appropriate, before retiring. The study remained open by web or through a call-in for all waves until the fielding period closed.⁷

Table 9: Contact Protocol Dates by Wave

Mailing	Wave 1	Wave 2	Wave 3
Initial Letter	7/16/2021	8/12/2021	9/27/2021
Reminder Postcard	7/23/2021	8/23/2021	10/4/2021
Reminder Letter (Priority)	8/13/2021	9/17/2021	10/20/2021
Phone Calls	8/16/2021	9/22/2021	10/29/2021
Final Postcard	11/1/2021	11/1/2021	11/18/2021
Holiday Postcard	n/a	n/a	12/15/2021

⁷ Refusals are often retired before they reach the call design.

3. Telephone Methods for Prepaid Cell Sample and ABS

The telephone methods were the same for the Prepaid Cell sample and for respondents from the ABS who completed the survey by telephone, with the same group of interviewers conducting the interviews with sample members from both groups. The ABS had a call-in option provided in the survey mailings that was not available to the Prepaid Cell sample.

Interviewer training

Prior to commencement of the study and when necessary throughout the fielding process, SSRS project directors:

- Briefed and trained each interviewer on the issues specific to the study.
- Explained the study's overall objectives, specific procedures, and questionnaire content to interviewers.
- Provided FAQs and scripts for all respondent questions in English and Spanish.
- Monitored interviewers for the duration of the project and provided feedback when necessary.

Survey fielding

The following steps were taken in conducting the telephone interviews to maximize telephone response rates:

- Instituted a call rule of six calls.
- Varied the times of day, and days of week when call-backs were placed (differential call rule).
- Explained the purpose of the study and stated as accurately as possible the expected length of the interview.
- Permitted respondents to set the schedule for a call-back, allowing them to return our call on a toll-free number.
- Provided a clear and early statement that the call was not a sales call.
- Informed respondents about how they would be well-served by the survey results.

Refusal conversions

SSRS has a core group of specially trained and highly experienced callback specialists and refusal converters who called back all initial refusals to the telephone survey on this project and attempted to persuade the respondent to complete the interview. Cases where a call attempt resulted in a respondent or household refusal, termination, or other break-off were attempted again after a period of at least seven days.

C. 2021 MHIS INSTRUMENT

1. Survey Content

The MHIS questionnaire begins by establishing that the household is in Massachusetts, and therefore included in the survey sample frame. 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 a series of questions that are used to create a full 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., dormitories, nursing homes, and shelters) are excluded from the study as the focus is on the noninstitutionalized population of the state.

From the full roster, one household member is randomly selected by the computer program to be the “target” person for the household. All the detailed information is collected for this person, including socioeconomic characteristics and insurance status. Basic demographic and socioeconomic information, including age, race/ethnicity, gender, education, and employment are collected for all household members. Table 10 summarizes the questions covered in the 2021 MHIS for all members of the household and for the household member selected as the “target” individual for the survey. The 2021 MHIS instrument is included in Appendix B.

Table 10: Summary of Topic Areas Covered in the 2021 MHIS, by Household Members

Topics	All Household Members	Target Household Member
Age, gender, education, and employment	X	X
Race/ethnicity		X
Marital status		X
Nativity and citizenship status		X
Family income		X
Health insurance coverage		X
Health insurance		X
Availability of employer sponsored health insurance		X
Health status		X
Access to and use of health care, including mental health care and care for substance use disorder)		X
Quality of health care		X
Health care affordability		X
Household homeownership	X	X
Household internet use	X	X
Household telephone status	X	X

The content of the MHIS continued to change in response to shifts in topic priorities for CHIA as well as to maintain a reasonable survey length. Table 11 below lists the modifications to the 2021 MHIS questionnaire. Some series of questions were administered to one of two randomly selected subsamples to reduce survey length and respondent burden.

Table 11: New Questions

S10aa	Unfortunately, no age was provided for this person. Because age is a critical piece of information, {Web/CATI: we/I} cannot proceed with the interview without that information.
H4b	How long have {you/{TARGET}} been enrolled in {MassHealth/Health Connector Plan/individually purchased private health insurance plan}? Less than 12 months, 12 months or more
H4c	Is {your/{TARGET}'s} enrollment in {MassHealth/Health Connector Plan/individually purchased private health insurance plan} related in any way to the coronavirus pandemic? For example, because of a lost job or a reduction in income.
H8bb	{Have you/Has {TARGET}} experienced a loss of health insurance at any time in the past 12 months because of the coronavirus pandemic? For example, because of a lost job or reduction in income.
E0a	<u>Last week, did {you/{TARGET}} work for pay at a job or business?</u>
E0b	<u>Last week, did {you/{TARGET}} do any work for pay, even for as little as one hour?</u>
E0c	What is the main reason {you/{TARGET}} did not work last week? {Web/CATI: Were you/Was {TARGET}.../}
E1b	Have any of the following happened to {you/{TARGET}} in the last 12 months because of the coronavirus pandemic? (CHECK ALL THAT APPLY.) {You were/{TARGET} was} required to cut back hours at work, {You were/{TARGET} was} required to stop working temporarily, {You/{TARGET}} lost {your/their} job permanently, {You/{TARGET}} chose to voluntarily cut back hours at work or to stop working, {You were/{TARGET} was} deemed an essential worker, meaning that {you/they} were required to work outside the home during the coronavirus pandemic, {You were/{TARGET} was} able to telework or work from home
HS1aa	Has a doctor or other health care provider ever told {you/{TARGET}} that {you/(he/she/they)} {have/has} anxiety problems, depression, other mood disorders?
HS1ab	When were {you/{TARGET}} first told by a doctor or other health care provider that {you have/{TARGET} has} mental health condition? Less than 1 year, At least 1 year but less than 2 years; 2 years or more
HS3a	Some people have problems with alcohol or drugs. Do any members of {your/{TARGET}'s} immediate family have an alcohol or drug use problem
Probe	{Web/CATI: /PROBE:} Please note that your answers to this question and all other questions are completely confidential.
A2a	{Does that place/Do any of those places} offer telehealth visits? That is, visits by video, phone, email, text or chat
A2b	{Have you/Has {TARGET}} ever had a telehealth visit for any type of health care, including mental health care or substance use treatment?
A2c	When was the first time {you/{TARGET}} had a telehealth visit for any type of health care? Within past 6 months, 6-12 months ago, 1 year ago, 2 years ago, More than 2 years
A3c	The last time {you/{TARGET}} went to a hospital emergency room, was it for ... a condition related to mental health? c. a condition related to alcohol or substance use disorder? d. coronavirus or a condition that you thought might be related to coronavirus
A3e	In the last 12 months, was there ever a time {you/{TARGET}}/{TARGET}'s parent or guardian} thought {you/{TARGET}} needed emergency care but did not go or delayed going to the hospital emergency room because of concerns about the coronavirus pandemic?
A6c	In the past 12 months, did {you/{TARGET}} receive care for an alcohol or substance use disorder? Please do not include care received when {you were/{TARGET} was} hospitalized overnight or in hospital emergency rooms. Please include in-person visits and telehealth care provided by phone, video, email, text or chat.

A9h-j	Still thinking about the past 12 months, was there any time that {you/{TARGET}}/{TARGET}'s parent or guardian} did... h. not get vision care that {you/{TARGET}} needed? i. not get medical equipment that {you/{TARGET}} needed? J. not get care from a nurse practitioner, physician assistant{, or midwife} that {you/{TARGET}} needed?
A9aaa	Still thinking about the past 12 months, was there any time that {you/{TARGET}} did...a. not fill a prescription for medicine needed for {you/{TARGET}} because of the coronavirus pandemic?, j. not get doctor care that you/{TARGET}} needed because of the coronavirus pandemic?, c. not get care from a nurse practitioner, physician assistant {, or midwife} that {you/{TARGET}} needed because of the coronavirus pandemic?, d. not get specialist care that {you/{TARGET}} needed because of the coronavirus pandemic? {Web/CATI: /(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}} needed because of the coronavirus pandemic? not get dental care that {you/{TARGET}} needed because of the coronavirus pandemic? g. not get alcohol or substance use disorder care or treatment that {you/{TARGET}} needed because of the coronavirus pandemic? h. not get vision care that {you/{TARGET}} needed because of the coronavirus pandemic? i. not get medical equipment that {you/{TARGET}} needed because of the coronavirus pandemic?
A9be	A doctor's office, clinic, or health care facility was closed or offering limited appointments due to the coronavirus pandemic.
A9bf	It felt unsafe visiting the doctor's office, clinic, or health care facility during the coronavirus pandemic.
A9bg	It felt unsafe traveling to the doctor's office, clinic, or health care facility during the coronavirus pandemic
A9bh	{You were/{TARGET} was/{TARGET}'s parent or guardian was} unable to get to an appointment at a doctor's office or clinic because of transportation issues
A9bi	{You were/{TARGET} was/{TARGET}'s parent or guardian was} unable to get to an appointment at a doctor's office or clinic because there was no childcare for children at home
A9bj	{You were/{TARGET} was/{TARGET}'s parent or guardian was} unable to get to an appointment at a doctor's office or clinic because of language barriers or lack of interpreter services
A11eff	ff. Coronavirus tests
A11efff	fff .Coronavirus treatment, including treatment for the after-effects of coronavirus
A11ee3	Was it because the provider was not in the plan's network, or some other reason?
A11ee4	In the past 12 months, how many medical bills did {you/{TARGET}}/you and your immediate family/{TARGET} and their immediate family} receive where the health insurance plan paid much less than expected or did not pay at all?
A11L	At any time in the past 12 months, have {you or your family /{TARGET}} (INSERT ITEM)? a. fallen behind in paying your rent or mortgage c. had problems paying for utilities d. fallen behind in paying credit card or other bills e. had problems affording health insurance f. had problems affording prescription medications
HH_HE7	How often do the following statements describe {you/{TARGET}}/{TARGET}'s parent or guardian} {and {your/their} immediate family}? {I worry/{TARGET} worries/We worry/They worry) that food will run out before there is money to buy more. The food {I buy/{TARGET} buys/We buy/they buy} doesn't last long enough, {I have/{TARGET} has/We have/They have} been hungry but couldn't afford enough food, {I/{TARGET}/We/They} got emergency food from a church, food pantry, food bank, or other community program, {I/{TARGET}/We/They} could not afford to eat balanced meals, {I/{TARGET}/We/They} cut portions or skipped meals because there wasn't enough money for food 1. Always, 2.Often, Sometimes, Rarely, Never

HH_HE1	How often {do you/does {TARGET}/do {TARGET}'S parent or guardian} {and {your/their} immediate family} worry about having a steady place to live? {Web/CATI: /READ LIST IF NECESSARY.} Always, Often, Sometimes, Rarely, Never
HH_HA6	In the past 12 months, how often were the following easy for {you/{TARGET}/{TARGET}'S parent or guardian} to understand? Written or verbal information from providers about health or health care, Written instructions about any medications, including over-the-counter medications, written or verbal information on the results from any blood tests, x-rays, or other tests, including COVID tests Always, Often, Sometimes, Rarely, Never, Not applicable
HH_FA2	Have any members of {your/{TARGET}'s} immediate family gone without insurance in the past 12 months?
HH_FA2b	Still thinking about the past 12 months, was there any time that because of cost, any members of {your/{TARGET}'s} immediate family did...
HH_FA3	Still thinking about the past 12 months, was there any time that any members of {your/{TARGET}'s} immediate family did...not fill a prescription for medicine for themselves because of pandemic?, not get doctor care that they needed because of pandemic?, not get care from a nurse practitioner, physician assistant, or midwife that they needed because of pandemic?, not get specialist care that they needed because of pandemic? (Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors and others who specialize in one area of health care.), not get mental health care or counseling that they needed because of pandemic?, not getting dental care that they needed because of the pandemic, not get alcohol or substance use disorder care or treatment that they needed because of pandemic?, not get vision care that they needed because of pandemic?, not get medical equipment that they needed because of pandemic?
HH_E1c	For this question, please think about any members of {your/{TARGET}'s} immediate family aged 16 and older. Have any of the following happened to them in the last 12 months because of the coronavirus pandemic? {Web/CATI: Check all that apply./CHECK ALL THAT APPLY.} Someone in the family was required to cut back hours at work, Someone in the family was required to stop working temporarily, c. Someone in the family lost their job permanently, Someone in the family chose to voluntarily cut back hours at work or to stop working, e. Someone in the family was deemed an essential worker, meaning that they were required to work outside of the home during the coronavirus pandemic, f. Someone in the family was able to telework or work from home
HH_E1d	Have any member of {your/{TARGET}'s} immediate family aged 16 or older had difficulty finding and keeping a job in the past 12 months?
HH_HS1	Earlier we asked if {you are/{TARGET} is} in excellent health, very good health, good health, fair health, or poor health. For this question, please think about the health of the members of {your/{TARGET}'s} immediate family. Are there any members in {your/{TARGET}'s} immediate family who is in fair or poor health?
Probe	:) Please note that your answers to this question and all other questions are completely confidential
HH_HS2	Are any members of {your/{TARGET}'s} immediate family limited in any way in their activities because of a physical, mental, or emotional problem?
Probe	:) Please note that your answers to this question and all other questions are completely confidential
Probe	:) Please note that your answers to this question and all other questions are completely confidential
L1a	Now {web/CATI: we are/I am} going to ask you questions about telephone usage in your household. Do you, yourself, have a working cell phone?
L1b	Do any adults in your household have a working cell phone?
L2	Are any of the cellphone in your household, using prepaid plans? Prepaid plans, also known as pay-as-you-go or no-contract phone, are plans where the user pays for a specific amount of data usage or minutes in advance.
L2a	{Including you, how/How} many adults in your household use a prepaid plan?

C2	Of all the telephone calls that you answer, are...
INT1NEW	Do you or any member of your household have access to the internet at home? This could be internet access by paying a cell phone company or an internet service provider.
D11	How would you rate the overall quality of your housing? Excellent, Very good, Good, Fair, Poor
D12b	People may consider many things when they are assessing their housing. What were the most important things you were thinking about when you rated the quality of your housing as fair or poor.

Table 12: Deleted Questions

S8	What is this person's relationship to you?
H1bb	Does that family policy cover everyone in (your/TARGET's) family?
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?
H11	What would you say is the major reason (you do/TARGET does) not have long-term care insurance?
A11k	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?
H5aa	[Your/TARGET'S] A deductible is the amount you/TARGET/] must pay out of your/their] own pocket each year before your health insurance begins paying for health care services. Does [your/TARGET's] health insurance have a deductible?
H5ab	Is the annual deductible for medical care for this plan less than [IF H1ba=1 ONLY ONE PERSON IS COVERED BY THE PLAN \$1,350 or \$1,350 or more? /IF H1ba=2 MORE THAN ONE PERSON IS COVERED BY THE PLAN: \$2,700 or \$2,700 or more?] If there is a separate deductible for prescription drugs, hospitalization, or out-of-network care, do not include those deductible amounts here.
INT1	Do you use internet at least occasionally?
INT3	Do you access the internet on a cell phone, tablet or other mobile handheld device, at least occasionally?
E4	How many hours per week {do you/does {TARGET}} usually work at {your/their} {main} job? {By main job, {Web/CATI: we/I} mean the one at which {you/{TARGET}} usually {work/works} the most hours
E5	How many hours per week {do you/does {TARGET}} usually work at {your/their} other jobs
E6	How long {have you/has {TARGET}} worked for {your/their} {main} job? {Web/CATI: You may answer in years, months, or years and months.}/(PROBE FOR MONTHS IF LESS THAN 2 YEARS
E7	Including {you/{TARGET}}, are there more than 50 people working for this business?){Counting all locations where this employer operates, are there more than 50 people working for {your/{TARGET}'s} employer?}
E8	Which category best represents the total number of persons who work for {your/{TARGET}'s} {employer/business}? Would it be...Just one, Just two, Between 3 and 9, Between 10 and 24, Between 25 and 50
E9	Which category best represents the total number of persons who work for {your/{TARGET}'s} {employer/business}? Would it be...Between 51 and 100, Between 101 and 500, Between 501 and 1000, Over 1000

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
E11	{Are you /Is {TARGET}} offered health insurance through {your/their} work?
E12	{Earlier you mentioned that {you/{TARGET}} had health insurance through {your/their} employer.} Could dependents be covered under that health insurance?
L1	Now thinking about your telephone use...Does anyone in your household, including yourself, have a working cell phone?

Table 13: Subsampled Questions

S9aa	Are you currently working for pay?
S9bb-yy	Is this {child/person} currently working for pay
H4c	Is {your/{TARGET}'s} enrollment in {MassHealth/Health Connector Plan/individually purchased private health insurance plan} related in any way to the coronavirus pandemic? For example, because of a lost job or a reduction in income.
H5a	{[Have you/Has {TARGET}] had health insurance for all of the past 12 months?}[Has {TARGET} had health insurance since they were born?]
H6a	{Were you/} uninsured just before {you/} obtained {your} current health insurance or did {you have some other type of health insurance?
H8bb	{Have you/Has {TARGET}} experienced a loss of health insurance at any time in the past 12 months because of the coronavirus pandemic? For example, because of a lost job or reduction in income.
E1	{Thinking about {your/{TARGET}'s} main job, {are you currently.../is {TARGET} currently...} Are you /Is {TARGET} currently...Self-employed, Employed by military, Employed by government (local, state, federal), Employed by someone else, Unpaid worker for a family business, Retired, Unemployed and looking for work, Unemployed and not looking for work
E2	{Do you/Does {TARGET}} have more than one job, including part-time, evening or weekend work
E3	Altogether, how many jobs {do you/does {TARGET}} have
E1b	Have any of the following happened to {you/{TARGET}} in the last 12 months because of the coronavirus pandemic?
E13	{Are you/Is {TARGET}} a veteran of the United States military?
E14	{Are you/Is {TARGET}} currently a full-time student?
A2a	{Does that place/Do any of those places} offer telehealth visits? That is, visits by video, phone, email, text or chat.
A2b	{Have you/Has {TARGET}} ever had a telehealth visit for any type of health care, including mental health care or substance use treatment?
A2c	When was the first time {you/{TARGET}} had a telehealth visit for any type of health care, including mental health care or substance use treatment?
A3cd	What condition did {you/TARGET} have, the last time {you/{TARGET}} went to a hospital emergency room? Coronavirus or a condition that you thought was related to coronavirus

A3e	In the last 12 months, was there ever a time {you/{TARGET}}/{TARGET}'s parent(s) thought {you//they/{TARGET}} needed emergency care but did not go or delayed going to the hospital emergency room because of concerns about the coronavirus pandemic?
A9a2	Thinking about the last time {you/{TARGET}} went without needed care because of cost, was it during a time that {you/they} had health insurance?
A9aa	The last time {you/{TARGET}} went without needed care because of cost was it because of any of the following? The care was not covered by {your/their} health plan, The co-payment or co-insurance for the care under {your/their} health plan was too high, The care had to be paid for as part of the deductible under {your/their} health Plan, {You weren't/{TARGET} wasn't/{TARGET}'s parent or guardian wasn't} sure whether the care was covered by {your/their} health plan,{You weren't/{TARGET} wasn't/{TARGET}'s parent or guardian wasn't } sure how much the care would cost, Something else {Web/CATI: Please specify:/(SPECIFY:)}_____
A9be	A doctor's office, clinic, or health care facility was closed or offering limited appointments due to the coronavirus pandemic.
A9bf	It felt unsafe visiting the doctor's office, clinic, or health care facility during the coronavirus pandemic.
A9bg	It felt unsafe traveling to the doctor's office, clinic, or health care facility during the coronavirus pandemic.
D14	Do you/Does {TARGET}/Do {TARGET}'s parent(s) speak a language other than English at home?
D15	What is that language
A11ee2	In the past 12 months, {have you/has {TARGET}/have you and your immediate family/has {TARGET} and their immediate family} received a medical bill where the health insurance plan paid much less than expected or did not pay at all?
A11ee3	Was it because the provider was not in the plan's network, or some other reason?
A11ee4	In the past 12 months, how many medical bills did {you/{TARGET}}/you and your immediate family/{TARGET} and their immediate family} receive where the health insurance plan paid much less than expected or did not pay at all?
A11	Are the medical bills being paid off over time for care that was received when {you/{TARGET}}/you and your immediate family/{TARGET} and their immediate family} did not have health insurance, when {you/{TARGET}}/you and your immediate family/{TARGET} and their immediate family} did have health insurance, or are the bills for care from both when {you/{TARGET}}/you and your immediate family/{TARGET} and their immediate family} did not have health insurance and when ({you/{TARGET}}/you and your immediate family/{TARGET} and their immediate family} did have health insurance
A11h	How much are the medical bills that are being paid off over time?/Was it...}Less than \$2,000, \$2,000 to under \$4,000, \$4,000 to under \$8,000, \$8,000 to under \$10,000, \$10,000 or more
A11hc	For this question, think about the medical bills that are being paid off over time that are from the period in which {you/{TARGET}}/you and your immediate family/{TARGET} and their immediate family} had health insurance. Were any of those medical bills for... care that was not covered by a health insurance plan?, co-payments or co-insurance for care under a health insurance plan? , care that had to be paid for as part of the deductible under a , health insurance plan?
A11i	When {were you/was {TARGET}}/were you and your immediate family/was {TARGET} and their immediate family} first unable to pay the medical bills that are being paid off over time? Was it...Within the last year, A year to less than 2 years ago, 2 to less than 5 years ago, 5 years ago or more

A11j	In the past 12 months, {have you/has {TARGET}/have you and your immediate family/has {TARGET} and their immediate family} {Web/CATI: done any of the following?/{INSERT}} cut back on savings or had to take money out of savings to pay medical bills, had to borrow or take on credit card debt to pay medical bills, been contacted by a collection agency about owing money for medical bills, had to declare bankruptcy because of medical bills
HH_FA3	Still thinking about the past 12 months, was there any time that because of the coronavirus pandemic, {you/{TARGET}/{TARGET}'s parent(s)} {or any member of {your/their}immediate family} did...
HH_E1c	For this question, please think about any members of {your/{TARGET}'s} immediate family aged 16 and older. Have any of the following happened to them in the last 12 months because of the coronavirus pandemic?
HH_E1d	{Have you/Have you or any member of your immediate family aged 16 or older/Has {TARGET} or any member of {TARGET}'s immediate family aged 16 or older/Has any member of {TARGET}'s immediate family aged 16 or older} had difficulty finding or keeping a job in the past 12 months?
A11L	At any time the past 12 months, {have you/has {TARGET}/has {TARGET}'s parent(s)} {or any member of {your/their} immediate family}
HH_HE7	How often do the following statements describe {you/{TARGET}/{TARGET}'s parent(s)} {or any member of {your/their} immediate family}?
HH_HE1	How often {do you/does {TARGET}/do {TARGET}'S parent(s)} {or any member of {your/their} immediate family} worry about having a steady place to live?
HH_HA6	In the past 12 months, how often were the following difficult for {you/{TARGET}/{TARGET}'S parent(s)} to understand?
D11	How would you rate the overall quality of your housing?
D12b	People may consider many things when they are assessing their housing. What were the most important things you were thinking about when you rated the quality of your housing as fair or poor.

2. Survey Modes and Languages

The 2021 MHIS was programmed in a computer assisted interviewing (CAI) platform that supports two modes of data collection - computer assisted telephone interview (CATI) and computer assisted web interview (CAWI). The advantage of having only one instrument in a CAI program that supports both modes is that respondents can start the interview in one mode and continue in the other, if they choose to, preventing any duplicate records. Another important advantage, from a data management perspective, is that the data are stored in single database and no data harmonization is required later.

The 2021 MHIS was offered in English and Spanish for both CATI and web. In total, 285 interviews were completed in Spanish – 159 on the phone with bilingual interviewers and 126 self-administered on the web.

3. Survey Pretest and Fielding

The pretest for the 2021 MHIS included both CATI and web interviews. The purpose of the pretesting was to evaluate whether new questions were flowing well with the existing instrument and whether respondents comprehended questions as intended by the research team. The web pretest also evaluated the usability of the web instrument, particularly related to any new questions since 2019.

The CATI pretesting was comprised of 11 interviews conducted on June 9, 2021. Respondents for the CATI interviews were prescreened from the SSRS omnibus survey.

SSRS conducted 4 web cognitive interviews from June 12-16, 2021. All the participants took the web survey on a computer, except for one person who used a phone. Web respondents were recruited via both Craigslist listings and the SSRS omnibus survey.

Recordings of the interviews were uploaded to a secure FTP site for CHIA's review.

Table 14 shows the basic demographic characteristics of the pretest targets.

Table 14: Demographic characteristic of the pretest targets

Demographics	n (CATI)	n (web)
Male	6	2
Female	5	2
Less than 18	4	0
18-25	1	0
26-64	4	4
65+	2	0
Insured	10	4
Uninsured	1	0

The survey was generally well received. We identified some problems with verbiage inserts (CATI and web) and some simple enhancements, which were addressed before the start of the main data collection, but in general the CATI and web program worked as planned.

Data collection for the 2021 MHIS began on July 16, 2021 and was completed on December 26, 2021.

4. Survey Training Materials and Interviewer Training

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

1. A briefing document that contained information about the goals of the study, the overall study protocol, 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. An annotated questionnaire.
3. A list of frequently asked questions and the appropriate responses to those questions.
4. A script to use when leaving messages on answering machines.
5. Contact information for project personnel.

Call center supervisors and interviewers were given the opportunity to walk through each question in the questionnaire using a test program. Interviewers were given instructions to help them maximize participation 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 were provided with feedback where appropriate to improve interviewer technique and clarify survey questions. The interviewer monitoring process was repeated periodically during the field period.

5. Completed MHIS Interviews

A total of 5,000 interviews were completed in the 2021 MHIS, 794 from the Prepaid Cell sample and 4,206 from the ABS. Table 15 shows the number of completed interviews by mode and sample type.

Table 15: Completed Interviews by Mode and Sample Type

	ABS	Prepaid Cell Sample	Total
CATI (inbound)	186	17	203
CATI (outbound)	127	777	904
Web	3,893	0	3,893
Total	4,206	794	5,000

The average interview length was 22 minutes. Specifically, the interview took 33.15 minutes on the phone and 18.8 minutes on the web.

D. DATA PROCESSING AND PREPARATION

Two data files were produced and delivered to CHIA – a raw unedited data file from the CATI and CAWI surveys, and a target person-level data file that included all data elements collected for the target person along with data on the characteristics of the target’s family and household. Ranges and logic checks were used to check the data during the data collection process for both CATI and CAWI. 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 for the target and target’s household members, such as age, race/ethnicity, health and disability status, and family income were replaced through hot-deck imputation

procedures (Myers, 2011).⁸ Missing values were also imputed for a group of analytic variables that were needed for the reports on the 2021 MHIS 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 for any given question was quite low. As observed in the past, item nonresponse for income questions remained the highest, at roughly 11.8%.

E. SURVEY 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 ABS and cell phone sample and the overall survey sample are reported below. Before presenting those estimates, our methods for calculating the response rates are described.

AAPOR Response Rate #3 was calculated for this study. Response rate #3 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.

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

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 RDD sample members who refused to be interviewed, ABS members who did not respond, RDD and ABS sample members 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 #3 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) or mail that is delivered but no actions are taken. Finally, cases were defined as not eligible if they were not in Massachusetts, the mail was returned as undeliverable, or the address was not a residential address. 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.

Final response rates for the 2021 MHIS are summarized in Table 16. The response rate for the ABS was 13.2 percent. While this is a decline from the ABS response rate in 2019, this is in line with what is observed in other state health

⁸ The hot decking was done in SPSS. More details on the imputation procedures are provided in Appendix A.

surveys. To review response rates from other state level health surveys, review the CHIS Report 4 2019-2020 Response Rates⁹ or the 2019 Minnesota Health Access Survey Technical Report: Study Design and Data Processing Methodology¹⁰. The response rate for the prepaid cell phone sample was 2.2 percent. This response rate is very low, but it should be noted that phone response rates continue to decline, and this sample of prepaid cell phone was aimed at harder-to-reach populations. As a result, the overall response rate was 6.5 percent. This is significantly lower than 2019 and while responses to the survey continue to decline, the sharp drop is also a result of the design that includes a heavier reliance on the prepaid cell sample.

While low, the 2021 MHIS response rate does not necessarily imply inaccurate estimates, as a survey with a low response rate can still be representative of the sample population, though the risk of nonresponse bias is higher¹¹. Other factors beyond response rates are also important, such as levels of bias, levels of missing data, and similarity to other research findings¹². However, it should be noted that the 2021 MHIS may carry with it more risks and potential errors than federal government surveys. A number of potential sources of bias, including nonresponse bias, are likely only partly mitigated through the survey weighting (described below).

Table 16: Response Rates for 2008-2019 MHIS

Sample	ABS	RDD - Landline Telephone	RDD - Cell Phone	Overall RDD	Overall Response Rate
2008	29.2%	42.0%	N/A	42.0%	33.4%
2009	39.2%	49.6%	N/A	49.6%	42.2%
2010	38.1%	39.2%	N/A	39.2%	41.1%
2011	35.4%	42.3%	N/A	42.3%	37.3%
2014	N/A	32.4%	27.7%	30.9%	30.9%
2015	N/A	22.1%	29.5%	24.6%	24.6%
2017	N/A	22.5%	16.1%	18.8%	18.8%
2019	20.7%	26.1%	7.0%	16.5%	19.6%
2021	13.2%	N/A	2.2%	2.2%	6.5%

In 2021, the RDD cell phone sample was limited to prepaid cell phone numbers.

N/A indicates that such sample was not applicable for a given year.

⁹ CHIS Report 4 2019-2020 Response Rates: <https://healthpolicy.ucla.edu/chis/design/Pages/methodology.aspx>

¹⁰ 2019 Minnesota Health Access Survey Technical Report: Study Design and Data Processing Methodology: <https://www.shadac.org/sites/default/files/publications/MNHA%202019%20Technical%20Report.pdf>

¹¹ Groves, RM. Nonresponse Rates and Nonresponse Bias in Household Surveys. *Public Opinion Quarterly*. 2006; 70(5): 646–75; Jonathon, R, Halbesleben, B, Whitman, M. Evaluating Survey Quality in Health Services Research: A Decision Framework for Assessing Nonresponse Bias. *Health Services Research*. 2013; 48(3):913–30; Brick, JM. The Future of Survey Sampling. *Public Opinion Quarterly*. 2011; 75(5): 872–88.

¹² American Association of Public Opinion Research. Response Rates - An Overview. <https://www.aapor.org/Education-Resources/For-Researchers/Poll-Survey-FAQ/Response-Rates-An-Overview.aspx>

F. SURVEY WEIGHTS AND VARIANCE ESTIMATION

1. Survey Weights

The survey data were weighted to adjust for differential sampling probabilities, to reduce biases due to differences between respondents and nonrespondents (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 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 based on targeted household characteristics, and then to balance the sample to match official statistics for persons living in Massachusetts on metrics such as age and gender (post-stratification weighting).

In developing weights for the MHIS, the survey data were weighted first at the household level and then at the target-person level.

Household base weights

The base weighting process corrects for disproportionate probabilities of selection at the household level. The base weight was calculated differently depending on whether the respondent was contacted through the prepaid cell sample or via ABS. Because the two samples were drawn from separate, but overlapping, frames, it was necessary to first calculate base weights for each sample separately, and then combine the samples.

Address-based sample weights

For the ABS portion, the household base weight began with a stratification weight that adjusts for sampling fractions across design strata. This effectively “undoes” any over- or under-sampling. The stratification weight, WS_i , can be expressed as $WS_i = N_i/n_i$ where N_i is the size of the sample frame in stratum i and n_i is the amount of sample drawn from stratum i . The MHIS strata were created by crossing the eight hierarchical sampling stratification (Predicted to be Asian, Predicted to be Hispanic, Predicted to be High density non-English speaker census block groups, Predicted to be High density Black/African American census block groups, Predicted to have children, Predicted Age 65+, Residual (No external data), Residual (external data)) with the eight Massachusetts HSR sampling strata, yielding 64 weighting strata. All the addresses within each of the 64 weighting strata have the same stratification weight.

Next, the household weights are adjusted for unknown residential status and non-residential (i.e., ineligible) addresses. Weights for addresses with unknown residential status and non-residential addresses are set to zero after this calculation. The residential status adjustment applied to the weights for addresses classified as “unknown residential status” reflects the share of addresses of unknown status that were likely to be eligible for the survey. The adjustment, $ABSA1F_i$, is computed as follows:

$$ABSA1F_i = \begin{cases} \left(\sum_{i \in RES} WS_i + \sum_{i \in UNK_RES} p_{res} \times WS_i \right) / \sum_{i \in RES} WS_i, & \text{if } i \in RES \\ 0, & \text{if } i \in UNK_RES, NON_RES \end{cases}$$

where RES denotes addresses identified as residential, UNK_RES denotes addresses with unknown residential status, and NON_RES denotes non-residential addresses. WS_i is the stratification weight described above, and p_{res} is the estimated proportion of eligible residential addresses among those with unknown residential status. p_{res} was calculated separately for each of the eight Massachusetts Health Regions sampling strata.

The new weight, $ABSA1W_i$, was computed as:

$$ABSA1W_i = ABSA1F_i \times WS_i$$

for all known residential households.

The second adjustment in the household base weight for the ABS accounts for known residential households that did not complete the survey.

This weight, $ABSA2W_i$, was computed as:

$$ABSA2W_i = ABSA2F_i \times ABSA1W_i$$

where $ABSA2F_i$ is the household nonresponse adjustment factor computed as

$$ABSA2F_i = \begin{cases} \sum_{i \in HR, HNR} ABSA1W_i / \sum_{i \in HR} ABSA1W_i, & \text{if } i \in HR \\ 0, & \text{if } i \in HNR \end{cases}$$

where HR is the set of household respondents and HNR is the set of household nonrespondents.¹³ Household respondents are cases where household status was confirmed and the survey was completed. Household nonrespondents are cases where household status was confirmed, but no survey was completed. This adjustment was performed on the sample as a whole.¹⁴

The third household base weight adjustment calibrates the responding sample to the low response score (LRS) from the Census Planning Database in order to address the potential for additional, unmeasured factors driving nonresponse to the MHIS that are captured by the Census-modeled LRS.¹⁵ A five-category variable was created that divides census block groups into quintiles based on the LRS. Then the household weights were calibrated to match the occupied household distribution from the Census Planning Database for Massachusetts block groups.

This weight, $ABSA3W_i$, was computed as:

$$ABSA3W_i = ABSA3F_{gi} \times ABSA2W_i$$

The low response score calibration adjustment, $ABSA3F_{gi}$, is computed as:

$$ABSA3F_{gi} = N_g / \sum_{i \in g} ABSA2W_i$$

where g denotes the low response score quintile and N_g is the number of occupied housing units in quintile g . This adjustment helps reduce nonresponse bias based on potentially unmeasured characteristics that are common to address-based studies.

¹³ Due to a programming error, some cases needed to be deleted and replaced with additional interviews. For weighting purposes, these deleted cases were considered household nonrespondents.

¹⁴ A classification model was run to determine if there was variability in response rate by sample frame variables available for both respondents and nonrespondents. The model suggested there were no meaningful differences in response rates by cell. Therefore nonresponse adjustments were computed for the full sample.

¹⁵ Chandra Erdman, Nancy Bates, The Low Response Score (LRS): A Metric to Locate, Predict, and Manage Hard-to-Survey Populations, *Public Opinion Quarterly*, Volume 81, Issue 1, 1 March 2017, Pages 144–156, <https://doi.org/10.1093/poq/nfw040>

Prepaid cell sample weights

The prepaid cell phone sample weights follow a similar structure as the ABS weights. The prepaid cell phone sample weights began with a design weight that is applied to all of the sample, WD , can be expressed as $WD_i = N_i/n_i$ where N_i is the size of the prepaid cell phone sample frame in zip code i and n_i is the amount of prepaid cell phone sample drawn from zip code i .

There was then an adjustment made to that weight for unknown eligibility status and ineligible phone numbers within the prepaid sample. Weights for those with unknown eligibility and ineligible phone numbers were set to zero. The eligibility adjustment for the known eligible sample, $PPDA1F_i$, was computed as follows:

$$PPDA1F_i = \begin{cases} \left(\sum_{i \in ELIG} WD_i + \sum_{i \in UNK_ELIG} p_{elig} \times WD_i \right) / \sum_{i \in ELIG} WD_i, & \text{if } i \in ELIG \\ 0, & \text{if } i \in UNK_ELIG, NON_ELIG \end{cases}$$

where ELIG denotes phone numbers identified as eligible, UNK_ELIG denotes phone numbers with unknown eligibility status, and NON_ELIG denotes ineligible phone numbers, and p_{elig} is the estimated proportion of eligible phone numbers among those with unknown eligibility status.

The adjusted weight, $PPDA1W_i$, was computed as:

$$PPDA1W_i = PPDA1F_i \times WD_i$$

Next, a nonresponse adjustment was computed to account for eligible phone numbers where no survey was completed.

This weight, $PPDA2W_i$, was computed as:

$$PPDA2W_i = PPDA2F_i \times PPDA1W_i$$

where $PPDA2F_i$ is the prepaid cell phone nonresponse adjustment factor computed as

$$PPDA2F_i = \begin{cases} \sum_{i \in HR, HNR} PPDA1W_i / \sum_{i \in HR} PPDA1W_i, & \text{if } i \in PR \\ 0, & \text{if } i \in PNR \end{cases}$$

where PR is the set of prepaid cell phone respondents and PNR is the set of prepaid cell phone nonrespondents. Prepaid cell phone respondents are cases where eligibility status was confirmed and the survey was completed. Prepaid cell phone nonrespondents are cases where eligibility status was confirmed, but no survey was completed. This adjustment was performed on the prepaid cell phone sample as a whole.¹⁶

Combined ABS and Prepaid cell sample weights

Because the two samples are drawn from separate, but overlapping, frames, they must be combined with a composite adjustment that downweights cases in the overlap. Not every ABS household contains an individual

¹⁶ A classification model was run to determine if there was variability in response rate by sample frame variables available for both respondents and nonrespondents. The model suggested there were no meaningful differences in response rates by cell. Therefore nonresponse adjustments were computed for the full sample.

with a prepaid cell phone, so the compositing adjustment was limited to ABS where one or more prepaid cell phones is present and the entirety of the Prepaid cell sample. For the remainder of the ABS, the adjustment was simply 1.

The overlapping frame adjustment, $OFAF_i$ is computed as

$$OFAF_i = \begin{cases} 1/PPD_i, & i \in PPD \cup ABS(PPD) \\ 1, & i \in ABS(\sim PPD) \end{cases}$$

where PPD_i is the number of adults in the household who have a prepaid cell phone. PPD_i was capped at 3 to contain the variance of the weights.

The final ABS weight, $ABSA4W_i$, was computed as:

$$ABSA4W_i = OFAF_i \times ABSA3W_i$$

The final prepaid cell sample base weight was computed as

$$PPDA3W_i = OFAF_i \times PPDA2W_i$$

The final composite household-level base weight, $BWHH_i$, is therefore:

$$BWHH_i = \begin{cases} WS_i \times ABSA1F_i \times ABSA2F_i \times ABSA3F_{gi} \times OFAF_i, & i \in ABS \\ WD_i \times PPDA1F_i \times PPDA2F_i \times OFAF_i, & i \in PPD \end{cases}$$

A final adjustment was made so that the distribution of cases in households with a prepaid cell phone is in its proper proportion relative to the ABS frame size in MA. This adjustment makes it so that the sum of the final composite household-level base weights of households with a prepaid cell phone, regardless of which frame they were sampled from, total the estimated amount of households in the ABS frame containing one or more prepaid cell phones.

$$FBWHH_i = \begin{cases} BWHH_i, & i \in ABS(\sim PPD) \\ (BWHH_i) \times \left(\sum_{i \in ABS(PPD)} ABSA3W_i / \sum_{i \in PPD \cup ABS(PPD)} BWHH_i \right), & i \in PPD \cup ABS(PPD) \end{cases}$$

Household-level post-stratification

With the household-level base weight applied, the sample was post-stratified to known household parameters based on the 2019¹⁷ U.S. Census Bureau's American Community Survey (ACS)¹⁸ and area characteristics obtained from Claritas¹⁹ in April 2022. The latter included population density quintiles, based on the population per square mile in each zip code, and Massachusetts HSR, as defined by zip code.

The benchmarks used for post-stratification are based on the noninstitutionalized household population of Massachusetts for the following parameters: presence of children in the household, number of adults in the

¹⁷ Due to data quality issues with the 2020 ACS, the 2019 ACS was used to extract post-stratification targets: <https://www.census.gov/programs-surveys/acs/library/flyers/flow-chart.html>

¹⁸ Steven Ruggles, Sarah Flood, Sophia Foster, Ronald Goeken, Jose Pacas, Megan Schouweiler and Matthew Sobek. IPUMS USA: Version 11.0 [dataset]. Minneapolis, MN: IPUMS, 2021. <https://doi.org/10.18128/D010.V11.0>.

¹⁹ <https://claritas.com/>

household, highest level of education attained by a member of the household, homeownership, population density based on the population per square mile in each zip code (divided into quintiles), Massachusetts HSR, and household home access to the internet.

Table 17: Household-level Weighting Benchmarks and Weights

Parameter	Value Label	Benchmark (%)	Unweighted Sample (%)	Weighted Sample (%)
Presence of children in household	No	72.5%	72.8%	72.5%
	Yes	27.5%	27.2%	27.5%
Number of adults in household	1	32.9%	34.7%	32.9%
	2	49.2%	48.9%	49.2%
	3	11.6%	11.2%	11.6%
	4 or more	6.2%	5.3%	6.3%
Population density in zip code	Quintile 1	20.2%	18.1%	20.2%
	Quintile 2	20.0%	19.7%	20.0%
	Quintile 3	20.0%	18.9%	20.0%
	Quintile 4	19.8%	20.8%	19.8%
	Quintile 5	20.0%	22.5%	20.0%
Region	Western MA	11.9%	11.4%	11.9%
	Central MA	10.9%	9.8%	11.0%
	Northeast MA	21.0%	20.2%	21.0%
	Metro West	9.7%	9.4%	9.8%
	Metro Boston	25.0%	29.0%	25.0%
	Metro South	12.1%	11.7%	12.1%
	Southcoast Cape and Islands	5.2% 4.0%	5.2% 3.3%	5.2% 4.0%
Homeownership	Owns home	62.0%	65.9%	62.0%
	Does not own home	38.0%	34.1%	38.0%
Highest Household Education	Less than high school	4.6%	3.8%	4.6%
	High school graduate	16.7%	11.6%	16.7%
	Some college College+	23.0% 55.7%	11.2% 73.4%	23.0% 55.7%
Home Internet Access	No Access	8.6%	3.5%	8.6%
	Access	91.4%	96.5%	91.4%

Target person-level base weights

The target person-level base weight was calculated by adjusting the final household-level weight, after raking, to account for the different probabilities of selection for the target in the household. The probability of selection as

the target within a household is inversely related to the number of people in the household. The final person-level base weight, BWP , can be expressed as $BWP = WHH \times P$ where WHH is the final household weight and P is the number of people in the household, capped at 5. P is capped at 5 to control for unnecessary extra variance at this stage of the weighting. If this adjustment was not capped, it is possible that households with many members will be too far upweighted, which could cause the weights to be over-specified, introducing additional bias.

Target person-level post-stratification

The benchmarks used for post-stratification for the target person in the household were based on the noninstitutionalized population of Massachusetts for the following parameters: age by gender, Massachusetts Health Region, education, race/ethnicity, employment status, marital status, presence of target's parents in household for targets under 18, population density based on the population per square mile in each zip code (divided into quintiles), and nativity status.

The person-level benchmarks for education, employment, and marital status were different depending on whether the target was under or over 18. For adults, the benchmark was the target's status and was based on 2019 ACS estimates. For targets under 18, education was the highest education level attained by the adult(s) in the target's household and was based on the combined 2018–2019 National Survey of Children's Health (NSCH)²⁰. For employment and marital status, targets under 18 were included in a single group of 0–17-year-olds for the benchmarks.

The presence of target's parents for targets under 18 benchmark will be: target's age 18 or over, target's age 0–5 with 0 parents present, target's age 0–5 with 1 parent present, target's age 0–5 with 2 parents present, target's age 6–11 with 0 parents present, target's age 6–11 with 1 parent present, target's age 6–11 with 2 parents present, target's age 12–17 with 0 parents present, target's age 12–17 with 1 parent present, target's age 12–17 with 2 parents present. It was based on the combined 2018–2019 NSCH.

The population density and Massachusetts Health Region benchmarks were obtained from Claritas in April 2022. Remaining benchmarks were based on 2019 ACS estimates.

²⁰ National Survey of Children's Health, Health Resources and Services Administration, Maternal and Child Health Bureau. <https://mchb.hrsa.gov/data/national-surveys>

Table 18: Target Person-Level Weighting Benchmarks and Weights

Parameter	Value Label	Benchmark (%)	Unweighted Sample (%)	Weighted Sample (%)
Gender by Age	Male 0-5	3.2%	1.9%	3.1%
	Male 6-11	3.4%	1.6%	3.3%
	Male 12-17	3.7%	2.3%	3.7%
	Male 18-29	7.9%	5.6%	7.8%
	Male 30-49	12.9%	12.5%	12.7%
	Male 50-64	10.0%	13.3%	10.2%
	Male 65+	7.4%	10.9%	7.6%
	Female 0-5	3.1%	1.9%	2.9%
	Female 6-11	3.3%	2.0%	3.1%
	Female 12-17	3.5%	1.9%	3.5%
	Female 18-29	7.7%	5.8%	7.5%
	Female 30-49	13.5%	11.6%	13.4%
	Female 50-64	10.8%	15.4%	11.1%
	Female 65+	9.5%	13.3%	9.8%
Race/ ethnicity	White, non-Hispanic	70.5%	72.8%	70.8%
	Black, non-Hispanic	7.0%	5.0%	6.7%
	Other, non-Hispanic	3.4%	3.3%	3.4%
	Hispanic	12.4%	11.4%	12.3%
	Asian, non-Hispanic	6.7%	7.7%	6.8%
Nativity status	Born in the U.S.	79.5%	80.4%	80.1%
	Not born in the U.S.	20.5%	19.6%	19.9%
Education	Age 18+, Less than high school	6.9%	4.2%	6.7%
	Age 18+, High school graduate	19.5%	13.7%	19.0%
	Age 18+, Some college	18.9%	18.9%	19.1%
	Age 18+, College+	34.5%	51.6%	35.3%
	Age 0-17, Highest Education of Parent - Less than high school	1.3%	0.5%	1.2%
	Age 0-17, Highest Education of Parent - High school graduate	2.3%	0.8%	2.1%

	Age 0-17, Highest Education of Parent - Some college	3.1%	1.0%	2.8%
	Age 0-17, Highest Education of Parent - College+	13.5%	9.3%	13.7%
Marital Status	Age 0-17	20.2%	11.6%	19.8%
	Married	40.2%	43.1%	40.9%
	Not Married	39.6%	45.3%	39.3%
Employment status	Age 0-17	20.2%	11.6%	19.8%
	Employed	54.0%	57.0%	54.2%
	Not Employed	25.8%	31.3%	26.0%
Presence of parents	Age 18+	79.8%	88.4%	80.2%
	Age 0-5, 0 Parents	0.2%	0.1%	0.2%
	Age 0-5, 1 Parent	1.1%	0.4%	0.9%
	Age 0-5, 2 Parents	5.0%	3.2%	5.0%
	Age 6-11, 0 Parents	0.3%	0.0%	0.2%
	Age 6-11, 1 Parent	1.1%	0.9%	1.1%
	Age 6-11, 2 Parents	5.3%	2.7%	5.1%
	Age 12-17, 0 Parents	0.3%	0.3%	0.3%
	Age 12-17, 1 Parent	1.2%	1.1%	1.3%
Age 12-17, 2 Parents	5.8%	2.9%	5.6%	
Region	Western MA	11.7%	11.4%	11.8%
	Central MA	11.2%	9.8%	11.2%
	Northeast MA	21.7%	20.2%	21.7%
	Metro West	10.2%	9.4%	10.3%
	Metro Boston	24.2%	29.0%	24.3%
	Metro South	12.5%	11.7%	12.3%
	Southcoast	5.0%	5.2%	5.0%
	Cape and Islands	3.5%	3.3%	3.5%
Population density in zip code	Quintile 1	20.2%	18.1%	20.4%
	Quintile 2	20.0%	19.7%	20.0%
	Quintile 3	20.0%	18.9%	19.9%
	Quintile 4	19.8%	20.8%	19.8%
	Quintile 5	20.0%	22.5%	19.9%

Weight trimming

To minimize the potential impact of very large weights on survey estimates, the weights were trimmed at 2nd and 98th percentiles, then adjusted so that the final weights sum to the population of Massachusetts.

2. Variance Estimation

Special variance estimation procedures have been developed to account for a complex sample design. Using these procedures, factors such as stratification, sampling from different frames, and the use of differential sampling rates to oversample targeted subpopulations can be appropriately reflected in estimates of sampling error. Ideally, variance estimation for the 2021 MHIS should be conducted using the provided replicate weights detailed below. At the end of this section, we also show an approximation method that can be used which only requires the linear weights.

Replication

The basic idea behind replication is to draw subsamples from the sample, compute the estimate of interest from each subsample, and estimate the variance of the original sample using the variability of the subsample estimates. Specifically, subsamples of the original “full” sample are selected to calculate subsample estimates of a parameter for which a “full-sample” estimate of interest has been generated. The variability of these subsample estimates about the estimate for the full sample can then be assessed. The subsamples are called replicates, and the estimates from the subsamples are called replicate estimates.

For the MHIS, replicate weights were created to produce the corresponding replicate estimate. Each replicate weight was computed using the same estimation steps as the full sample weight but using only the subsample of cases comprising each replicate.

Replicate point estimates (e.g., mean) generated from replicate weights are used in the following general formula to calculate the associated variance for the point estimate:

$$v(\hat{\theta}) = a \sum_{r=1}^R (\hat{\theta}_{(r)} - \hat{\theta})^2$$

where $\hat{\theta}_{(r)}$ is the estimate generated from the r th replicate; $\hat{\theta}$ is the full-sample estimate generated using the main analytic weight; and a is a constant depending on the replication method chosen. R is the total number of replicates formed.

Design of Replicates

Replicate variance estimation requires a set of weights that capture components associated with the sample design and weight adjustments applied to the full-sample weight.

A paired jackknife replication method (JK2) was used for computing variances in the 2021 MHIS. It was elected to create 80 variance estimation strata. Even though many more could have been created, 80 provide enough degrees of freedom while simultaneously minimizing the computational demands for estimation. For the ABS and prepaid cell phone sample, the 80 variance strata were formed by sorting the full sample into 65 strata (the 64 ABS strata plus one stratum for the prepaid phone sample) and within each stratum, the sample was arranged in the same sort order that was used in sample selection. Next, adjacent sampled units (addresses or phone numbers) were paired to establish initial variance estimation strata (the first two units were in the first initial stratum, the third and fourth sampled units were in the second initial stratum, etc.). Each pair was sequentially assigned to one of 80 final variance estimation strata (the first pair to variance estimation stratum 1, the second to stratum 2, ..., the 80th stratum pair to stratum 80, the 81st pair to stratum 1, etc.). As a result, each variance stratum had approximately the same number of sampled units. The same process was followed for each sampling stratum.

Once the variance strata were created, the replicate weights were created. The full replicate weights were constructed by first modifying the full sample base weights. The replicate base weight for replicate R for record i is

$$w_i^{(r)} = \begin{cases} 2w_i, & \text{if } i \text{ is in variance stratum } r \text{ and variance unit 1} \\ 0, & \text{if } i \text{ is in variance stratum } r \text{ and variance unit 2} \\ w_i, & \text{if } i \text{ is not in variance stratum } r \end{cases}$$

The same sequence of weighting adjustments used in the full sample weight is then applied to the replicate base weights to create the final replicate weights. Thus, all of the different components of the weighting process are fully reflected in the replicate weights.

The final step was to calibrate the weights to the population estimates used for the full sample. Thus, the sum of the weights for each of the replicates and for the full sample will match the size of the MHIS target population (apart from rounding).

An Approximation Method to Replication

An approximation method for variance estimation can be used to avoid the need for replicate weights. Researchers can approximate the variance inflation due to weighting and incorporate it in subsequent calculations of confidence intervals and tests of significance. With w_i representing the final weight of the i^{th} respondent, the inflation due to weighting, which is commonly referred to as Design Effect, can be approximated by $def = n \sum w^2 / (\sum w)^2$ (Kish, 1992).

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APPENDIX A: IMPUTATION OF ANALYTIC VARIABLES

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. Hot deck imputation has emerged as a general and widely used technique for analysis in the presence of missing data.

Hot deck imputation sorts data by user-entered variables and takes data from the “nearest neighbor” and imputes it into a missing case. This procedure can then produce a series of more “complete” datasets which can then be used for analysis.

The hot deck imputation of analytic variables was performed using the `hotdeck()` function from the VIM package (v 4.8.0)²¹ in R (v 3.6.0). Table A.1 provides the list of variables for which we imputed values for missing data. Because of the number of variables to be imputed, imputation was done in multiple batches. Variables were limited and constrained where necessary to avoid contradictory imputed values (for example, imputed age groups were reconciled with imputed single years of age). For the sake of consistency, the imputation procedures for the variables used in weighting followed similar guidelines as in prior waves of this study. As noted previously, an SPSS hot deck macro was also used.

Table A.1: Imputation of Analytic Variables

Question	Missing Values	Total Responses	Missing Percent
Zip code	10	5000	0.2%
Target's age range	19	5000	0.4%
Target's gender	15	5000	0.3%
Target's race/ethnicity	45	5000	0.9%
Target's citizenship status	12	5000	0.2%
Interview was conducted in English	0	5000	0.0%
Target's health status	8	5000	0.2%
Target's activities are limited due to health concerns	28	5000	0.6%
Target's health/disability status	20	5000	0.4%
Target's immediate family's highest completed level of education	37	5000	0.7%
No workers in Target's family	0	5000	0.0%
One or more workers in Target's family	0	5000	0.0%
Family income as percentage of Federal poverty level (four categories)	635	5000	12.7%
Family income as percentage of Federal poverty level (nine categories)	635	5000	12.7%
Target's health insurance status over the past 12 months	4	5000	0.1%
Target's insurance status at the time of the survey	0	5000	0.0%
Target's insurance status for all of the past 12 months	74	5000	1.5%
Target was uninsured at any point in the past 12 months	22	5000	0.4%
Target was insured at any point in the past 12 months	22	5000	0.4%
Target was insured for less than 6 of the past 12 months	22	5000	0.4%

²¹ A. Kowarik, M. Templ (2016) Imputation with R package VIM. *Journal of Statistical Software*, 74(7), 1-16.

Target was insured for 6 or more of the past 12 months	26	5000	0.5%
Target has been insured for the past 12 months or more	4	5000	0.1%
Target was insured at the time of the survey but not for all of the past 12 months	3	5000	0.1%
Target was insured at the time of the survey and for the past 2 years	112	5000	2.2%
Target was insured at the time of the survey and for the past 5 years	112	5000	2.2%
Target transitioned from being uninsured to being insured	66	5000	1.3%
Target transitioned from one type of insurance to another	66	5000	1.3%
Target was uninsured at any point in the past 12 months	22	5000	0.4%
Target was uninsured for less than 6 of the past 12 months	22	5000	0.4%
Target was uninsured for 6 or more of the past 12 months	22	5000	0.4%
Target has been uninsured for the past 12 months or more	22	5000	0.4%
Target was uninsured at the time of the survey but was insured at some point in the past 12 months	22	5000	0.4%
Target was uninsured at the time of the survey and for the past 2 years	0	5000	0.0%
Target was uninsured at the time of the survey and for the past 5 years	0	5000	0.0%
Target was uninsured because the cost of insurance is too high	12	70	17.1%
Target had employer-sponsored health insurance	0	4930	0.0%
Target had public health insurance	0	5000	0.0%
Target had private health insurance	0	5000	0.0%
Target had Medicare	0	5000	0.0%
Target had some other insurance	0	5000	0.0%
Target's primary type of insurance	0	4930	0.0%
Target had a usual source of care other than the ER	34	5000	0.7%
Target received care from a general doctor or specialist in the past 12 months	4	5000	0.1%
Target received care from a general doctor in the past 12 months	39	5000	0.8%
Target received care from a nurse practitioner or physician assistant in the past 12 months	71	5000	1.4%
Target visited a doctor, nurse practitioner or physician assistant for preventive care in the past 12 months	21	4363	0.5%
Target received care from a specialist in the past 12 months	22	5000	0.4%
Target received care from a mental health professional in the past 12 months	21	4950	0.4%
Target saw a dentist or hygienist in the past 12 months	23	5000	0.5%
Target took prescription medications in the past 12 months	20	5000	0.4%
Target visited the ER in the past 12 months	19	5000	0.4%
Target visited the ER more than once in the past 12 months	19	5000	0.4%
Target was unable to get an appointment with a doctor due to problems with their insurance	39	5000	0.8%
Target was unable to get an appointment with a doctor because they weren't accepting new patients	49	5000	1.0%

Target was unable to get an appointment with a doctor as soon as they thought one was needed	36	5000	0.7%
Target was unable to get an appointment with a specialist as soon as they thought one was needed	46	5000	0.9%
Target was unable to get an appointment with a doctor because they were closed or offering limited appointments due to the coronavirus pandemic	20	2470	0.8%
Target felt unsafe receiving health care during the coronavirus pandemic	15	2470	0.6%
Target felt unsafe traveling to receive health care during the coronavirus pandemic	19	2470	0.8%
Target was unable to get to an appointment due to transportation issues	31	5000	0.6%
Target was unable to get to an appointment because there was no child care for children at home	41	5000	0.8%
Target was unable to get to an appointment due to language barriers or lack of an interpreter	32	5000	0.6%
Target visited the ER for a non-emergency condition	24	998	2.4%
Target visited the ER because they were unable to get an appointment with their doctor/clinic	3	334	0.9%
Target visited the ER because they needed care after normal hours at their doctor's office/clinic	1	334	0.3%
Target visited the ER because they owed money to their doctor's office/clinic	0	334	0.0%
Target visited the ER because the ER was more convenient	1	334	0.3%
Target and immediate family's out of pocket spending was more than 5% of income	447	4439	10.1%
Target and immediate family's out of pocket spending was more than 10% of income	229	945	24.2%
Target and immediate family's out of pocket spending was \$1,000 or more	248	5000	5.0%
Target and immediate family's out of pocket spending was \$3,000 or more	248	5000	5.0%
Target did not fill a prescription for medication because of cost in the past 12 months	55	5000	1.1%
Target did not get needed doctor care because of cost in the past 12 months	58	5000	1.2%
Target did not get needed care from a nurse practitioner, physician assistant, or midwife because of cost in the past 12 months	62	5000	1.2%
Target did not get needed specialist care because of cost in the past 12 months	53	5000	1.1%
Target did not get needed mental health care or counseling because of cost in the past 12 months	60	5000	1.2%

Target did not get needed dental care because of cost in the past 12 months	49	5000	1.0%
Target did not get needed alcohol or substance abuse care or treatment because of cost in the past 12 months	66	5000	1.3%
Target did not get needed vision care because of cost in the past 12 months	58	5000	1.2%
Target did not get needed medical equipment because of cost in the past 12 months	70	5000	1.4%
Target or immediate family had problems paying or were unable to pay medical bills	17	5000	0.3%
Target or immediate family had problems paying ER bills	37	568	6.5%
Target or immediate family had problems paying on-going treatment bills	32	568	5.6%
Target or immediate family had problems paying medical test or surgical procedure bills	30	568	5.3%
Target or immediate family had problems paying bills from the birth of a child	44	568	7.7%
Target or immediate family had problems paying dental bills	27	568	4.8%
Target or immediate family had problems paying prescription bills	35	568	6.2%
Target or immediate family had problems paying COVID-19 testing bills	39	568	6.9%
Target or immediate family had problems paying COVID-19 treatment bills	43	568	7.6%
Target or immediate family had problems paying bills for something else	45	568	7.9%
Target or immediate family has received a medical bill where their health plan paid much less than expected or not at all	22	2530	0.9%
To pay medical bills, Target or immediate family has cut back on savings	59	418	14.1%
To pay medical bills, Target or immediate family has borrowed money or taken on credit card debt	63	418	15.1%
Target or immediate family has been contacted by a collection agency about medical bills	63	418	15.1%
Target or immediate family has declared bankruptcy because of medical bills	64	418	15.3%
Target or immediate family has medical bills being paid over time	33	5000	0.7%
Medical bills paid over time are under \$2,000	6	594	1.0%
Medical bills paid over time are between \$2,000 and \$8,000	6	594	1.0%
Medical bills paid over time are over \$8,000	6	594	1.0%
Medical bills paid over time are from within the last year	7	284	2.5%
Medical bills paid over time are from 1 to 5 years ago	7	284	2.5%
Medical bills paid over time are from over 5 years ago	7	284	2.5%
Target went without needed care while insured	0	26	0.0%
Target went without care because the care wasn't covered by their health plan	2	9	22.2%

Target went without care because the copay or coinsurance was too high	2	9	22.2%
Target went without care because it had to be paid as part of their deductible	2	9	22.2%
Target went without care because they weren't sure if the care was covered	2	9	22.2%
Target went without care because they weren't sure of the care's cost	2	9	22.2%
Target went without care for another reason	2	9	22.2%
Medical bills paid over time are for care received when Target had health insurance	3	284	1.1%
Medical bills incurred while insured are for care not covered by their health plan	17	265	6.4%
Medical bills incurred while insured are for co-payments or co-insurance for care covered by their health plan	14	265	5.3%
Medical bills incurred while insured are for care that was part of their deductible	14	265	5.3%
Target's health insurance has a deductible	509	4930	10.3%
Amount of Target's annual deductible	707	3133	22.6%
Target's most recent visit to the ER was for physical health	0	998	0.0%
Target's most recent visit to the ER was for mental health	0	991	0.0%
Target's most recent visit to the ER was for alcohol/substance abuse	0	939	0.0%
Target's most recent visit to the ER was for coronavirus	0	506	0.0%
Target received care for an alcohol or substance abuse disorder in the past 12 months	13	4629	0.3%
Target's self-assessed mental health status	15	4950	0.3%
Target has a chronic health condition	23	5000	0.5%
Target uses the internet at least occasionally	19	1107	1.7%
Any of Target's immediate family went without health insurance at some time in the past 12 months	15	2984	0.5%
Any of Target's immediate family did not fill a prescription for medication because of cost in the past 12 months	112	2918	3.8%
Any of Target's immediate family did not get needed doctor care because of cost in the past 12 months	113	2934	3.9%
Any of Target's immediate family did not get needed nurse practitioner, physician assistant, or midwife care because of cost in the past 12 months	112	2987	3.7%
Any of Target's immediate family did not get needed specialist care because of cost in the past 12 months	110	2891	3.8%
Any of Target's immediate family did not get needed mental health care or counseling because of cost in the past 12 months	111	2900	3.8%
Any of Target's immediate family did not get needed dental care because of cost in the past 12 months	97	2768	3.5%

Any of Target's immediate family did not get needed alcohol or substance abuse care or treatment because of cost in the past 12 months	104	2679	3.9%
Any of Target's immediate family did not get needed vision care because of cost in the past 12 months	113	2907	3.9%
Any of Target's immediate family did not get needed medical equipment because of cost in the past 12 months	114	2977	3.8%
Any of Target's immediate family limited because of physical, mental, or emotional problems	16	2582	0.6%
Target delayed or did not get needed emergency care in the past 12 months because of coronavirus pandemic concerns	8	2470	0.3%
Someone in the Target's immediate family was required to cut back work hours because of the coronavirus pandemic in the past 12 months	12	1385	0.9%
Someone in the Target's immediate family was required to temporarily stop working because of the coronavirus pandemic in the past 12 months	12	1368	0.9%
Someone in the Target's immediate family permanently lost their job because of the coronavirus pandemic in the past 12 months	12	1440	0.8%
Someone in the Target's immediate family voluntarily cut back work hours because of the coronavirus pandemic in the past 12 months	12	1427	0.8%
Someone in the Target's immediate family was deemed an essential worker to cut back work hours because of the coronavirus pandemic in the past 12 months	12	1233	1.0%
Someone in the Target's immediate family was able to telework because of the coronavirus pandemic in the past 12 months	12	1046	1.1%
No one in the Target's immediate family's employment was impacted by the coronavirus pandemic	12	1485	0.8%
Coronavirus employment questions left blank	0	4	0.0%
Respondent did not know if the Target's immediate family's employment was impacted by the coronavirus pandemic	0	252	0.0%
Respondent refused to answer questions about employment during the coronavirus pandemic	0	252	0.0%
Target lost health insurance at some point in the past 12 months because of coronavirus pandemic	1	73	1.4%
Target's enrollment in MassHealth, Health Connector Plan, or individually-purchased private health insurance is related to the coronavirus pandemic	2	45	4.4%
Any of Target's immediate family did not fill a prescription for medication because of the coronavirus pandemic in the past 12 months	22	2470	0.9%
Any of Target's immediate family did not get needed doctor care because of the coronavirus pandemic in the past 12 months	16	2470	0.6%

Any of Target's immediate family did not get needed nurse practitioner, physician assistant, or midwife care because of the coronavirus pandemic in the past 12 months	21	2470	0.9%
Any of Target's immediate family did not get needed specialist care because of the coronavirus pandemic in the past 12 months	17	2470	0.7%
Any of Target's immediate family did not get needed mental health care or counseling because of the coronavirus pandemic in the past 12 months	25	2470	1.0%
Any of Target's immediate family did not get needed dental care because of the coronavirus pandemic in the past 12 months	21	2470	0.9%
Any of Target's immediate family did not get needed alcohol or substance abuse care or treatment because of the coronavirus pandemic in the past 12 months	26	2470	1.1%
Any of Target's immediate family did not get needed vision care because of the coronavirus pandemic in the past 12 months	23	2470	0.9%
Any of Target's immediate family did not get needed medical equipment because of the coronavirus pandemic in the past 12 months	23	2470	0.9%
Target was required to cut back work hours in the past 12 months because of the coronavirus pandemic	9	2222	0.4%
Target was required to stop working temporarily in the past 12 months because of the coronavirus pandemic	9	2222	0.4%
Target lost their job permanently in the past 12 months because of the coronavirus pandemic	9	2222	0.4%
Target voluntarily cut back work hours in the past 12 months because of the coronavirus pandemic	9	2222	0.4%
Target was deemed an essential worker in in the past 12 months because of the coronavirus pandemic	9	2222	0.4%
Target was able to telework in the past 12 months because of the coronavirus pandemic	9	2222	0.4%
Target's employment was not impacted by the coronavirus pandemic	9	2222	0.4%
Coronavirus employment questions blank	0	2	0.0%
Respondent did not know if the Target's employment was impacted by the coronavirus pandemic	0	494	0.0%
Respondent refused to answer questions about employment during the coronavirus pandemic	0	494	0.0%
Target or someone in the Target's immediate family had difficulty finding or keeping a job in the past 12 months	15	2470	0.6%
Timeframe of Target's first telehealth visit	31	1250	2.5%
Target or their immediate family worries that food will run out before they can afford to buy more	9	2470	0.4%
The food that the Target or their immediately family buys doesn't last long enough	15	2470	0.6%

Target or their immediate family have been hungry but couldn't afford to buy food	8	2470	0.3%
Target or their immediate family got emergency food from a church, food pantry, food bank, or other community program	6	2470	0.2%
Target had difficulty understanding written or verbal information from providers about health or health care	23	2470	0.9%
Target had difficulty understanding written instructions about any medications	20	2470	0.8%
Target had difficulty understanding written or verbal information on the results from any medical tests	20	2470	0.8%
Any of Target's immediate family members are in fair or poor health	15	2802	0.5%
Overall quality of housing	11	2470	0.4%
Reasons why housing quality is low - Size of housing	10	199	5.0%
Reasons why housing quality is low - Structural problems	10	199	5.0%
Reasons why housing quality is low - Mice or roaches	10	199	5.0%
Reasons why housing quality is low - Noise levels	10	199	5.0%
Reasons why housing quality is low - Location relative to work/schools	10	199	5.0%
Reasons why housing quality is low - Neighborhood quality	10	199	5.0%
Reasons why housing quality is low - Other	19	197	9.6%
No reasons why housing quality is low were provided	0	1	0.0%
Respondent didn't know why housing quality is low	0	98	0.0%
Respondent refused to answer questions about why housing quality is low	0	98	0.0%
How often Target or their immediate family worries about having a steady place to live	9	2470	0.4%
Any member of the HH has access to the internet at home	19	1107	1.7%
Target has ever been diagnosed with a mental health condition	189	4950	3.8%
Timeframe when Target was first diagnosed with a mental health condition	36	1285	2.8%
Respondent's cell and home phone call frequency	5	1916	0.3%
Respondent or another adult in their HH uses a prepaid cell phone	15	4113	0.4%
Number of adults using prepaid cell phones in the household	73	787	9.3%
Length of time Target has been enrolled in MassHealth, Health Connector Plan, or individually-purchased private health insurance	20	618	3.2%
Target or their immediate family has had problems paying rent/mortgage over the past 12 months	11	2470	0.4%
Target or their immediate family has had problems paying for utilities over the past 12 months	10	2470	0.4%
Target or their immediate family has had problems paying credit card or other bills over the past 12 months	11	2470	0.4%
Target or their immediate family has had problems paying for health insurance over the past 12 months	12	2470	0.5%

Target or their immediate family has had problems paying for prescriptions over the past 12 months	11	2470	0.4%
Primary reason Target did not work the previous week	8	1680	0.5%
Target has an alcohol or substance abuse problem	78	4629	1.7%
Target has ever had a telehealth visit	19	2530	0.8%
Number of medical bills Target or their immediate family received where the health plan paid much less than expected or not at all	7	595	1.2%
Target or their immediate family received bills where the health plan paid much less than expected because the provider was out-of-network	16	595	2.7%
Target's usual source of care offers telehealth visits	72	2190	3.3%
Target did any work for pay during the previous week	2	1750	0.1%
Target worked for pay at a job or business the previous week	16	4490	0.4%
Target's most recent emergency room visit was for a physical health reason	4	998	0.4%
Target's most recent emergency room visit was for a mental health reason	4	998	0.4%
Target's most recent emergency room visit was for a substance abuse disorder	4	998	0.4%
Target's most recent emergency room visit was for a coronavirus-related condition	4	998	0.4%
Respondent didn't answer why Target most recently went to the emergency room	0	998	0.0%
Respondent didn't know why Target most recently went to the emergency room	0	998	0.0%
Respondent refused to answer why Target most recently went to the emergency room	0	998	0.0%
Respondent has a working cell phone	12	5000	0.2%
Respondent or someone else in the HH has a working cell phone	3	5000	0.1%
Respondent's age follow up, if initially refused	0	14	0.0%
Target's insurance status at time of survey and the previous 12 months	15	5000	0.3%

APPENDIX B: 2021 MHIS INSTRUMENT

Field Dates: 7/16/2021 – 12/26/2021
Job #T1121

Massachusetts Health Insurance Survey

GLOBAL PROGRAMMING NOTES:

- MODE= Web, CATI
- SAMPSOURCE= ABS, CELL
- Except for screening questions, allow respondents to skip all other survey questions without a response.
- Message to show on the web if skipped:
Your answers to these questions are very important to us. Please take a moment to respond to the question below. If you prefer not to answer, click the “Next” button.
- The body of the page (question area) should be white.
- Question text should be in larger font than response options.
- Question numbers will be removed before going live.
- Preferred fonts – Arial, Helvetica, or Verdana.
- Do not show any Section titles (ex – Demographics, etc.)
- Languages – allow respondent to pick among the following language preferences:
 - English
 - Spanish
- Grids:
 - Html tables should be programmed in a way that column widths are set as proportions of the screen size. This will allow content to adjust to different browser window sizes.
 - Do NOT to display table lines.
 - Columns should be of equal width.
 - Rows should be shaded – starting with the first row.
 - No vertical shading – i.e. columns.
- Refused and Don’t know response options are only shown for CATI unless specifically indicated for web.
- Please code any skipped/left blank web response for a question a respondent saw as a “97”.
- For the data file, on the back end, we will be re-coding “97” as “-1”.
- Please locate ‘Finish Survey Later’ button to bottom of screen.
- In an effort to reduce the survey length, some questions will only be asked to a subsample of respondents (SubSamp = 1 or 2). Subsamp is randomly assigned.
- If you have technical trouble with this survey, please contact info@mahealthsurvey.com.
- Banner should be displayed on every screen for PC and on the landing page for mobile. Format should be as shown below. “Center for Health Information & Analysis” should be in blue and “An Agency of the Commonwealth of Massachusetts” in grey.
The logo is saved in \T1121\Specifications\Website\MassHealth.jpg



Center for Health Information & Analysis

An Agency of the Commonwealth of Massachusetts

- Set auto-suspend for web surveys at 15 minutes of inactivity

SECTION: WEB INTRO

Ask if: Web R (MODE=Web)

WEBINTRO0. (Web)

Welcome to the 2021 Massachusetts Health Insurance Survey. This survey is being conducted by the Center for Health Information and Analysis. SSRS, an independent research firm, is administering the survey. You were selected to participate in this survey to represent many households like yours.

Enter your secure access code in the box below. The code is printed on the invitation you received in the mail. If you agree to participate in this survey, click next.

WEBINTRO1. (Web)

First, we'd like to tell you about the survey. It asks about health, access to health, and insurance. If you agree to participate, you will be asked to answer a survey online. It takes about 20 minutes. It may be shorter for small households.

Next, we'd like to tell you about your rights in participating. There are no direct benefits for participating. However, your answers will be combined with those of many others. Together, they guide legislators and policymakers to provide high quality, affordable health care for Massachusetts' residents.

Risks to you are minimal. Some questions may make you feel uncomfortable. If that happens, you can skip the question or stop the survey at any time. To the best of our ability your answers will remain confidential. With any online related activity, however, the risk of a breach of confidentiality is always possible. Know that we take every precaution to minimize such risk by storing your answers on secure servers in secure facilities.

This survey is voluntary and confidential. You have the right to participate or not participate. Your decision will not impact your insurance, health care, or relationship with any state or federal agency.

WEBINTRO1B.

On this page is the contact information of the people responsible for the research. There is also phone numbers to call if you want to withdraw or to contact the IRB. The IRB is the body that oversees the protection of study participants. There is also a webpage where you can see data from prior cycles.

The people responsible for the research are Dr. Zi Zhang and Dr. Susan Sherr.

Dr. Zi Zhang

Dr. Susan Sherr

Deputy Executive Director for Research
501 BOYLSTON STREET
BOSTON, MA 02116
617-701-8100
Data.Notice@chiamass.gov

SSRS
SVP Demographic Policy & Research
1 Braxton Way, Suite 125
Glen Mills, PA 19342
ssherr@ssrs.com

For questions about the survey or to withdraw, please call Kathy Langdale at SSRS. She can be reached at 484-840-4449. If you decide to withdraw after completing the survey, your information may not be removed.

For questions about your rights as a participant in the study, contact Solutions IRB. They can be reached at 855-226-4472 or participants@solutionsirb.com.

For information about this survey, click [here](#).

PROGRAM: DISPLAY SECURE ACCESS CODE AS R TYPES IT IN. GO TO HELP.
ERROR MESSAGE: IF SECURE ACCESS CODE IS NOT RECOGNIZED, DISPLAY: "This secure access code is not valid. Please reenter. If you are unable to access the survey, please email us at info@mahealthsurvey.com."

Ask if: Web R (MODE=Web)

HELP. (Web)

Move forward or backward in the survey using the Next and Back buttons. Do not use your browser's buttons or menus while taking the survey.

Please answer each question by selecting the item or category that best describes your response. Then click the Next button to go to the next question.

If you are unable to answer a particular question, you may click the Next button to advance to the next question.

To select responses in questions with buttons, click on the button beside your response. If a question asks for a text response, click on the box and begin typing.

If you have any questions, you may contact us at info@mahealthsurvey.com.

PROGRAM: IN ADDITION TO THIS SCREEN, ALSO DISPLAY THE TEXT FROM "HELP" AT ANY POINT DURING THE SURVEY IF R CLICKS ON THE "NEED ASSISTANCE LINK."
GO TO WSC1.

Ask if: Web R breaks off from web survey

SUSPEND. (Web)

Your answers have been saved. When you return to continue the survey, you will need to enter the 7-digit Secure Access Code found on the materials we sent.

PROGRAM: END

Ask if: Web R resumes survey and enters his/her access code

SUSPEND_RESUME. (Web)

Welcome back to the Massachusetts Health Insurance Survey. Click the “Next” button to go where you left off.

PROGRAM: GO TO THE NEXT UNANSWERED QUESTION.

***END* SECTION: WEB INTRO**

SECTION: CATI INTRO

CALLER ID = MA HEALTH SURVEY

Display local MA phone number.

Ask if: CATI outbound if voicemail (MODE=CATI and o/b) LEAVE VOICEMAIL ON CALL 1ST, 3RD, AND 6TH CALL

OBVOICEMAIL. (CATI)

Hello, I’m calling from SSRS on behalf of the Commonwealth of Massachusetts for an important study about health care and health insurance in Massachusetts. Your number was randomly selected from phone numbers in Massachusetts. We will call you again and hope to reach you at a time that is more convenient for you.

*Ask if: CATI outbound if phone is picked up (MODE=CATI and o/b) OR
Other adult in HH available to talk (IDENTIFY_ADULT2=1) OR
Other adult knows about health insurance for HH members (ALTR=1)*

CATIINTRO1. (CATI)

Hello. My name is _____. I am calling from SSRS on behalf of the Commonwealth of Massachusetts.

(INTERVIEWER: IF YOU REACH A CHILD, ASK TO SPEAK TO AN ADULT AND REINTRODUCE YOURSELF.)

I would like to tell you about the 2021 Massachusetts Health Insurance Survey. This survey is being done by the Center for Health Information and Analysis.

For quality assurance, this call will be recorded.

PROGRAM: IF SAMPSOURCE=ABS, GO TO ABSCCELL, ELSE GO TO CELL1.

VOICEMAIL TO BE SET UP BY TELEOPS, NOT QRE.

Hello and thank you for calling SSRS regarding the study about health care and health insurance in Massachusetts conducted by the Commonwealth of Massachusetts. We are unable to take your call right now but if you leave us a voicemail with your name, phone number, and best time to reach you, one of our interviewers will call you back. If you have it available, please also give us the secure access code from your letter, so we can have your case open and ready to start when we call you back. Thank you for your interest in this important study.

Ask if: ABS respondents with appended phone number (SAMPSOURCE=ABS)

ABSCCELL. (ABSCCELL) (CATI)

Just so that I can ask you the right questions, am I reaching you on a cell phone?

- | | | |
|----|-----------------------|--------------|
| 1 | Yes | GO TO CELL3 |
| 2 | No | GO TO INTRO2 |
| 99 | (DO NOT READ) REFUSED | GO TO EXIT2 |

Ask if: Cell phone sample R (SAMPSOURCE=Cell)

CELL1. (CELL1) (CATI)

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 | GO TO TERM1 |
| 2 | 18 to 25 | CONTINUE TO CELL2 |
| 3 | 26 to 64 | CONTINUE TO CELL2 |
| 4 | 65 or older | CONTINUE TO CELL2 |
| 98 | (DO NOT READ) DON'T KNOW | GO TO TERM1 |
| 99 | (DO NOT READ) REFUSED | GO TO TERM1 |

Ask if: Cell phone sample R and age is 18+ (CELL1=2, 3, 4)

CELL2. (CELL2) (CATI)

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) | GO TO CELL3 |
| 2 | (DO NOT READ) OUTSIDE OF MASSACHUSETTS | GO TO CELL2a |
| 98 | (DO NOT READ) DON'T KNOW | GO TO CELL2a |
| 99 | (DO NOT READ) REFUSED | GO TO CELL2a |

RANGE: HARD: MA ZIP CODE. SEE APPENDIX A.

ERROR MESSAGE: THIS ZIP CODE IS INCORRECT, PLEASE VERIFY AND REENTER. IF ZIP CODE CONTINUES TO BE INCORRECT, SELECT "OUTSIDE OF MASSACHUSETTS")

Ask if: Cell phone sample R and residence is outside MA, or zip is RF or DK (CELL2=2, 98, 99)

CELL2a. (CELL2a) (CATI)

Is your home located in Massachusetts?

- | | | |
|----|--------------------------|-------------|
| 1 | Yes | GO TO CELL3 |
| 2 | No | GO TO TERM2 |
| 98 | (DO NOT READ) DON'T KNOW | GO TO TERM2 |
| 99 | (DO NOT READ) REFUSED | GO TO TERM2 |

Ask if: Cell phone sample R and home is in MA (CELL2=valid MA zip or CELL2a=1) OR ABS sample R reached on cell phone (ABSCELL=1)

CELL3. (CELL3) (CATI)

Before we continue, are you driving?

- | | | |
|----|---|---------------|
| 1 | Not driving | GO TO INTRO2 |
| 2 | Driving | GO TO DRIVING |
| 3 | (IF VOLUNTEERED) THIS IS NOT A CELL PHONE | SEE PRG |
| 99 | (DO NOT READ) REFUSED | GO TO EXIT2 |
- PROGRAM: IF CELL3=3 AND SAMPSOURCE=CELL, GO TO TERM3.
IF CELL3=3 AND SAMPSOURCE=ABS, GO TO INTRO2.

Ask if: All CATI

INTRO2. (CATI)

First, I'd like to tell you about the survey.

It asks about health, access to health, and insurance. You were selected to participate in this survey to represent many households like yours. If you agree to participate, you will be asked to answer a survey over the phone. It takes about 25 minutes. It may be shorter for small households.

Next, I'd like to tell you about your rights in participating. There are no direct benefits for participating. However, your answers will be combined with those of many others. Together, they guide legislators and policymakers provide quality and affordable health care for Massachusetts' residents.

Risks to you are minimal. Some questions may make you feel uncomfortable. If that happens, you can skip the question or stop the survey at any time. To the best of our ability your answers will remain confidential. With any online related activity, however, the risk of a breach of confidentiality is always possible. Know that we take every precaution to minimize such risk by storing your answers on secure servers in secure facilities.

This survey is voluntary and confidential. You have the right to participate or not participate. Your decision will not impact your insurance, health care, or relationship with any state or federal agency.

PROGRAM: GO TO INTRO3

Ask if: All CATI

INTRO3. (CATI)

Before we start, I can give you contact information of the people responsible for the research. I can also give you phone number of people to call if you want to withdraw or to contact the IRB. The IRB is the body that oversees the protection of study participants. I can also give you a webpage where you can see data from prior cycles. Would you like this information?

(IF NEEDED. DO NOT READ ALL CONTACT INFO, PROVIDE ONLY CONTACTS REQUESTED.)

The people responsible for the research are Dr. Zi Zhang and Dr. Susan Sherr.

Dr. Zi Zhang

Deputy Executive Director for Research

501 BOYLSTON STREET

BOSTON, MA 02116

617-701-8100

Data.Notice@chiamass.gov

Dr. Susan Sherr

SSRS

SVP Demographic Policy & Research

1 Braxton Way, Suite 125

Glen Mills, PA 19342

ssherr@ssrs.com

For information about this survey, go to www.chiamass.gov/massachusetts-health-insurance-survey.

For questions about your rights as a participant in the study, contact Solutions IRB. They can be reached at 855-226-4472 or participants@solutionsirb.com.

For questions about the survey or to withdraw, please call Kathy Langdale at SSRS. Her number is 484-840-4449. If you withdraw after completing the survey, your information may not be removed.)

Do you agree to start the survey?

- | | | |
|---|-----|---------|
| 1 | Yes | SEE PRG |
| 2 | No | END |

PROGRAM: IF SAMPSOURCE=CELL, GO TO S2, ELSE (SAMPSOURCE=ABS) GO TO WSC1.

***END* SECTION: CATI INTRO**

SECTION: LOCATION AND R IDENTIFICATION

Ask if: ABS sample R on the web or CATI (SAMPSOURCE=ABS)

WSC1. (WSC1) (Web, CATI)

Are you completing the survey for {Web/CATI: this address/ADDRESS FROM SAMPLE}?
{Web/CATI: ADDRESS FROM SAMPLE/}

- | | | |
|----|----------------------------|-------------|
| 1 | Yes, that is my address | GO TO WSC2 |
| 2 | No, that is not my address | GO TO EXIT1 |
| 99 | (DO NOT READ) REFUSED | GO TO EXIT2 |
| 97 | Web Blank | GO TO EXIT2 |

Ask if: R is completing survey for sampled address (WSC1=1)

WSC2. (WSC2) (Web, CATI)

Do you live or stay at {Web/CATI: this address/ADDRESS FROM SAMPLE}?
{Web/CATI: ADDRESS FROM SAMPLE/}

{Web/CATI: Select "Yes" if you...

-usually live or stay at this address, or

-have no other permanent place to live or stay and currently live or stay at this address, even for short time./ (SELECT YES IF RESPONDENT USUALLY LIVES OR STAYS AT THIS ADDRESS, OR HAVE NO OTHER PLACE TO LIVE OR STAY AND CURRENTLY LIVE OR STAY AT THIS ADDRESS, EVEN FOR A SHORT TIME.)}

- | | | |
|----|-----------------|-------------|
| 1 | Yes | GO TO WSC2b |
| 2 | No | GO TO WSC4 |
| 99 | (CATI: REFUSED) | GO TO EXIT2 |
| 97 | Web Blank | GO TO EXIT2 |

Ask if: R lives/stays at that address (WSC2=1)

WSC2b. (WSC2b) (Web, CATI)

Is this address your main residence, a second home or a vacation home?

- | | | |
|----|-----------------------|-------------|
| 1 | Main Residence | GO TO WSC3 |
| 2 | Second home | GO TO TERM2 |
| 3 | Vacation home | GO TO TERM2 |
| 99 | (DO NOT READ) REFUSED | GO TO EXIT2 |
| 97 | Web Blank | GO TO EXIT2 |

Ask if: Sampled address is R's main residence (WSC2b=1)

WSC3. (WSC3) (Web, CATI)

Are you at least 18 years old?

- | | | |
|---|-----|----------|
| 1 | Yes | GO TO S2 |
|---|-----|----------|

2	No	GO TO IDENTIFY_ADULT#
99	(DO NOT READ) REFUSED	GO TO EXIT2
97	Web Blank	GO TO EXIT2

PROGRAM: IF MODE=WEB, GO TO IDENTIFY_ADULT1, ELSE GO TO IDENTIFY_ADULT2.

Ask if: R does not live/stay at address (WCS2=2)

WSC4. (WSC4) (Web/CATI)

Does anyone live or stay at {web/CATI: this address/ADDRESS FROM SAMPLE}?

{Web/CATI: ADDRESS FROM SAMPLE/}

{Web/CATI: Select "Yes" if anyone...

-usually lives or stays at this address, or

-have no other permanent place to live or stay and currently live or stay at this address, even for short time./ (SELECT YES IF ANYONE USUALLY LIVES OR STAYS AT THIS ADDRESS, OR HAVE NO OTHER PLACE TO LIVE OR STAY AND CURRENTLY LIVE OR STAY AT THIS ADDRESS, EVEN FOR A SHORT TIME.)}

1	Yes	GO TO IDENTIFY_ADULT#
2	No	GO TO WSC5
99	(DO NOT READ) REFUSED	GO TO EXIT2
97	Web Blank	GO TO EXIT2

PROGRAM: IF MODE=WEB, GO TO IDENTIFY_ADULT1, ELSE (CATI) GO TO IDENTIFY_ADULT2.

Ask if no one lives at the sampled address (WSC4=2)

WSC5. (WSC5) (Web/CATI)

Is {web/CATI: this address/ADDRESS FROM SAMPLE} a residential address, a business address, or both?

{Web/CATI: ADDRESS FROM SAMPLE/}

1	Residential	GO TO TERM2
2	Business	GO TO TERM2
3	Both Residential and Business	GO TO TERM2
99	(DO NOT READ) REFUSED	GO TO EXIT2
97	Web Blank	GO TO EXIT2

Ask if: Web R is not 18+ (MODE= web and WSC3=2) OR

Web R does not live at address but someone does (MODE=web and WSC4=1) OR

Web R is less than 18 (MODE=web and (S6a<18 or S6a1=1))

IDENTIFY_ADULT1. (Web)

Please follow the instructions provided in the materials we mailed and give these materials to an adult who lives or stays at {ADDRESS FROM SAMPLE}. Thank you.

PROGRAM: END AND RESET RECORD.

*Ask if: CATI R is not 18+ (MODE=CATI and WSC3=2) OR
CATI R does not live at address but someone does (MODE=CATI and WSC4=1) OR
CATI R is less than 18 (MODE=CATI and (S6a<18 or S6a1=1))*

IDENTIFY_ADULT2. (IDENTIFY_ADULT2) (CATI)

Is there an adult who lives or stays at this address?

- | | | |
|----|-----------------------|------------------------|
| 1 | Yes | GO TO IDENTIFY_ADULT2a |
| 2 | No | GO TO EXIT6 |
| 99 | (DO NOT READ) REFUSED | GO TO EXIT2 |

Ask if: There is an adult who lives at this address (IDENTIFY_ADULT2=1)

IDENTIFY_ADULT2a. (IDENTIFY_ADULT2a) (CATI)

Are they currently available to talk?

- | | | |
|----|-----------------------|------------------|
| 1 | Yes | GO TO CATIINTRO1 |
| 2 | No | GO TO EXIT2b |
| 99 | (DO NOT READ) REFUSED | GO TO EXIT2 |

*Ask if: ABS sample R who confirmed residence in MA and is at least 18+ (WSC3=1) OR
Cell phone sample R and not driving (SAMPSOURCE=CELL and CELL3=1) (saw INTRO3)*

S2. (S2) (Web, CATI)

{Web/CATI: Next are/I'd like to begin by asking} some questions about health insurance for people in your household. Can you answer questions about health insurance for people in your household?

- | | | |
|----|--------------------------|-------------|
| 1 | Yes | GO TO S4 |
| 2 | No | SEE PRG |
| 98 | (DO NOT READ) DON'T KNOW | SEE PRG |
| 99 | (DO NOT READ) REFUSED | GO TO EXIT2 |
| 97 | Web Blank | GO TO EXIT2 |

PROGRAM:

IF S2=2, 98 AND MODE=CATI AND SAMPSOURCE=CELL, GO TO EXIT5,
IF S2=2, 98 AND MODE=CATI AND SAMPSOURCE=ABS, GO TO S3.
ELSE (MODE=WEB), GO TO EXITS3

*Ask if: CATI R does not know about health insurance for people in HH, or RF, or DK and sample is ABS
(MODE=CATI and S2=2, 98 and SAMPSOURCE=ABS)*

S3. (s3) (Web, CATI)

Is another adult available who could answer questions about health insurance?

- | | | |
|----|--------------------------|-------------|
| 1 | Yes | SEE PRG |
| 2 | No | SEE PRG |
| 98 | (DO NOT READ) DON'T KNOW | GO TO EXIT5 |
| 99 | (DO NOT READ) REFUSED | GO TO EXIT2 |
| 97 | Web Blank | GO TO EXIT2 |

PROGRAM:

IF S3=1 AND MODE=CATI, GO TO ALTR
IF S3=1 AND MODE=WEB, GO TO EXITS3
IF S3=2 AND MODE=CATI, GO TO EXIT2b
IF S3=2 AND MODE=WEB, GO TO EXIT5

Ask if: Another person is available to answer questions about health insurance and mode is CATI (S3=1 and MODE=CATI)

ALTR. (ALTR) (CATI)

May I please speak with this person?

- | | | |
|----|--------------------------|------------------|
| 1 | Yes | GO TO CATIINTRO1 |
| 2 | Not available | GO TO EXIT2b |
| 98 | (DO NOT READ) DON'T KNOW | GO TO EXIT5 |
| 99 | (DO NOT READ) REFUSED | GO TO EXIT2 |
| 97 | Web Blank | GO TO EXIT2 |

***END* SECTION: LOCATION AND R IDENTIFICATION**

SECTION: TERMINATE SCREENS

Ask if: Cell phone sample R and age is less than 18, DK, or RF (CELL1 = 1, 98, 99)

TERM1. (CATI)

Thank you. We are only interviewing people who are 18 years old or older.

PROGRAM: END

*Ask if: Home is outside MA, DK, or RF (CELL2a = 2, 98, 99) OR
not R's main residence (WSC2b=2, 3) OR
unoccupied/non res (WSC5=1, 2, 3)*

TERM2. (Web, CATI)

We are only interviewing people whose main residence is in Massachusetts, so these are all the questions {Web/CATI: we/I} have for you today. Thank you.

PROGRAM: END

Ask if: Cell phone sample R but did not reach cell (SAMPSOURCE=cell and CELL3=3)

TERM3. (CATI)

We are only interviewing cell phone lines at this time. Thank you.

PROGRAM: END

Ask if: R is driving (CELL3=2)

DRIVING. (CATI)

For safety reasons, I cannot continue the interview. Someone will call you back at a later point. Thank you.

PROGRAM: END

Ask if: Not completing for sampled address (WSC1=2)

EXIT1. (Web, CATI)

The Massachusetts Health Insurance Survey needs to collect information about: {ADDRESS FROM SAMPLE}. Because you have indicated that you are not completing the survey for that address, we do not need any further information at this time. Thank you.

{Web/CATI: If that is your home address, please press the Back button below to return to the previous question./}

PROGRAM: END

Ask if:

*ABS sample R refuses or does not answer address confirmation (WSC1=99, 97) OR
refuses or does not answer if lives/stays at address (WSC2=99, 97) OR
refuses or does not answer if main residence (WSC2b=99, 97) OR
refuses or does not answer if 18+ (WSC3=99, 97) OR
refuses or does not answer if anyone lives/stays at address (WSC4=99, 97) OR
refuses or does not answer if address is residential or commercial (WSC5=99, 97) OR
refuses to indicate if adult lives in HH (IDENTIFY_ADULT2=99) OR
refuses to indicate if adult in HH is available to talk (IDENTIFY_ADULT2a=99) OR
ABS sample R and refuses to indicate if reached on cell phone (ABSCCELL=99) OR
(cell phone sample R or ABS sample R reached on cell) and refuses to indicate if driving (CELL3=99) OR
refuses or does not answer if can answer Q about health insurance for HH (S2=99, 97) OR
refuses or does not answer if other adult can answer Q about health insurance for HH (S3=99, 97) OR
refuses or does not answer if can speak to alt adult (ALTR=99, 97) OR
Refuses, doesn't know, or does not answer # of people in HH (S4=98, 99, 97)*

EXIT2. (Web, CATI)

Unfortunately, {Web/CATI: we/I} cannot continue the interview without that information. Thank you.

PROGRAM: CODE CASE AS REFUSAL AND END.

Ask if: Adult not available and CATI (IDENTIFY_ADULT2a=2 and mode=CATI)

EXIT2b. (CATI)

I'd like to talk with the adult who lives or stays at this address. I will call back later. Thank you.

PROGRAM: END

*Ask if: Cell phone sample R and cannot answer or does not know about health insurance
(SAMPSOURCE=CELL and S2=2, 98)*

EXIT5. (CATI)

{Web/CATI: We/I} are only interviewing people who can answer questions about health insurance for people in their household, so these are all the questions {Web/CATI: we/I} have for you today. Thank you.

PROGRAM: END

Ask if: No adult live at this address (IDENTIFY_ADULT2=2)

EXIT6. (Web, CATI)

These are all the questions I have for you today, thank you.

PROGRAM: END

*Ask if: Web R cannot answer or doesn't know about health insurance for all members in HH (S2=2, 98
and MODE=web)*

EXITS3. (Web)

We'd like to talk with the adult who can answer questions about health insurance for all people in the household. Please provide them with the materials that were sent so that they may participate in the survey. Thank you.

IF S3=2, BLANK AND MODE=WEB, PLEASE LEAVE RECORD OPEN FOR RE
ACCESS

PROGRAM: END

***END* SECTION: TERMINATE SCREENS**

SECTION: ENUMERATION

Ask if: R is able to answer questions about health insurance for HH members (S2=1)

S4. (S4) (Web, CATI)

Including yourself, how many people currently live or stay in your household?

{Web/CATI: /(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.

{Web/CATI: /(PROBE:)} **Do not include** people who live or stay at another place most of the time, such as people in a correctional facility, nursing home, or residential facility, or people in the regular Armed Forces living somewhere else.

_____ people	GO TO S4a
98 {CATI}{DO NOT READ) Don't know	GO TO EXIT2
99 (DO NOT READ) REFUSED	GO TO EXIT2
97 Web Blank	GO TO EXIT2

PROGRAM: FOR WEB, INSERT PULL DOWN MENU.
RANGE: HARD: 1-50

Ask if: Two or more people in HH (S4>=2)

S4a. (Web, CATI)

{Web/CATI: We/I} need some general information about the people in this household so that one person can be picked at random to talk about health insurance coverage.

PROGRAM: GO TO S6a

Ask if: All (from this point forward, refers to all who passed screener)

S6a. (S6a) (Web, CATI)

{Starting with yourself, what/What} is your age?

Age: _____	SEE PRG
998 (DO NOT READ) DON'T KNOW	GO TO S6a1
999 (DO NOT READ) REFUSED	GO TO S6a1
997 Web Blank	GO TO S6a1

{Web/CATI: /(IF RESPONDENT REFUSES OR DOESN'T KNOW, SAY: We understand your reluctance to give your age, but this information is totally confidential. It will not be used to identify you. It is very important that we gather this information accurately to help improve health insurance for Massachusetts residents.)}

PROGRAM: IF AGE IS LESS THAN 18 (S6a<18) AND MODE=WEB, GO TO IDENTIFY_ADULT1,

IF AGE IS LESS THAN 18 (S6a<18) AND MODE=CATI, GO TO IDENTIFY_ADULT2,
ELSE GO TO S6aa.

RANGE: HARD: 1-110

ERROR MESSAGE: IF LEFT BLANK IN WEB, DISPLAY “We understand your reluctance to give your age, but this information is totally confidential. It will not be used to identify you. It is very important that we gather this information accurately to help improve health insurance for Massachusetts residents.”

Ask if: R refuses, doesn't know, or leaves blank age (S6a=998, 999, 997)

S6a1. (S6a1) (Web, CATI)

{Web/CATI: Are you?/Could you please tell me if you are...}

{Web/CATI: /(READ LIST. ENTER ONE ONLY.)}

- | | | |
|----|--------------------------------|-------------|
| 1 | Less than 18 years of age | SEE PRG |
| 2 | Between 18 and 25 years of age | GO TO S6aa |
| 3 | 26 years of age or older | GO TO S6aa |
| 98 | (DO NOT READ) DON'T KNOW | GO TO EXIT2 |
| 99 | (DO NOT READ) REFUSED | GO TO EXIT2 |
| 97 | Web Blank | GO TO EXIT2 |

PROGRAM: IF AGE IS LESS THAN 18 (S6a1=1) AND MODE=WEB, GO TO IDENTIFY_ADULT1,
IF AGE IS LESS THAN 18 (S6a1=1) AND MODE=CATI, GO TO IDENTIFY_ADULT2.

Ask if: R is 18+ (S6a>=18 or S6a1=2, 3)

S6aa. (S6aa) (Web, CATI)

How do you describe yourself? {Web/CATI: /Would you say...}

- | | | |
|----|--------------------------|-----------|
| 1 | Male | GO TO S9a |
| 2 | Female | GO TO S9a |
| 3 | Transgender male | GO TO S9a |
| 4 | Transgender female | GO TO S9a |
| 5 | None of these | GO TO S9a |
| 98 | (DO NOT READ) DON'T KNOW | GO TO S9a |
| 99 | (DO NOT READ) REFUSED | GO TO S9a |
| 97 | Web blank | GO TO S9a |

Ask if: R is 18+ (S6a>=18 or S6a1=2, 3)

S9a. (S9a) (web, CATI)

What is the highest level of school that you have completed or the highest degree you have received?

- 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 (including 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)
- 98 { (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

Ask if: R is 18+ (S6a>=18 or S6a1=2, 3) AND subsample is 2 (subsamp=2)

S9aa. (S9aa) (web, CATI)

Are you currently working for pay?

- 1 Yes, working
- 2 No, not working
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: IF MORE THAN ONE PERSON IN HH, LOOP THROUGH S6b-y, S6b1b-y, S7b-y and S9b-y FOR NUMBER OF PEOPLE IN HOUSEHOLD (S4-1), ELSE GO TO ROSTERCHECK1.

Ask if: Two or more people in HH (S4>=2),

S6b-y. (S6b-y) (Web, CATI)

You mentioned {S4} people currently live or stay at your household.

What is the next person's age? Your best guess is fine.

- | | |
|---|---------------|
| Age: _____ | GO TO S7b-y |
| 00 Less than 1 year old | GO TO S7b-y |
| 998 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW} | GO TO S6b1b-y |
| 999 (DO NOT READ) REFUSED | GO TO S6b1b-y |
| 997 Web Blank | GO TO S6b1b-y |

{Web/CATI: /(IF RESPONDENT REFUSES OR DOESN'T KNOW, SAY: We understand your reluctance to give your household members' ages, but this information is totally confidential. It will not be used to identify them. It is very important that we gather this information accurately to help improve health insurance for Massachusetts residents.)}

PROGRAM: ALLOW UP TO 25 PEOPLE.LOOP S6

RANGE: HARD: 1-110

ERROR MESSAGE: IF LEFT BLANK IN WEB, DISPLAY "We understand your reluctance to give your household members' ages, but this information is totally confidential. It will not be used to identify them. It is very important that we gather this information accurately to help improve health insurance for Massachusetts residents."

Ask if: R doesn't know, refused, or leaves blank age for HH member (S6b-y=998, 999, 997)

S6b1b-y. (S6b1b-y) (Web, CATI)

{Web/CATI: Is this person.../Could you please me if this person is...}

{Web/CATI: /(READ LIST. ENTER ONE ONLY.)}

- | | | |
|----|---|-------------|
| 1 | Less than 18 years of age | GO TO S7b-y |
| 2 | Between 18 and 25 years of age | GO TO S7b-y |
| 3 | 26 years of age or older | GO TO S7b-y |
| 98 | {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW} | GO TO S7b-y |
| 99 | (DO NOT READ) REFUSED | GO TO S7b-y |
| 97 | Web Blank | GO TO S7b-y |

Ask if: Two or more people in HH (S4>=2)

S7b-y. (S7b-y) (Web, CATI)

{Is this child a boy or a girl?/How does this {child/person} describe themselves?}

- | | | |
|----|--------------------------|-------------|
| 1 | {Male/Boy} | GO TO S9b-y |
| 2 | {Female/Girl} | GO TO S9b-y |
| 3 | Transgender male | GO TO S9b-y |
| 4 | Transgender female | GO TO S9b-y |
| 5 | None of these | GO TO S9b-y |
| 98 | (DO NOT READ) DON'T KNOW | |
| 99 | (DO NOT READ) REFUSED | |
| 97 | Web blank | |

PROGRAM:

IN THE QUESTION TEXT:

IF PERSON BEING ASKED ABOUT IS BELOW 12 (S6b-y<12) OR LESS THAN 18 YEARS OF AGE (S6b1b-y=1),
DISPLAY "Is this child a boy or a girl?"

ELSE IF 12<=S6b-y<18 DISPLAY "How does this child describe themselves?"

ELSE DISPLAY "How does this person describe themselves?"

IN THE RESPONSE OPTION:

DISPLAY "Boy" OR "girl" IF AGE IS BELOW 12 (S6b-y<12) OR LESS THAN 18 YEARS OF AGE (S6b1b-y=1),
ELSE DISPLAY "Male", "Female", "Transgender male", "Transgender female", and "None of these".

ONLY DISPLAY "Male, Female, Transgender male, Transgender female, and None of these" IF AGE IS 12
OR ABOVE (S6b-y>=12) OR MORE THAN 18 YEARS OF AGE (S6b1b-y=2,3).

Ask if: Two or more people in HH and HH member is 18 or older (S4>=2 and (S6b-y>=18 or S6b1b-y=2, 3))

S9b-y. (S9b-y) (Web, CATI)

What is the highest level of school that this person has completed or the highest degree this person has received?

- 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 (including 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)
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

Ask if: Two or more people in HH and HH member is 16 or older (S4>=2 and (S6b-y>=16 or S6b1b-y=2, 3)) AND subsample is 2 (subsamp=2)

S9bb-yy. (S9bb-yy) (Web, CATI)

Is this {child/person} currently working for pay?

- 1 Yes, working
- 2 No, not working
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: IF LESS THAN 18 (S6b-y<18 OR S6b1b-y=1), DISPLAY "child",
ELSE DISPLAY "person".
GO TO ROSTERCHECK1.

Ask if: Two or more people in HH (S4>=2)

RosterCheck1. (ROSTERCHECK1) (Web, CATI)

{Web/CATI: We'd/l'd} like to confirm the information you just provided {about members of your household}. Is the following correct?

Household {member/members}:	Gender	Age
You:	IF S6aa=1, DISPLAY "Male", IF S6aa=2, DISPLAY "Female", IF S6aa=3, DISPLAY "Transgender male", IF S7aa=4, DISPLAY "Transgender female",	IF S6a= 18-110, INSERT AGE (S6a), IF S6a1=2, 3: "18 or older", ELSE LEAVE BLANK

	IF S7aa=5, DISPLAY “Neither male, female, nor transgender” ELSE LEAVE BLANK	
Person 2-25:	IF S7b-y=1, DISPLAY “Male” OR “Boy” BASED ON S7b-y DISPLAY, IF S7b-y=2, DISPLAY “Female” OR “Girl” BASED ON S7b-y DISPLAY, IF S7b-y=3, DISPLAY “Transgender male”, IF S7b-y=4, DISPLAY “Transgender female”, IF S7b-y=5, DISPLAY “Neither male, female, nor transgender” BASED ON S7b-y DISPLAY, ELSE LEAVE BLANK	IF S6b-y=0-110, INSERT AGE (S6b-y), IF S6b1b-y=1, DISPLAY “Less than 18”, ELSE (S6b1b-y=2, 3) DISPLAY “18 or older”, ELSE LEAVE BLANK.

{Web/CATI: If this is not correct, click the Back button below and adjust information as necessary./(IF NOT CORRECT, GO BACK AND ADJUST INFORMATION.)}

PROGRAM: INSERT ROW FOR EACH MEMBER.

IF S4>1, DISPLAY “about members of your household”.

AFTER HOUSEHOLD ROSTER SECTION IS COMPLETED RANDOMLY SELECT ONE PERSON TO BE THE TARGET.

Ask if: All

S10. (S10) (Web, CATI)

{The computer has randomly chosen {you./the following person-}
{INSERT ROW FROM ROSTER FOR THE PERSON WHO IS SELECTED}}

We will now ask some specific questions about {your/this person's} health insurance.

PROGRAM:

IF S4>=2, DISPLAY “The computer has randomly chosen {you./the following person-}
{INSERT ROW FROM ROSTER THAT IS SELECTED}”,
ELSE LEAVE BLANK.

IF PERSON SELECTED IS RESPONDENT, DISPLAY “your”, ELSE DISPLAY “this person’s”.

IF PERSON SELECTED IS RESPONDENT, AND ONLY ONE PERSON IN HH (S4=1), GO TO h1, ELSE GO TO S12a.

IF PERSON SELECTED IS NOT RESPONDENT, AND AGE IS REFUSED, DON’T KNOW, OR MISSING (S6b1-y=98, 99, 97), GO TO EXITS10.

IF SELECTED PERSON IS NOT REPENDENT, GO TO S10a.

Ask if: Target's age is refused, don't know or missing (S6b1b-y=98, 99, 97)

S10aa. (S10aa) (Web, CATI)

Unfortunately, no age was provided for this person. Because age is a critical piece of information, {Web/CATI: we/I} cannot proceed with the interview without that information.

{Web/CATI: Is this person.../Could you please me if this person is...}

{Web/CATI: /(READ LIST. ENTER ONE ONLY.)}

- 1 Less than 18 years of age
- 2 Between 18 and 25 years of age
- 3 26 years of age or older
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

IF AGE IS REFUSED, DON'T KNOW, OR BLANK (S10aa=98, 99, 97), GO TO EXITS10, ELSE GO TO S10a.

Ask if: Person selected is target and age is refused, don't know or missing (S10aa=98, 99, 97)

EXITS10. (Web, CATI)

Unfortunately, age is a critical piece of information, {Web/CATI: we/I} cannot proceed with the interview. Thank you.

Ask if: Person selected is target

S10a. (S10a, S10aName) (Web, CATI)

So that {Web/CATI: we/I} can refer to this person throughout the survey, what is the first name or initials of the person who was selected?

{Web/CATI: We are only asking for this information so this person can be referred to throughout the survey./ (IF NEEDED: We are only asking for this information so this person can be referred to throughout the survey.)

- 1 Name or initials: _____
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: IF REFUSED OR WEB BLANK (S10a=99, 97) DISPLAY "We will refer to this person as "Person X" for the remainder of the survey." WRITE "Person X" IN S10aName.

Ask if: Person selected is 16 or older (S6b-y>=16 or S6b1b-y=2,3) and more than one person in HH (S4>1)

S11. (S11) (Web, CATI)

{Are you/Is this person} currently...

{Web/CATI: /(READ LIST. ENTER ONE ONLY.)}

- 1 Married
- 2 Living with partner
- 3 Divorced
- 4 Separated
- 5 Widowed
- 6 Never Married
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: IF SELECTED PERSON IS RESPONDENT, DISPLAY "Are you", ELSE DISPLAY "Is this person".
IF ONE PERSON HOUSEHOLD, (S4 =1) DO NOT SHOW CODE 2, LIVING WITH PARTNER.

Ask if: Target is respondent

S12a. (S12a) (Web, CATI)

It would be helpful to know the relationship between you and the other members of your household.
How is the {SEX} {who is {AGE}} related to you? Are they your...

- 01 Spouse (wife / husband) (SHOW IF MARRIED OR SEPARATED OR UNKNOWN S11=1, 4, 97, 98, 99)
- 02 Unmarried partner / significant other (SHOW IF LIVING WITH A PARTNER OR UNKNOWN S11=2, 97, 98, 99)
- 03 Child / stepchild / foster child / ward
- 06 Child of unmarried partner (SHOW IF LIVING WITH A PARTNER OR UNKNOWN S11=2, 97, 98, 99)
- 04 Parent / stepparent / foster parent / guardian (SHOW IF TAGE <26 OR TAGE2=1 OR 2)
- 05 Sibling / stepsister / stepbrother (SHOW IF TAGE<26 OR TAGE2=1 OR 2)
- 10 Other relative
- 14 Other non-relative
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

SEX:

IF S7b-y=1, DISPLAY "Male" OR "Boy" BASED ON S7b-y,
IF S7b-y=2, DISPLAY "Female" OR "Girl" BASED ON S7b-y,
IF S7b-y=3, DISPLAY "Transgender male",
IF S7b-y=4, DISPLAY "Transgender female",
IF S7b-y=5, DISPLAY "Neither male, female, or transgender",
ELSE DISPLAY "person"

IF AGE IS NOT MISSING, DISPLAY "who is {AGE}":

AGE:

IF S6b-y=0-110, INSERT AGE “(S6b-y) years old”,
IF S6b1b-y=1 OR S10aa=1, DISPLAY “Less than 18”,
ELSE (S6b1b-y=2, 3 OR S10aa=2, 3) DISPLAY “18 or older”,
ELSE AGE IS MISSING.

Ask if: Target is not respondent and target is child (TAGE<26 OR TAGE2=1 OR 2)

S12b-y. (S12b-y) (Web, CATI)

It would be helpful to know the relationship between {S10aName} and the other members of your household.

How {are you/{is the {SEX} {who is {AGE}}}} related to (S10aName)? Are (you/they) the...

- 04 Parent / stepparent / foster parent/ guardian
- 15 Unmarried partner or significant other of the {child’s/their} parent
- 01 Spouse (wife / husband) (SHOW IF (TAGE >=16 OR TAGE2=2 OR 3) AND MARRIED OR SEPARATED OR UNKNOWN S11=1, 4, 98, 99, 97)
- 02 Unmarried partner / significant other (SHOW IF (TAGE >=16 OR TAGE2=2 OR 3) AND LIVING WITH A PARTNER OR UNKNOWN S11=2, 98, 99, 97)
- 03 Child / stepchild (SHOW IF (TAGE>=16 OR TAGE2=2 OR 3) AND HOUSEHOLD MEMBER AGE <26)
- 05 Sibling / Stepsister / Stepbrother
- 10 Other relative
- 14 Other non-relative
- 98 (DO NOT READ) DON’T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

DISPLAY “child’s” IF (TAGE<18 OR TAGE2=1), ELSE DISPLAY “their”.

Ask if: Target is not respondent and target is adult

S12b-y. (S12b-y) (Web, CATI)

It would be helpful to know the relationship between {S10aName} and the other members of your household.

How {are your/is {the {SEX} {who is {AGE}}}} related to (S10aName)? Are (you/they) the...

- 01 Spouse (wife / husband) (SHOW IF MARRIED OR SEPARATED OR UNKNOWN S11= 1, 4, 97, 98, 99)
- 02 Unmarried partner / significant other (SHOW IF LIVING WITH A PARTNER OR UNKNOWN S11=2, 97, 98, 99)
- 03 Child / stepchild / child of unmarried partner / foster child / ward
- 06 Child of unmarried partner (SHOW IF LIVING WITH A PARTNER OR UNKNOW S11=2, 97, 98, 99)

- 04 Parent / Stepparent / foster parent / guardian (SHOW IF TAGE<26 OR TAGE2=1 OR 2)
- 05 Sibling / Stepsister / Stepbrother (SHOW IF TAGE<26 OR TAGE2=1 OR 2)
- 10 Other relative
- 14 Other non-relative
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

IF ASKING ABOUT RELATIONSHIP BETWEEN RESPONDENT AND TARGET, DISPLAY “your/you”, ELSE DISPLAY “the {SEX} {who is {AGE}}” and “they”.

SEX:

IF S7b-y=1, DISPLAY “Male” OR “Boy” BASED ON S7b-y,
 IF S7b-y=2, DISPLAY “Female” OR “Girl” BASED ON S7b-y,
 IF S7b-y=3, DISPLAY “Transgender male”,
 IF S7b-y=4, DISPLAY “Transgender female”,
 IF S7b-y=5, DISPLAY “Neither male, female, or transgender”,
 ELSE DISPLAY “person”

IF AGE IS NOT MISSING, DISPLAY “who is {AGE}”:

AGE:

IF S6b-y=0-110, INSERT AGE “(S6b-y) years old”,
 IF S6b1b-y=1 OR S10aa=1, DISPLAY “Less than 18”,
 ELSE (S6b1b-y=2, 3 OR S10aa=2, 3) DISPLAY “18 or older”,
 ELSE AGE IS MISSING.

NOTE THAT FOR PROGRAMMING PURPOSES, THE 2 S12b-y QUESTIONS WILL BE COMBINED AS IT GREATLY SIMPLIFIES THE PROGRAMMING OF THE ROSTER CHECK. THE ONLY IMPACT OF THIS CHANGE IS THE ORDER OF RESPONSE OPTION #4 IN THE SECOND QUESTION.

Ask if: HH is more than one person (S4>1)

RosterCheck2. (ROSTERCHECK2) (Web, CATI)

{Web/CATI: We’d/I’d} like to confirm the information you just provided about the relationship of the members of your household to {you/S10a}. Is the following correct?

PROGRAM: INSERT THE SELECTED PERSON IN ROW 1. THEN EVERY OTHER HH MEMBERS.

INSERT A ROW FOR EACH MEMBER OF HOUSEHOLD, STARTING WITH TARGET SHOWING RESPONSES FROM:

Household Member	Gender (S6aa or S7b-y)	Age (S6a-y)
------------------	------------------------	-------------

<p>{you/S10aName}</p>	<p>IF S6aa or S7b-y=1, DISPLAY "Male", IF S6aa or S7b-y=2, DISPLAY "Female", IF S6aa or S7b-y=3, DISPLAY "Transgender male", IF S6aa or S7b-y=4, DISPLAY "Transgender female", IF S6aa or S7b-y=5, DISPLAY "Neither male, female, nor transgender", ELSE LEAVE BLANK</p>	<p>IF S6a-y= 18-110, INSERT AGE (S6a-y), IF S6a1=2, 3 OR S6b1b-y=2, 3 OR S10aa=2, 3: "18 or older", ELSE LEAVE BLANK</p>
<p>{Your/{S10a}'s} IF S12a-y=1, DISPLAY "Spouse (wife / husband)", IF S12a-y=2, DISPLAY "Unmarried partner / significant other", IF S12a-y=3, DISPLAY "Child / stepchild / foster child / ward", IF S12a-y=4, DISPLAY "Parent / Stepparent / foster parent / guardian", IF S12a-y=5, DISPLAY "Sibling / Stepsister / Stepbrother", IF S12a-y=6, DISPLAY "Child of unmarried partner", IF S12a-y=10, DISPLAY "Other relative", IF S12a-y=14, DISPLAY "Other non-relative",</p>	<p>IF S6aa or S7b-y=1, DISPLAY "Male" OR "Boy" BASED ON S7b-y, IF S6aa or S7b-y=2, DISPLAY "Female" OR "Girl" BASED ON S7b-y, IF S6aa or S7b-y=3, DISPLAY "Transgender male", IF S6aa or S7b-y=4, DISPLAY "Transgender female", IF S6aa or S7b-y=5, DISPLAY "Neither male, female, nor transgender", ELSE LEAVE BLANK</p>	<p>IF S6a-y= 18-110, INSERT AGE (S6a-y), IF S6a1 OR S6b1b-y=1 OR S10aa=1, INSERT "less than 18 years old", IF S6a1 OR S6b1b- y=2, 3 OR S10aa=2, 3, INSERT "18 or older", ELSE LEAVE BLANK</p>

IF S12a-y=15, DISPLAY "Unmarried partner of significant other of the child's parent", ELSE LEAVE BLANK		
--	--	--

Is this information correct?

- 1 Yes
- 2 No

PROGRAM: IF NO, ALLOW PULL DOWN FOR S12 ANSWER CATEGORIES AND display "Please update the relationships if necessary".

Ask if: Target is child ((TAGE<18 OR TAGE2=1) AND has less than 2 parents in HH AND there is another adult in the HH.

S12c. (S12c (Web, CATI)

Are any {other} members of your household the legal guardian or caretaker of {TARGET}?

- 1 Yes GO TO S12d
- 2 No
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 CATI ONLY: (DO NOT READ) REFUSED
- 97 BLANK

INSERT "other" IF AT LEAST ONE PARENT IN HH.

Ask if: Target has guardian or parent in HH (S12c=1)

S12d. (S12d (Web,CATI)

Which household member (or members) is {TARGET}'s legal guardian or caretaker?
(DO NOT READ, ALLOW MULTIPLE)

- 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
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 CATI ONLY: (DO NOT READ) REFUSED

PROGRAM: SHOW HOUSEHOLD MEMBERS WHO ARE NOT PARENT S12a-y NE 4 AND AGE IS >=16.
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 living with a spouse/partner; 0 otherwise

TPAR – 1 if TARGET is parent of child <26 in household; 0 otherwise

TAGE – TARGET's age

TAGE2 – 1 if TARGET's age S6b1(a-y)=1 Less than 18

2 if TARGET's age S6b1(a-y)=2 18 years of age to 25

3 if TARGET's age S6b1(a-y)=3 26 or older

NOTE: FOR THE REMAINING OF THE QUESTIONNAIRE, CONDITIONS BASED ON AGE ARE USING TAGE OR TAGE2. THE FOLLOWING ARE DECISIONS WHEN TAGE AND TAGE2 DO NOT PERFECTLY LINE UP.

TAGE>=16 OR TAGE2=2 OR 3

TAGE>=1 OR TAGE2=1, 2, OR 3

TAGE>11 OR TAGE2=2 OR 3

TAGE<16 OR TAGE2=1

TFEM – 1 if TARGET is female/girl including trans female; 2 if trans male, 0 otherwise

IF (TAGE<26 OR TAGE2=1 OR 2) & TMARR=0 & TPAR=0: TARGET+PARENTS+SIBLINGS<26 FROM ROSTER (S12b-y=04 OR 14 OR 05)

IF (TAGE<26 OR TAGE2=1 OR 2) & (TMARR=1 OR TPAR=1): TARGET+SPOUSE (S11=1 OR 2)+CHILDREN<26 FROM

ROSTER (S12b-y=3)

IF (TAGE=>26 OR TAGE2=3): TARGET+SPOUSE (S11=1 OR 2)+CHILDREN<26 FROM ROSTER (S12b-y=3)

ADLTCOUNT – Number of people in HH who are 18 or older (S6a-y>=18 OR S6b1a-y=2 or 3)

IF TARGET IS UNDER 26 AND IS NOT MARRIED AND NOT A PARENT ((TAGE<26 OR TAGE2=1 OR 2) AND TMARR=0 AND TPAR=0) SET THE FOLLOWING VARIABLES:

RPAR=1 IF THE RESPONDENT INDICATED BEING THE PARENT OF THE TARGET AT S12 (S12_01=04), ELSE RPAR=0

RMARR=1 IF –RESPONDENT IS PARENT AND THERE IS ANOTHER PERSON IN HH WHO IS PARENT OR UNMARRIED PARTNER OF CHILD'S PARENT (RPAR=1 AND (ANY 1 OF S12_2 THROUGH S12_25=04 OR 15))

OR

–RESPONDENT IS NOT PARENT AND THERE ARE TWO PEOPLE IN HH WHO ARE PARENT OR UNMARRIED PARTNER OF CHILD'S PARENTS (RPAR<>1 AND (AT LEAST 2 OF S12_2 THROUGH S12_25=4 OR 15))

ELSE RMARR=0.

HEALTH INSURANCE- TARGET PERSON

***P.N. #1– THROUGHOUT Q’NAIRE WHEN THE INSERT LANGUAGE IS REFERRING TO THE TARGET’S PARENT:**

IF TARGET IS <18 YEARS OLD (TAGE<18 OR TAGE2=1) AND RESPONDENT IS TARGET’S PARENT, THE INSERT SHOULD FOLLOW THE INSERTS FOR “RESPONDENT”.

IF TARGET IS <18 YEARS OLD AND RESPONDENT IS NOT TARGET’S PARENT, THE INSERT SHOULD BE “TARGET’S PARENT...”

Ask if: Family is more than 1 person (TFAM_COUNT>1)

FAMCONFIRM.

For some of the questions in the survey we will be asking about {your/{TARGET}'s} family that is living with {you/TARGET}. For the purposes of the survey, we will use:

- “spouse” to include both married and unmarried partners
- “children” under 26 to include biological children, stepchildren, adopted children, foster children, or children of an unmarried partner
- “parent” to include biological parent, stepparent, parent through adoption, foster parent, or guardian, as well as any unmarried partner of a parent (IF TARGET IS LESS THAN 18 (TAGE<18) OR IS LESS THAN 26 AND IS NOT MARRIED AND NOT PARENT (TAGE<26 OR TAGE2=1 AND TMAR=0 AND TPAR=0))

For the remainder of this survey, we are defining family as the immediate family, where immediate family includes{FAMILY DESCRIPTION}.

PROGRAM:

FAMILY DESCRIPTION:

IF (TAGE<26 OR TAGE2=1 OR 2) & TMARR=0 & TPAR=0 & RESPONDENT IS PARENT AND RESPONDENT IS MARRIED (RPAR=1 AND RMARR=1), INSERT:

“you, your spouse and your children **under 26** who are living with you.”

IF (TAGE<26 OR TAGE2=1 OR 2) & TMARR=0 & TPAR=0 & RESPONDENT IS PARENT AND RESPONDENT IS NOT MARRIED (RPAR=1 AND RMARR=0), INSERT:

“you and your children **under 26** who are living with you.”

IF (TAGE <26 OR TAGE2=1 OR 2) & TMARR=0 & TPAR=0 & RESPONDENT IS NOT PARENT (RPAR=0) & TFAM_COUNT>1, INSERT:

“{TARGET}, {TARGET}'s parent(s) and {TARGET}'s siblings **under 26** who are living with {TARGET}.”

IF TMARR=1 & TFAM_COUNT>2, INSERT:

“{you/{TARGET}}, {your/{his/her/their}} spouse and {your/{TARGET}'s} children **under 26** who are living with {you/{TARGET}}.”

INSERT “your/you” IF TARGET IS RESPONDENT, ELSE INSERT {TARGET/his/her/their} WHERE THEIR IS USED IF GENDER IS NOT MALE OR FEMALE.

IF TMARR=1 & TFAM_COUNT = 2, INSERT:

"{you/{TARGET}} and {your/{his/her/their}} spouse."

INSERT "your/you" IF TARGET IS RESPONDENT, ELSE INSERT/ "{TARGET}/his/her/their" WHERE THEIR IS USED IF GENDER IS NOT MALE OR FEMALE.

IF TMARR=0 & TPAR=1 & TFAM_COUNT>=2, INSERT:

"{you/{TARGET}} and {your/{TARGET}}'s children **under 26** who are living with {you/{TARGET}}."

INSERT "you/your" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}".

IF RESPONDENT IS TARGET AND (18<TAGE<26 OR TAGE2= 2) & TMARR=0 & TPAR=0 AND TFAM=>2)

INSERT:

"{you, your parent(s) {and your siblings **under 26**} who are living with you."

INSERT "and your siblings **under 26**" IF S12a=5 FOR ANY HH MEMBERS.

Ask if: All

H1. (H1b, H1c, H1d, H1h, H1i, H1q, H1k, H1l, H1m, H1f)

{Web/CATI: The next questions ask about health insurance. Please tell us if {you/{TARGET}} currently {have/has} any of the following types of health insurance./I am going to read you a list of different types of health insurance. Please tell me if {you/{TARGET}} currently {have/has} any of the following types of health 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...

{Web/CATI: /(READ LIST.)}

{Web/CATI: /(IF RESPONDENT ASKS TO SKIP THROUGH INSURANCE QUESTIONS, SAY:) I'm sorry, but I have to read all of the health insurance categories.}

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

- b. Health insurance through {your/{TARGET}}'s work or union? {Web/CATI: / (PROBE:)} This health insurance could be through COBRA through a former employer, or a retiree benefit.
- c. Health insurance through someone{ else}'s work or union? {Web/CATI: / (PROBE:)} This health insurance could be through COBRA through a former employer, or a retiree benefit.
- d. Medicare? {Web/CATI: /(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.
- h. MassHealth or Medicaid? {Web/CATI: /(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 MassHealth Premium Assistance. {You/{TARGET}} may have coverage under MassHealth through a health insurance plan.

- i. Connector Care? {Web/CATI: /(PROBE:)} This is health insurance available through the Health Connector at either no cost or low cost for low- and moderate-income adults. {You/{Target}} would have coverage through a health insurance plan and the health insurance card would also say "ConnectorCare" on it.
- q. Health Connector Plan? This is health insurance purchased through the Health Connector. {You/{Target}} would have coverage through a health insurance plan.
- k. A qualifying student health insurance plan? {Web/CATI: /(PROBE:)} A QSHIP is a health insurance plan that is sponsored by a college or university.
- l. Health insurance bought directly from a health insurance company by {you/{Target}}? {Web/CATI: /(PROBE:)} For example, bought directly from Blue Cross Blue Shield or another company or bought through a health insurance broker.
- m. Health insurance bought directly from a health insurance company by someone else? {{Web/CATI: /(PROBE:)}For example, bought directly from Blue Cross Blue Shield or another company or bought through a health insurance broker.}

- f. Veteran's Affairs, Military Health, TRICARE or CHAMPUS?

PROGRAM:

SHOW EACH ITEM ON SEPARATE SCREEN.

ASK ITEMS b, i, and l if (TAGE>=16OR TAGE2=2 OR 3)

ASK ITEM c IF H1b < 1 > OR WAS NOT ON PATH. FOR H1c, DISPLAY "else" ONLY IF TAGE>=16.

ASK ITEM l IF H1b AND H1c < 1 > AND T(AGE>=18 OR TAGE2=2 OR 3)

ASK ITEM m IF H1l AND H1b AND H1c < 1 >. IF ITEM l IS NOT ASKED, DISPLAY "For example, bought directly from Blue Cross Blue Shield or another company or bought through a health insurance broker."

ASK ITEM k if TAGE>=16 OR TAGE2=2 OR 3 AND <=64 AND H1b AND H1c < 1 >

INSERT "you/have/do you" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}/has/does".

PLACE INTRO ON THE SCREEN WITH THE FIRST INSURANCE TYPE

STOP ASKING SERIES AFTER FIRST YES RESPONSE.

Ask if: Target has insurance through his/her work or union, through Health Connector Plan, or through health insurance bought from an insurance company (H1b = 1 OR H1q=1 OR H1l=1) and insurance not through someone else (H1c<>1 AND H1m<>1)

H1ba. (H1ba)

Does {the health insurance through {your/{TARGET}'s} work or union/the health insurance through someone else's work or union/the Health Connector plan/the health insurance bought directly from a health insurance company} cover more than one person?

- 1 Yes, (family policy)
- 2 No (individual policy)
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

IF H1b=1, DISPLAY “the health insurance through {your/{TARGET}'s} work or union”

IF H1c=1, DISPLAY “the health insurance through someone else’s work or union”

IF H1q=1, DISPLAY “the Health Connector plan”

IF H1l=1, DISPLAY “the health insurance bought directly from a health insurance company”

INSERT “your” if TARGET IS RESPONDENT, ELSE INSERT “{TARGET}'s”.

IF INSURANCE IS THROUGH SOMEONE ELSE, (H1c OR H1M=1, SET H1ba=1 WITHOUT ASKING THE QUESTION.

DELETED H1bb for 2021

Ask if: Target did not report any insurance or refused or don't know or does not answer (ALL IN H1=2, or null, or 98, 99, 97)

H2. (H2_1, H2_2, H2_3, H2_4, H2_5, H2_6, H2_7, H2_7_OS, H2_8, H2_98, H2_99, H2_97)

{Do you/ Does {TARGET}} currently have any other type of health insurance?

{Web/CATI: Check all that apply./(DO NOT READ, ALLOW MULTIPLE.)}

- 1 Workers compensation for specific injury/illness
- 2 Employer pays bills, but not a health insurance policy
- 3 Family member pays out of pocket for any bills
- 4 Other non health insurance payment source
- 5 Indian Health Service (IHS)
- 6 Free Care/Health Safety Net/Medical Hardship
- 7 Other health insurance {Web/CATI: Please specify:/(SPECIFY:)} _____
- 8 No other health insurance
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT “Do you” if TARGET IS RESPONDENT, ELSE INSERT “Does {TARGET}”.

MAKE H2_8 MUTUALLY EXCLUSIVE.

Ask if: Target has workers compensation, employer pays bills, family pays out of pocket, or has other non insurance payment source (H2a=1 OR H2b=1 OR H2c=1 OR H2d=1 ONLY)

H2b.

For the purposes of this survey, we'll assume that {you do/{TARGET} does} not have health insurance.

PROGRAM:

INSERT “you do” IF TARGET IS RESPONDENT, ELSE INSERT “{TARGET} does”.

NOW GO TO H6

Ask if: Target reported no insurance or refused or don't know (H2_1-7 = 0, OR H2_98=1, OR H2_99=1, OR H2_97=1, OR H2_8=1)

H3. (H3)

Just to be sure {Web/CATI: /I have this right}, {you do/{TARGET} does} not have health insurance. Is that correct?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

INSERT "you do" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET} does".

Ask if: Not correct, target has health insurance (H3 = 2)

H3a. (H3a, H3a_OS)

What health insurance do {you/they} have?

{Web/CATI: /(DO NOT READ, ENTER ONE ONLY.)}

{Web/CATI: /(PROBE:)} If you can, it might be helpful to look at {your/their} health insurance card to help identify the type of health insurance.

- 02 Health insurance through {your/{TARGET}'s} work or union
- 03 Health insurance through someone{ else}'s work or union
- 04 Medicare
- 08 MassHealth or Medicaid
- 09 Connector Care
- 22 Health Connector Plan
- 12 Health insurance bought directly from a health insurance company by {you/{TARGET}}
- 13 Health insurance bought directly by someone else
- 06 Veteran's Affairs, Military Health, TRICARE or CHAMPUS
- 11 Student health plan
- 05 Railroad Retirement Plan
- 07 Indian Health Service (IHS)
- 14 Free Care/Health Safety Net/Medical Hardship
- 15 Workers compensation for specific injury/illness
- 16 Employer pays for bills, but not a health insurance policy
- 17 Family member pays out of pocket for any bills
- 18 Other non health insurance payment source
- 96 Other health insurance {Web/CATI: Please specify:/(SPECIFY:)} _____
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "you/your" IF TARGET IS RESPONDENT, ELSE INSERT "they/their/{TARGET}'s/{TARGET}".

DISPLAY RESPONSE OPTION 02 ONLY IF TAGE >=16 OR TAGE2=2 OR 3.
DISPLAY "else" FOR OPTION 3 ONLY IF TAGE>=16.

Ask if: R does not know, refuses, or leaves blank the type of health insurance target has (H3a = 98, 99, 97)

H3b. (H3b)

When {you/they} receive care from a doctor, health clinic, or hospital, does anyone else pay for some or all of {your/their} medical bills?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW 99 (DO NOT READ) REFUSED

- 97 Web Blank

PROGRAM: INSERT "you/your" IF TARGET IS RESPONDENT, ELSE INSERT "they/their"

Ask if: Target receives Free Care/Health Safety Net/Medical Hardship or Indian Health Service (H2_5=1 OR H2f=1 OR H3a = 07,14)

H3c. (H3c)

{Web/CATI: You selected that/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} receive care from a doctor, health clinic, or hospital?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: IF H2_5=1 or H3a=7, DISPLAY "Indian Health Service", ELSE DISPLAY "Free Care/Health Safety Net/Medical Hardship"

INSERT "you receive/your/you" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET} receives/{TARGET}'s/they".

Ask if: No one else pays for bills or refuses or does not know or does not answer (H3c = 2, 98, 99, 97)

H3d.

For the purposes of this survey, {Indian Health Service/(Free Care/Health Safety Net/Medical Hardship)} is not considered comprehensive health insurance. For our survey, we'll assume that {you do/{TARGET} does} not have health insurance.

PROGRAM:

IF H2_5=1 or H3a=7, DISPLAY "Indian Health Service", ELSE DISPLAY "Free Care/Health Safety Net/Medical Hardship"

INSERT "you do" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET} does".

NOW GO TO Q.H6

Ask if: Someone else pays for medical bills (Q H3b=1 OR H3c = 1)

H4. (H4, H4_OS)

And who is that?

{Web/CATI: /(DO NOT READ, ENTER ONE ONLY.)}

- 02 Health insurance through {your/{TARGET}'s} work or union
- 03 Health insurance through someone{ else}'s work or union
- 04 Medicare
- 08 MassHealth or Medicaid
- 09 Connector Care
- 22 Health Connector Plan
- 12 Health insurance bought directly from a health insurance company by {you/{TARGET}}
- 13 Health insurance bought directly by someone else
- 06 Veteran's Affairs, Military Health, TRICARE or CHAMPUS
- 11 Student health plan
- 05 Railroad Retirement Plan
- 07 Indian Health Service
- 14 Free Care/Health Safety Net/Medical Hardship
- 15 Workers compensation for specific injury/illness
- 16 Employer pays for bills, but not a health insurance policy
- 17 Family member pays out of pocket for any bills
- 18 Other non health insurance payment source
- 96 Other health insurance {Web/CATI: Please specify:/(SPECIFY:)} _____
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "your/you" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}'s/{TARGET}".

DISPLAY RESPONSE OPTION 02 ONLY IF TAGE >=16 OR TAGE2=2 OR 3.

DISPLAY "else" FOR OPTION 3 ONLY IF TAGE>=16.

Ask if: Indian Health Service, OR Free Care/Health Safety Net/Medical Hardship OR Workers compensation for specific injury/illness OR Employer pays for bills, but not an insurance policy OR Family member pays out of pocket for any bills OR Other Non Insurance Payment Source (H4 = 07 OR 14-18)

H4a.

For purposes of this survey, we'll assume {you do/{TARGET} does} not have health insurance.

PROGRAM: INSERT "you do" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET} does".
NOW GO TO Q.H6

(Q.H4a DELETED 2017)
(Q.H4b DELETED 2017)

Ask if: Current coverage is MassHealth (H1h=1 OR H3a=8), OR Health Connector Plan (H1q=1 OR H3a=22), OR Individually purchased Private Insurance (H1l=1 OR H1m=1 OR H3a=12, 13)

H4b. (H4b)

How long have {you/{TARGET}} been enrolled in {MassHealth/Health Connector Plan/individually purchased private health insurance plan}?

- 1 Less than 12 months
- 2 12 months or more
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "MassHealth" IF H1h=1 OR H3a=8,
INSERT "Health Connector Plan" IF H1q=1 OR H3a=22,
ELSE INSERT "individually purchased private health insurance".
INSERT "you" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}".

Ask if: Coverage under MassHealth, Health Connector Plan, or private insurance is less than 12 months old (H4b=1) AND subsample is 2 (subsamp=2)

H4c. (H4c)

Is {your/{TARGET}'s} enrollment in {MassHealth/Health Connector Plan/individually purchased private health insurance plan} related in any way to the coronavirus pandemic? For example, because of a lost job or a reduction in income.

- 1 Yes
- 2 No
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW} 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "MassHealth" IF H1h=1 OR H3a=8,
INSERT "Health Connector Plan" IF H1q=1 OR H3a=22,
ELSE INSERT "individually purchased private health insurance".
INSERT "your" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}'s".

SETUP2

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

TINS

- 1** TARGET is insured (H1b-q OR H2 = 7 OR H3a = 02-06, 08-13, 22, 96 OR H4 = 02-06, 08-13, 22, 96)
- 0** NOT insured [(ALL IN H1=2, or null, or 98, 99, 97) AND ((H2a=1 OR H2b=1 OR H2c=1 OR H2d=1 OR H2e=1) AND H2f<>1) AND H3 = 1] OR H3a = 7, 15-18, 98,99, 97 OR H3c = 2, 98, 99, 97 OR H4 = 07, 14-18, 98, 99, 97

TESI

- 1** TARGET has insurance through their employer. H1b=1 OR h3a=2 OR h4=2
- 0** otherwise

Ask if: Target is insured (TINS=1)

H5. (H5)

[[Have you/Has {TARGET}] had health insurance for all of the past 12 months?]
[Has {TARGET} had health insurance since they were born?]

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: IF (TAGE>=1 OR TAGE2=1, 2, OR 3) USE 1ST VERBIAGE IN BRACKETS.
IF TAGE<1 USE 2ND VERBIAGE IN BRACKETS.
INSERT "Have you" IF TARGET IS RESPONDENT, ELSE DISPLAY "Has {TARGET}"

Ask if: Target is insured (TINS=1)

H5aa. (H5aa)

A deductible is the amount {you/{TARGET}/{TARGET}'s parent(s)} must pay out of {your/their} own pocket each year before health insurance begins paying for health care services. Does {your/{TARGET}'s} health insurance have a deductible?

- 1 Yes
- 2 No
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "you/your/your" IF TARGET IS RESPONDENT,
INSERT "you/your/{TARGET}'s" IF (TAGE<18 OR TAGE2=1) AND RESPONDENT IS TARGET'S PARENT,

INSERT "{TARGET}'s parent(s)/their/{TARGET}'s" IF RESPONDENT IS NOT TARGET'S PARENT AND (TAGE<18 OR TAGE2=1),
ELSE INSERT "{TARGET}/their/{TARGET}'s".

Ask if: Health insurance has deductible (H5aa=1)

H5ab. (H5ab)

Is the annual deductible for medical care for this plan less than \${1,400/2,800} or \${1,400/2,800} or more?

If there is a separate deductible for prescription drugs, hospitalization, or out-of-network care, do not include those deductible amounts here.

- 1 Less than \${1,400/2,800}
- 2 \${1,400/2,800} or more
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

IF ONLY ONE PERSON COVERED BY THE PLAN (H1ba=2), INSERT "1,400", ELSE INSERT "2,800"

Ask if: Target has had insurance in the past 12 months/since birth (H5=1) AND subsample is 1 (subsamp=1)

H5a. (H5a)

How many years has it been since {you were/{TARGET} was} last uninsured?
{Web/CATI: /(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
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "you were" IF TARGET IS RESPONDENT, ELSE DISPLAY "{TARGET} was".

Ask if: Target is insured and was at some point uninsured (TINS=1 AND H5a<>7) AND subsample is 1 (subsamp=1)

H6a. (H6a)

{Were you/Was {TARGET}} uninsured just before {you/{TARGET}} obtained {your/their} current health insurance or did {you/{TARGET}} have some other type of health insurance?

- 1 {Web/CATI: /(DO NOT READ)}Uninsured just before {I/{TARGET}} obtained current health insurance
- 2 {Web/CATI: /(DO NOT READ)}Had some other type of health insurance
- 3 {Web/CATI: /(DO NOT READ)} Always had the same coverage
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW} 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "Were you/you/your/I" IF TARGET IS RESPONDENT, ELSE DISPLAY "Was {TARGET}/{TARGET}/their".

Ask if: Target is uninsured or has not had insurance in the past 12 months (TINS=0 OR H5=2)

H6. (H6)

How many months during the past 12 months {were you/was {TARGET}} without health insurance?

- _____ months
- 00 Less than 1 month
 - 98 (DO NOT READ) DON'T KNOW
 - 99 (DO NOT READ) REFUSED
 - 97 Web Blank

PROGRAM: INSERT "were you" IF TARGET IS RESPONDENT, ELSE INSERT "was {TARGET}".
RANGE: HARD 1-12

Ask if: Target is uninsured (TINS=0)

H7. (H7, H7_CYY, H7_CMM, H7_WYY, H7_WMM)

How long has it been since {you/{TARGET}} had any health insurance?

{Web/CATI: You may answer in years, months, or years and months./(PROBE FOR MONTHS IF LESS THAN 2 YEARS.)}

- CATI
- 01 ANSWER GIVEN IN YEARS _____ # (1-110) YEARS
 - 02 ANSWER GIVEN IN MONTHS _____ # (1-24) MONTHS
 - 00 LESS THAN 1 MONTH
 - 03 NEVER HAD COVERAGE
 - 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
 - 99 (DO NOT READ) REFUSED

- WEB
- 01 _____ # of years

- 02 _____ # of months
- 03 Never had coverage
- 00 Less than 1 month
- 97 Web Blank

PROGRAM: INSERT “you” IF TARGET IS RESPONDENT, ELSE INSERT “{TARGET}”.

RANGE:

HARD: IF YEARS IS MISSING, MONTHS RANGE IS 1-24, ELSE MONTHS RANGE IS 1-11

Ask if: Target is uninsured (TINS=0)

H8. (H8a, H8b, H8c, H8d, H8e, H8f, H8g, H8h, H8i, H8j, H8j_OS)

{Web/CATI: Next is/I’m going to read} a list of reasons that people sometimes give for why they don’t have health insurance. Please {Web/CATI: indicate/tell me} if these are reasons that {you do/{TARGET} does} not have health insurance.

{Web/CATI: /How about...}

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON’T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

- 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 health insurance
- h. Don’t know how to get health insurance
- i. Traded health insurance for another benefit or higher pay
- j. Is there some other reason for not having health insurance {Web/CATI: Please specify:/(SPECIFY:)}_____

PROGRAM: INSERT “you do” IF TARGET IS RESPONDENT, ELSE INSERT “{TARGET} does”.

SCRAMBLE ITEMS WITH j ALWAYS LAST.

Ask if: Target is insured at the time of the survey but uninsured at some point in the past 12 months (TINS=1 AND H5=2) OR uninsured at the time of the survey but insured at some point in the past 12 months (TINS=0 AND H6<12) AND subsample is 2 (subsamp=2)

H8bb. (H8bb)

{Have you/Has {TARGET}} experienced a loss of health insurance at any time in the past 12 months because of the coronavirus pandemic? For example, because of a lost job or reduction in income.

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "Have you" IF TARGET IS RESPONDENT, ELSE INSERT "Has {TARGET}"

Ask if: Target has not had insurance for 1 month or more, refuses, does not know, or does not answer (H7 = 01, 02, 98, 99, OR 97)

H9. (H9_02, H9_03, H9_04_H9_08, H9_17, H9_19, H9_09, H9_10, H9_12, H9_13, H9_06, H9_11, H9_07, H9_05, H9_14, H9_16, H9_18, H9_15, H9_85, H9_85_OS, H9_86, H9_86_OS, H9_87, H9_87_OS, H9_88, H9_88_OS, H9_89, H9_89_OS, H9_98, H9_99, H9_97)

Thinking back to the last time {you/{TARGET}} had health insurance, what type of health insurance did {you/{TARGET}} have?

{Web/CATI: Check all that apply./ (CHECK ALL THAT APPLY.)}

- 02 Health insurance through {your/{TARGET}'s} work or union
- 03 Health insurance through someone else's work or union
- 04 Medicare
- 08 MassHealth or Medicaid
- 17 Connector Care
- 19 Health Connector Plan
- 09 Commonwealth Care
- 10 Commonwealth Choice
- 12 Health insurance bought directly from a health insurance company by {you/{TARGET}}
- 13 Health insurance bought directly by someone else
- 06 Veteran's Affairs, Military Health, TRICARE or CHAMPUS
- 11 Student health plan
- 07 Indian Health Service
- 05 Railroad Retirement Plan
- 14 Free Care/Health Safety Net/Medical Hardship
- 16 Temporary coverage from the Health Connector and MassHealth
- 18 Former Medical Security Program
- 15 Other non health insurance payment source
- 85 Other health insurance #1 {Web/CATI: Please specify./ (SPECIFY:)}

- 86 Other health insurance #2 {Web/CATI: Please specify:/(SPECIFY:)}
- 87 _____
Other health insurance #3 {Web/CATI: Please specify:/(SPECIFY:)}
- 88 _____
Other health insurance #4 {Web/CATI: Please specify:/(SPECIFY:)}
- 89 _____
Other health insurance #5 {Web/CATI: Please specify:/(SPECIFY:)}
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "you/your" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}/{TARGET}'s".
ASK ITEMS 02, 05, 09, 10, 11, 12 IF (TAGE>=16 OR TAGE2=2 OR 3)

(H10 AND H11 DELETED IN 2019)
(\$13 AND SECTION I DELETED IN 2015)
(SETUP3 VARIABLES DELETED IN 2015)

EMPLOYMENT

Ask if: Target is 16 or older (TAGE>=16 OR TAGE2=2 OR 3)

E0.

{Web/CATI: The next questions ask about employment./My next questions ask about employment.}

Ask if: Target is 16 or older (TAGE>=16 TAGE2=2 OR 3)

E0a. (E0a)

Last week, did {you/{TARGET}} work for pay at a job or business?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

Ask if: Target did not work for pay at a job or business last week, (E0a=2)

E0b. (E0b)

Last week, did {you/{TARGET}} do **any** work for pay, even for as little as one hour?

- 1 Yes

- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

Ask if: Target did not do any work for pay last week, (E0b=2)

E0c. (E0c)

What is the main reason {you/{TARGET}} did not work last week? {Web/CATI: Were you/Was {TARGET}.../}

{Web/CATI: Main reason is the most important reason./ (IF NEEDED, SAY: Main reason is the most important reason.)}

- 1 Taking care of house or family
- 2 On a planned vacation
- 3 Not able to find a job
- 4 Going to school (student)
- 5 Retired
- 6 Disabled
- 7 Unable to work temporarily
- 8 On layoff
- 9 On strike
- 10 On family or maternity leave
- 11 Off season
- 12 Sick
- 91 Not working for some other reason
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

Ask if: Target worked for pay last week (E0a OR E0b=1) AND subsample is 2 (subsamp=2)

E2. (E2)

{Do you/Does {TARGET}} have more than one job, including part-time, evening or weekend work?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "Do you" IF TARGET IS RESPONDENT, ELSE INSERT "Does {TARGET}"

Ask if: Target has more than one job (E2=1) AND subsample is 2 (subsamp=2)

E3. (E3)

Altogether, how many jobs {do you/does {TARGET}} have?

- 1 2 jobs
- 2 3 jobs
- 3 4 or more jobs
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "do you" IF TARGET IS RESPONDENT, ELSE INSERT "does {TARGET}".

Ask if: Target worked for pay last week (E0a OR E0b=1) AND subsample is 2 (subsamp=2)

E1. (E1)

{Thinking about {your/{TARGET}'s} main job, {are you currently.../is {TARGET} currently...}
{Are you /Is {TARGET}} currently...

- 1 Self-employed
- 2 Employed by military
- 8 Employed by government (local, state, federal)
- 3 Employed by someone else
- 4 Unpaid worker for a family business
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "Thinking about {your/{TARGET}'s} main job, {are you currently.../is {TARGET} currently...}" IF E2=1, ELSE
INSERT "Are you/Is {TARGET}you".
INSERT "your/are you currently/Are you" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}'s/is {TARGET}/Is {TARGET}".

Ask if: Target is 16 or older (TAGE>=16 OR TAGE2=2 OR 3) AND subsample is 2 (subsamp=2)

E1b. (E1b_1, E1b_2, E1b_3, E1b_4, E1b_5, E1b_6, E1_98, E1_99, E1_97)

Have any of the following happened to {you/{TARGET}} in the last 12 months because of the coronavirus pandemic?

{Web/CATI: Check all that apply./{CHECK ALL THAT APPLY.}}

- 1 {You were/{TARGET} was} required to cut back hours at work
- 2 {You were/{TARGET} was} required to stop working temporarily
- 3 {You/{TARGET}} lost {your/their} job permanently
- 4 {You/{TARGET}} chose to voluntarily cut back hours at work or to stop working
- 5 {You were/{TARGET} was} deemed an essential worker, meaning that {you/they} were required to work outside the home during the coronavirus pandemic
- 6 {You were/{TARGET} was} able to telework or work from home
- 7 None of these

- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "you/you were//your" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}/{TARGET} was/their".

Ask if: Target is older than 18 (TAGE> 18 OR TAGE2=2 OR 3) AND subsample is 2 (subsamp=2)

E13. (E13)

{Are you/Is {TARGET}} a veteran of the United States military?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "Are you" IF TARGET IS RESPONDENT, ELSE INSERT "Is {TARGET}".

Ask if: Target is 16 or older (TAGE>=16 OR TAGE2=2 OR 3) AND subsample is 2 (subsamp=2)

E14. (E14)

{Are you/Is {TARGET}} currently a full-time student?
{Web/CATI: /(IF NECESSARY:) greater than three-fourths time.}

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "Are you" IF TARGET IS RESPONDENT, ELSE INSERT "Is {TARGET}".

HEALTH STATUS

Ask if: All

HS0.

{Web/CATI: The/My} next questions are about {your/{TARGET}'s} health. Remember that your answers to these questions and all other questions are completely confidential.

Ask if: All

HS1. (HS1)

Would you say {your/{TARGET}'s} health, in general, is excellent, very good, good, fair, or poor?
{Web/CATI: /PROBE: Remember that your answers to this question and all other questions are completely confidential.}

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "your" IF TARGET IS RESPONDENT ELSE
INSERT "{TARGET}'s".

Ask if: Age is greater than 1 (TAGE>1 OR TAGE2=1, 2, OR 3)

HS1a. (HS1a)

Would you say {your/{TARGET}'s} mental health, in general, is excellent, very good, good, fair, or poor?
{Web/CATI: /PROBE: Remember that your answers to this question and all other questions are completely confidential.}

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "your" IF TARGET IS RESPONDENT ELSE
INSERT "{TARGET}'s".

Ask if: Age is greater than 1 (TAGE>1 OR TAGE2=1, 2, OR 3)

Source: BRFSS with additional conditions from NAMI.

HS1aa. (HS1aa)

Has a doctor or other health care provider ever told {you/{TARGET}} that {you/they} have anxiety disorder, depression, post-traumatic stress disorder (PTSD), bipolar disorder, obsessive compulsive disorder (OCD), or some other mental health condition?

{Web/CATI: /PROBE:} Remember that your answers to this question and all other questions are completely confidential.

- 1 Yes
- 2 No
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "you" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}/they".

Ask if: Target has been told he/she has a mental health condition (HS1aa=1)

HS1ab. (HS1ab)

When {were you/was {TARGET}} first told by a doctor or other health care provider that {you have/{TARGET} has} a mental health condition?

{Web/CATI: /PROBE: Remember that your answers to this question and all other questions are completely confidential.}

- 1 Less than 1 year ago
- 2 At least 1 year ago but less than 2 years ago
- 3 2 years ago or more
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "you/you have" IF TARGET IS RESPONDENT ELSE INSERT "{TARGET}/{TARGET} has".

Ask if: All

HS2. (HS2)

{Are you/Is {TARGET}} limited in any way in {your/their} activities because of a physical, mental, or emotional problem?

{Web/CATI: /PROBE:} Remember that your answers to this question and all other questions are completely confidential.

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "Are you/your" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}/their".

Ask if: All

Source: CHIS

HS3. (HS3)

{Do you/Does {TARGET}} currently have a health condition that has lasted for a year or more or is expected to last for a year or more? This could be a physical health condition (such as arthritis, asthma, cancer, dementia, diabetes, heart disease, high cholesterol, hypertension or stroke), a behavioral health or mental health condition, or a developmental disability.

{Web/CATI: /PROBE: Remember that your answers to this question and all other questions are completely confidential.}

- 1 Yes, one condition
- 2 Yes, more than one condition
- 3 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "Do you" IF TARGET IS RESPONDENT
INSERT "Does TARGET" IF PERSON ASKING ABOUT IS "TARGET PERSON"

Ask if: Age is greater than 11 (TAGE>11 OR TAGE2=2 OR 3)

Source: CHIS

HS3a. (HS3a)

Some people have problems with alcohol or substance use. {Do you/Does {TARGET}} have an alcohol or substance use problem?

{Web/CATI: /PROBE:} Remember that your answers to this question and all other questions are completely confidential.

- 1 Yes
- 2 No
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "Do you" IF TARGET IS RESPONDENT, ELSE INSERT "Does {TARGET}"

ACCESS, USE AND COST

Ask if: All

A1. (A1)

{Web/CATI: The following/My next} questions ask about {your/{TARGET}'s} recent health care experiences.

Is there a place where {you/{TARGET}} usually {go/goes} when {you/they} are sick or when {you/they} need advice about {your/their} health?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "your/you/go" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}'s/{TARGET}/goes/they/their".

Ask if: Target goes to specific place for care (A1 = 1)

A2. (A2, A2_OS)

What kind of place is it? {Web/CATI: /Is it...}
{Web/CATI: /(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? {Web/CATI: Please specify:/(SPECIFY:)}
- 7 _____
{Web/CATI: {I don't/{TARGET} doesn't} go to one place most often./(DO NOT READ)
Doesn't go to one place most often}
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "I don't" IF TARGET IS RESPONDENT), ELSE INSERT "{TARGET} doesn't".

Ask if: Target goes to specific place for care (A1 = 1) AND kind of place is doctor's office, private clinic, community health center, hospital outpatient dept, hospital ER, or urgent care center (A2=1, 2, 3, 4, or 5) AND subsample is 1 (subsamp=1)

A2a. (A2a)

{Does that place/Do any of those places} offer telehealth visits? That is, visits by video, phone, email, text or chat.

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT “Do any of those places” if A2=7, ELSE INSERT “Does that place”.

Ask if: subsample is 1 (subsamp=1)

A2b. (A2b)

{Have you/Has {TARGET}} ever had a telehealth visit for any type of health care, including mental health care or substance use treatment?

- 1 Yes
- 2 No
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT “Have you” IF TARGET IS RESPONDENT, ELSE INSERT “Has {TARGET}”.

Ask if: Target had had telehealth visit (A2b=1) AND subsample is 1 (subsamp=1)

A2c. (A2c)

When was the first time {you/{TARGET}} had a telehealth visit for any type of health care, including mental health care or substance use treatment?

- 1 Less than 6 months ago
- 2 At least 6 months ago but less than 1 year ago
- 3 At least 1 year ago but less than 2 years ago
- 4 2 years ago or more
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT “you” IF TARGET IS RESPONDENT, ELSE INSERT “{TARGET}”

Ask if: All

A3. (A3)

The next questions are about the health care {you/{TARGET}} received in the past 12 months.

In the past 12 months, how many times did {you/{TARGET}} receive care in a hospital emergency room?
{Web/CATI: Your best guess is fine./(READ LIST. ENTER ONE ONLY.)}

- 0 None
- 1 1 time
- 2 2 times
- 3 3 times
- 4 More than 3 times

- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "you" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}".

Ask if: Target received care in ER in past 12 months (A3=1, 2, 3, 4)

A3a. (A3a)

The last time {you/{TARGET}} went to a hospital emergency room, was it for a condition that {you/{TARGET}}/{TARGET}'s parent(s) thought could have been treated by a regular doctor if he or she had been available?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "you" IF TARGET IS RESPONDENT OR (TAGE<18 OR TAGE2=1) AND RESPONDENT IS TARGET'S PARENT,
INSERT "{TARGET}'s parent(s)" IF RESPONDENT IS NOT TARGET'S PARENT AND (TAGE<18 OR TAGE2=1),
ELSE INSERT "{TARGET}".

Ask if: Condition could have been treated by regular doctor (A3a=1)

A3b. (A3ba, A3bb, A3bc, A3bd)

{Web/CATI: Next is a list of reasons why some people/I'm going to read you a list of reasons why people sometimes} go to the emergency room.

{Web/CATI: Please indicate/Please tell me} if any of these were important reasons for {your/{TARGET}'s} last visit to a hospital emergency room.

{Web/CATI: /Was this an important reason?}

- 1 Yes
- 2 No
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

- a. {You were/{TARGET} was/{TARGET}'s parent(s) was} unable to get an appointment at the doctor's office or clinic as soon as {you/{TARGET}}/{they} 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(s) owed money to the doctor's office or clinic
- d. It was more convenient to go to the hospital emergency room

PROGRAM: INSERT "your/You were/you" IF TARGET IS RESPONDENT,

INSERT "{TARGET}'s/You were/{TARGET}/you" IF TARGET IS LESS THAN 18 (TAGE<18 OR TAGE2=1) AND RESPONDENT IS TARGET'S PARENT,
INSERT "{TARGET}'s/{TARGET}'s parent(s) was/they/{TARGET}" IF RESPONDENT IS NOT TARGET'S PARENT AND (TAGE<18 OR TAGE2=1),
ELSE INSERT "{TARGET}'s/{TARGET} was/{TARGET}".

Ask if: Target received care in ER in past 12 months (A3=1, 2, 3, 4)

A3c. (A3ca, A3cb, A3cc, A3cd)

What condition did {you/TARGET} have, the last time {you/{TARGET}} went to a hospital emergency room?

{Web/CATI: Check all that apply./CHECK ALL THAT APPLY.}

- a. A condition related to physical health
 - b. A condition related to mental health
 - c. A condition related to alcohol or substance use disorder
 - d. Coronavirus or a condition that you thought might be related to coronavirus
- 98 (DO NOT READ) DON'T KNOW
99 (DO NOT READ) REFUSED
97 Web Blank

PROGRAM: INSERT "you" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}".

ASK ITEM b IF (TAGE>1 OR TAGE2=1, 2, OR 3)

ASK ITEM c IF (TAGE>11 OR TAGE=2 OR 3)

ASK ITEM d IF SUBSAMPLE IS 2 (subsamp=2)

Ask if: subsample is 2 (subsamp=2)

A3e. (A3e)

In the last 12 months, was there ever a time {you/{TARGET}}/{TARGET}'s parent(s)} thought {you//they/{TARGET}} needed emergency care but did not go or delayed going to the hospital emergency room because of concerns about the coronavirus pandemic?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "you" IF TARGET IS RESPONDENT

INSERT "you/{TARGET}" IF TARGET IS LESS THAN 18 (TAGE<18 OR TAGE2=1) AND RESPONDENT IS TARGET'S PARENT,

INSERT "{TARGET}'s parent(s)/{TARGET}" IF RESPONDENT IS NOT TARGET'S PARENT AND (TAGE<18 OR TAGE2=1),

ELSE INSERT "{TARGET}/they".

Ask if: All

A4.

For the next several questions, {Web/CATI: we/I} want to ask you about health care that {you/{TARGET}} received through an office or clinic. Please do not include care received when {you were/{TARGET} was} hospitalized overnight or in hospital emergency rooms. Please include in-person visits and telehealth care provided by phone, video, email, text or chat.

PROGRAM: INSERT “you/you were” IF TARGET IS RESPONDENT, ELSE INSERT “{TARGET}/{TARGET} was”.

Ask if: All

A5. (A5)

In the past 12 months, how many times did {you/{TARGET}} receive care from a general doctor who treats a variety of illnesses? For example, a doctor {or pediatrician} in general practice, family medicine or internal medicine. (Please include visits to receive a vaccine if you saw a general doctor.)

{Web/CATI: /(READ LIST IF NECESSARY. ENTER ONE ONLY.)}

- 0 None
- 1 1 time
- 2 2 times
- 3 3 times
- 4 More than 3 times
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT “you” IF TARGET IS RESPONDENT, ELSE INSERT “{TARGET}”.
IF (TAGE<18 OR TAGE2=1), INSERT “or pediatrician”.

Ask if: All

A5aa. (A5aa)

{(Web/CATI: Not counting the general doctor visits you already mentioned, how/Not counting the general doctor visits you've already told me about, how)/How} many times did {you/{TARGET}} receive care from a nurse practitioner or physician assistant{,or midwife} in the past 12 months? (Please include visits to receive a vaccine if you saw a nurse practitioner or physician assistant{, or midwife}.)

{Web/CATI: (READ LIST IF NECESSARY. ENTER ONE ONLY.)}

- 0 None
- 1 1 time
- 2 2 times
- 3 3 times
- 4 More than 3 times
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

IF A5=1-4, INSERT "{Web/CATI: Not counting the general doctor visits you already mentioned, how/Not counting the general doctor visits you've already told me about, how}", ELSE INSERT "How".

INSERT "you" IF TARGET IS RESPONDENT, ELSE INSERT {TARGET}.

IF (TFEM=1 OR 2) AND S6 OR S6(b-y)>=12, INSERT ", or midwife".

Ask if: Target received care from doctor or NP or PA (A5=1, 2, 3, 4 OR A5aa=1, 2, 3, 4)

A5a. (A5a)

For this question, {Web/CATI: I/we} want you to think about all the times {you/{TARGET}} received care from a general doctor, nurse practitioner or physician assistant{, or midwife} in the past 12 months. {Was this visit/Were any of those visits} with a general doctor, nurse practitioner or physician assistant{, or midwife} for a check-up, physical examination or for other preventive care?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "you" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}".

IF ONLY A5 = 1 OR A5A = 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 OR 2) AND Q.S6 OR Q.S6(b-j) >=12.

(A5b DELETED 2017 MHIS)

Ask if: All

A6. (A6)

{Web/CATI: / IF NEEDED:} For the next several questions, we want to ask you about care that {you/{TARGET}} received in an office or clinic. Please do not include care received when {you were/{TARGET} was} hospitalized overnight or in hospital emergency rooms. Please include in-person visits and telehealth care provided by phone, video, email, text or chat.

In the past 12 months, did {you/{TARGET}} receive care from a specialist? Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors and others who specialize in one area of health care.

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "you/you were" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}/{TARGET} was".

Ask if: Target is over the age of 1 (TAGE>1 OR TAGE2=1, 2, OR 3)

A6b. (A6b)

In the past 12 months, did {you/{TARGET}} receive care from a mental health professional such as a psychiatrist, psychologist, psychiatric nurse, or clinical social worker?

Please do not include care received when {you were/{TARGET} was} hospitalized overnight or in hospital emergency rooms. Please include in-person visits and telehealth care provided by phone, video, email, text or chat.

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "you/you were" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}/{TARGET} was".

Ask if: Target is over the age of 11 (TAGE>11 OR TAGE2=2 OR 3)

A6c. (A6c)

In the past 12 months, did {you/{TARGET}} receive care for an alcohol or substance use disorder?

Please do not include care received when {you were/{TARGET} was} hospitalized overnight or in hospital emergency rooms. Please include in-person visits and telehealth care provided by phone, video, email, text or chat.

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "you/you were" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}/{TARGET} was".

Ask if: All

A7. (A7)

In the past 12 months, did {you/{TARGET}} see a dentist or a dental hygienist?

- 1 Yes
- 2 No

- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "you" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}".

Ask if: All

A8. (A8)

In the past 12 months, did {you/{TARGET}} take any drugs or medications that were prescribed to {you/them}?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "you" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}/them".

Ask if: All

A9. (A9a, A9j, A9c, A9d, A9e, A9f, A9g, A9h, A9i)

Still thinking about the past 12 months, was there any time that because of cost, {you/{TARGET}}/{TARGET}'s parent(s) did...

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

- a. not fill a prescription for medicine needed for {you/{TARGET}}?
- j. not get doctor care that {you/{TARGET}} needed?
- c. not get care from a nurse practitioner, physician assistant {, or midwife} that {you/{TARGET}} needed?
- d. not get specialist care that {you/{TARGET}} needed? {Web/CATI: /(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}} needed ?
- f. not get dental care that {you/{TARGET}} needed?
- g. not get alcohol or substance use disorder care or treatment that {you/{TARGET}} needed?
- h. not get vision care that {you/{TARGET}} needed?
- i. not get medical equipment that {you/{TARGET}} needed?

PROGRAM: INSERT "you" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}".

FOR A9a ONLY, IN THE QUESTION, IF TARGET IS CHILD (TAGE<18 OR TAGE2=1) AND RESPONDENT IS PARENT, INSERT “you”, ELSE INSERT “{TARGET}’s parent(s)”.

ASK ITEM e IF (TAGE>1 OR TAGE2=1, 2, OR 3)

ASK ITEM g IF (TAGE>11 OR TAGE2=2 OR 3)

IF (TFEM=1 OR 2) AND S6 OR S6(b-y)>=12, INSERT “, or midwife”.

SCRAMBLE.

Ask if: (TARGET is insured at the time of the survey but uninsured at some point in the past 12 months (TINS=1 AND H5=2) OR uninsured at the time of the survey but insured at some point in the past 12 months (TINS=0 AND H6<12))) AND at least one unmet need (any A9a-i=1) AND subsample is 1 (subsamp=1)

A9a2. (A9a2)

Thinking about the last time {you/{TARGET}} went without needed care because of cost, was it during a time that {you/they} had health insurance?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON’T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: IF A9=1 TO ANY AND TINS=1 AND H5=1 AND SUBSAMP=1 GEN IN CODE 1

INSERT “you” IF TARGET IS RESPONDENT, ELSE INSERT “{TARGET}/they”.

Ask if: Was a time when target had health insurance (A9a2=1) AND subsample is 1 (subsamp=1)

A9aa. (A9aa_1, A9aa_2, A9aa_3, A9aa_4, A9aa_5, A9aa_6, A9aa_6_OS, A9aa_98, A9aa_99, A9aa_97)

The last time {you/{TARGET}} went without needed care because of cost was it because of any of the following?

{Web/CATI: Check all that apply./CHECK ALL THAT APPLY.}

- 1 The care was not covered by {your/their} health plan
- 2 The co-payment or co-insurance for the care under {your/their} health plan was too high
- 3 The care had to be paid for as part of the deductible under {your/their} health Plan
- 4 {You weren’t/{TARGET} wasn’t/{TARGET}’s parent(s) wasn’t} sure whether the care was covered by {your/their} health plan
- 5 {You weren’t/{TARGET} wasn’t/{TARGET}’s parent(s) wasn’t } sure how much the care would cost
- 6 Something else {Web/CATI: Please specify:/(SPECIFY:)}_____
- 98 (DO NOT READ) DON’T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT “you/your/you weren’t” IF TARGET IS RESPONDENT, ELSE INSERT

“{TARGET}/their/{TARGET} wasn’t”.

FOR A9aa_4 and A9aa_5 ONLY, IF TARGET IS CHILD (TAGE<18 OR TAGE2=1) AND RESPONDENT IS PARENT, INSERT "You weren't", ELSE INSERT "{TARGET}'s parent(s) wasn't".

Ask if: All

A9b. (A9ba, A9bb, A9bc, A9bd, A9be, A9bf, A9bg, A9bh, A9bi, A9bj)

{Web/CATI: Next is a list of problems some people experience when they try to get health care. Please indicate/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}/{TARGET}'s parent(s) has} had these problems in the past 12 months {when trying to get health care for {TARGET}}.

{Web/CATI: /Has this happened to {you/{TARGET}/{TARGET}'s parent(s)} in the past 12 months?}

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

- a. {You were/{TARGET} was/{TARGET}'s parent(s) was} unable to get an appointment at a doctor's office or clinic as soon as {you/{TARGET}/{TARGET}'s parent of guardian} thought one was needed.
- b. {You were/{TARGET} was/{TARGET}'s parent(s) was} unable to get an appointment with a specialist as soon as {you/{TARGET}/{TARGET}'s parent(s)} thought one was needed.
- c. {You were/{TARGET} was/{TARGET}'s parent(s) 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 TINS=0, without health insurance.}
- d. {You were/{TARGET} was/{TARGET}'s parent(s) was} told by a doctor's office or clinic that they weren't accepting new patients.
- e. A doctor's office, clinic, or health care facility was closed or offering limited appointments due to the coronavirus pandemic.
- f. It felt unsafe visiting the doctor's office, clinic, or health care facility during the coronavirus pandemic.
- g. It felt unsafe traveling to the doctor's office, clinic, or health care facility during the coronavirus pandemic.
- h. {You were/{TARGET} was/{TARGET}'s parent(s) was} unable to get to an appointment at a doctor's office or clinic because of transportation issues.
- i. {You were/{TARGET} was/{TARGET}'s parent(s) was} unable to get to an appointment at a doctor's office or clinic because there was no child care for children at home.
- j. {You were/{TARGET} was/{TARGET}'s parent(s) was} unable to get to an appointment at a doctor's office or clinic because of language barriers or lack of interpreter services.

PROGRAM:

IN THE QUESTION:

INSERT "you have/you" IF TARGET IS RESPONDENT OR TARGET IS LESS THAN 18 (TAGE<18 OR TAGE2=1) AND RESPONDENT IS TARGET'S PARENT,

INSERT "{TARGET}'s parent(s) has/{TARGET}'s parent(s)" IF RESPONDENT IS NOT TARGET'S PARENT AND (TAGE<18 OR TAGE2=1),
ELSE INSERT "{TARGET} has/{TARGET}".
INSERT {when trying to get health care for {TARGET}} IF TARGET IS LESS THAN 18 (TAGE<18 OR TAGE2=1) AND RESPONDENT IS TARGET'S PARENT.
IN THE RESPONSES:
INSERT "you were/you" IF TARGET IS RESPONDENT OR TARGET IS LESS THAN 18 (TAGE<18 OR TAGE2=1) AND RESPONDENT IS TARGET'S PARENT,
INSERT "{TARGET}'s parent(s) was/{TARGET}'s parent or guardian/{TARGET}'s IN OPTION C" IF RESPONDENT IS NOT TARGET'S PARENT AND (TAGE<18 OR TAGE2=1),
ELSE INSERT "{TARGET} was/{TARGET}'s/{TARGET}".
ASK e, f, g IF SUBSAMPLE=2 (subsamp=2). FOR WEB, ASK THESE QUESTIONS ON A SEPARATE SCREEN.
(SCRAMBLE)

BACKGROUND

Ask if: All

D0.

{Web/CATI: Next are/Now I'd like to ask} a few general questions that describe {you/{TARGET}}.

PROGRAM: INSERT "Are you" IF TARGET IS RESPONDENT, ELSE INSERT "Is {TARGET}"

Ask if: All

D1. (D1)

{Are you/Is {TARGET}} Hispanic or {Latino/Latina}?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "Are you" IF TARGET IS RESPONDENT, ELSE INSERT "Is {TARGET}"
INSERT "Latina" IF TARGET IS FEMALE (TFEM=1), ELSE INSERT "Latino".

Ask if: All

D2. (D2_1, D2_2, D2_3, D2_4, D2_5, D2_6, D2_7, D2_7_OS, D2_8, D2_8_OS, D2_9, D2_9_OS, D2_98, D2_99, D2_97)

Which one or more of the following would you say is {your/{TARGET}'s} race?
{Web/CATI: Check all that apply./CHECK 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 {Web/CATI: Something else/Some other race} {Web/CATI: Please specify:/(SPECIFY:)}
- _____
- 8 {Web/CATI: Something else/Some other race} {Web/CATI: Please specify:/(SPECIFY:)}
- _____
- 9 {Web/CATI: Something else/Some other race} {Web/CATI: Please specify:/(SPECIFY:)}
- _____
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "your" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}'s"

Ask if: Target has more than one race (more than one of the following is set to 1: D2a, D2b, D2c, D2d, D2e, D2f, D2g, D2h)

D3. (D3)

Which **one** of these groups would you say **best** represents {your/{TARGET}'s} race?

- 1 White
- 2 Black or African American
- 3 Asian
- 4 Native Hawaiian or Other Pacific Islander
- 5 American Indian or Alaska Native
- 6 {D2f_OS}
- 7 {D2g_OS}
- 8 {D2h_OS}
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "your" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}'s"

ONLY INCLUDE RESPONSES FROM D2.

PN: Please add D1/D2/D3 to the fonfile

Ask if: Target is Latino/a or Asian (D1=1 OR D2c=1 OR D3=3)

D4. (D4_01, D4_02, D4_03, D4_04, D4_05, D4_06, D4_07, D4_08, D4_09, D4_10, D4_94, D4_94_OS, D4_95, D4_95_OS, D4_96, D4_96_OS, D4_93, D4_93_OS, D4_98, D4_99, D4_97)

Which best describes {your/{TARGET}'s} ancestry or heritage?

{Web/CATI: Check all that apply./CHECK ALL THAT APPLY.}

{Web/CATI: /Would you say...}

- 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 {Web/CATI: Please specify:/(SPECIFY:)} _____
- 95 Other South American {Web/CATI: Please specify:/(SPECIFY:)} _____
- 96 Other Asian {Web/CATI: Please specify:/(SPECIFY:)} _____
- 93 Some other ancestry or heritage {Web/CATI: Please specify:/(SPECIFY:)} _____
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "your" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}'s"
IF D1=1, SHOW CODES 01-04, 94, 95
IF D2c=1 OR D3=3, SHOW CODES 05-10, 96
ALWAYS SHOW 93, 97, 98

Ask if: subsample is 2 (subsamp=2)

D14. (D14)

{Do you/Does {TARGET}/Do {TARGET}'s parent(s)} speak a language other than English at home?

- 1 Yes
- 2 No
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "Do you" IF TARGET IS RESPONDENT,
INSERT "Does {TARGET}" IF (TAGE >1 OR TAGE2=1, 2, OR 3),
ELSE INSERT "Do {TARGET}'s parent(s)".

Ask if: Target speaks language other than English at home (D14=1) AND subsample is 2 (subsamp=2)

D15. (D15)

What is that language?

{Web/CATI: Please specify:/(SPECIFY:)}: _____

FAMILY

Ask if: $TFAM_COUNT \geq 2$

FO.

As a reminder, for the purposes of the survey, we use:

- “spouse” to include both married and unmarried partners
- “children” under 26 to include biological children, stepchildren, adopted children, foster children, or children of an unmarried partner
- “parent” to include biological parent, stepparent, parent through adoption, foster parent, or guardian, as well as any unmarried partner of a parent (IF TARGET IS LESS THAN 18 (TAGE<18) OR IS LESS THAN 26 AND IS NOT MARRIED AND NOT PARENT (TAGE<26 OR TAGE2=1 AND TMAR=0 AND TPAR=0))

When answering the following question, think of the immediate family, where immediate family includes-{FAMILY DESCRIPTION}.

PROGRAM:

FAMILY DESCRIPTION:

IF (TAGE<26 OR TAGE2=1 OR 2) & TMARR=0 & TPAR=0 & RESPONDENT IS PARENT AND RESPONDENT IS MARRIED (RPAR=1 AND RMARR=1), INSERT:

“you, your spouse and your children **under 26** who are living with you.”

IF (TAGE<26 OR TAGE2=1 OR 2) & TMARR=0 & TPAR=0 & RESPONDENT IS PARENT AND RESPONDENT IS NOT MARRIED (RPAR=1 AND RMARR=0), INSERT:

“you and your children **under 26** who are living with you.”

IF (TAGE <26 OR TAGE2=1 OR 2) & TMARR=0 & TPAR=0 & RESPONDENT IS NOT PARENT (RPAR=0) & TFAM_COUNT>1, INSERT:

“{TARGET}, {TARGET}'s parent(s) and {TARGET}'s siblings **under 26** who are living with {TARGET}.”

IF TMARR=1 & TFAM_COUNT>2, INSERT:

“{you/{TARGET}}, {your/{his/her/their}} spouse and {your/{TARGET}'s} children **under 26** who are living with {you/{TARGET}}.

INSERT “your/you” IF TARGET IS RESPONDENT, ELSE INSERT {TARGET/his/her/their} WHERE THEIR IS USED IF GENDER IS NOT MALE OR FEMALE.

IF TMARR=1 & TFAM_COUNT = 2, INSERT:

{you/{TARGET}} and {your/{his/her/their}} spouse.

INSERT “your/you” IF TARGET IS RESPONDENT, ELSE INSERT/ “{TARGET}/his/her/their” where their is used if gender is not male or female.

IF TMARR=0 & TPAR=1 & TFAM_COUNT>=2, INSERT:

{you/{TARGET}} and {your/{TARGET}'s} children **under 26** who are living with {you/{TARGET}}.

INSERT "you/your" IF TARGET IS RESPONDENT, ELSE INSERT {TARGET}.

IF RESPONDENT IS TARGET AND (TAGE<26 OR TAGE2=1 OR 2) & TMARR=0 & TPAR=0 AND TFAM=>2)

INSERT:

{you, your parent(s) {and your siblings **under 26**} who are living with you.} DISPLAY "and your siblings **under 26**" IF S12a=5 FOR ANY HH MEMBERS.

Ask if: All

A11c. (A11c)

In the past 12 months, did {you/{TARGET}/you and your immediate family/{TARGET} and their immediate family} have any problems paying or were unable to pay any medical bill?

This would include doctor or hospital bills, dentist bills, bills for prescription drugs, nursing home bills, or home care bills.

Please include any bills {you have/{TARGET} has/you and your immediate family have/{TARGET} and their immediate family have} had problems paying over the past 12 months, even if the initial bill was incurred more than 12 months ago.

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

IF TFAM_COUNT=1

AND TARGET IS RESPONDENT, INSERT "you/you have",
ELSE INSERT "{TARGET}/{TARGET} has".

IF TFAM_COUNT>1

AND TARGET IS RESPONDENT, INSERT "you and your immediate family/you and your immediate family have",
ELSE INSERT "{TARGET} and their immediate family/{TARGET} and their immediate family have".

Ask if: Target or family had problems paying medical bills (A11c=1)

A11e. (A11ea, A11eb, A11ec, A11ed, A11ee, A11ef, A11eff, A11efff, A11eg, A11eg_OS)

What types of medical services led to those medical bills?

{Web/CATI: /Was it...}

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

- 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
- ff. Coronavirus tests
- fff. Coronavirus treatment, including treatment for the after-effects of coronavirus
- g. For some other type of medical service {Web/CATI: Please specify:/(SPECIFY:)} _____

PROGRAM:

SCRAMBLE A-F, ASK G LAST.

Ask if: subsample is 1 (subsamp=1)

A11ee2. (A11ee2)

In the past 12 months, {have you/has {TARGET}/have you and your immediate family/has {TARGET} and their immediate family} received a medical bill where the health insurance plan paid much less than expected or did not pay at all?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

IF TFAM_COUNT=1

AND TARGET IS RESPONDENT, INSERT "have you/you",
ELSE INSERT "has {TARGET}/{TARGET}".

IF TFAM_COUNT>1

AND TARGET IS RESPONDENT, INSERT "have you and your immediate family/you and your immediate family",
ELSE INSERT "has {TARGET} and their immediate family/{TARGET} and their immediate family".

Ask if: Health plan paid less than expected (A11ee2= 1) AND subsample is 1 (subsamp=1)

A11ee3. (A11ee3)

Was it because the provider was not in the plan's network, or some other reason?

- 1 Not in the plan's network
- 2 some other reason
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

Ask if: Health plan paid less than expected (A11ee2= 1) AND subsample is 1 (subsamp=1)

A11ee4. (A11ee4)

In the past 12 months, how many medical bills did {you/{TARGET}/you and your immediate family/{TARGET} and their immediate family} receive where the health insurance plan paid much less than expected or did not pay at all?

- 1 One bill
- 2 Two bills
- 3 Three or more bills
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

IF TFAM_COUNT=1

AND TARGET IS RESPONDENT, INSERT "you",
ELSE INSERT "{TARGET}".

IF TFAM_COUNT>1

AND TARGET IS RESPONDENT, INSERT "you and your immediate family",
ELSE INSERT "{TARGET} and their immediate family".

Ask if: ALL

A11f. (A11f)

{Do you/Does {TARGET}/Do you and your immediate family/Does {TARGET} and their immediate family} currently have any medical bills that are being paid over time?

This could include medical bills being paid off with a credit card, through personal loans, or bill paying arrangements with hospitals or other providers.

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

IF TFAM_COUNT=1

AND TARGET IS RESPONDENT, INSERT "Do you",
ELSE INSERT "Does {TARGET}".

IF TFAM_COUNT>1

AND TARGET IS RESPONDENT, INSERT "Do you and your immediate family",
ELSE INSERT "Does {TARGET} and their immediate family".

Ask if: Target or family has medical bills being paid over time (A11f=1) AND subsample is 1 (subsamp=1)

A11. (A11)

Are the medical bills being paid off over time for care that was received when {you/{TARGET}/you and your immediate family/{TARGET} and their immediate family} **did not** have health insurance, when {you/{TARGET}/you and your immediate family/{TARGET} and their immediate family} **did** have health insurance, or are the bills for care from both when {you/{TARGET}/you and your immediate family/{TARGET} and their immediate family} did not have health insurance and when ({you/{TARGET}/you and your immediate family/{TARGET} and their immediate family} did have health insurance?

- 1 Did not have health insurance
- 2 Had health insurance
- 3 Both
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

IF TFAM_COUNT=1

AND TARGET IS RESPONDENT, INSERT "you",
ELSE INSERT "{TARGET}".

IF TFAM_COUNT>1

AND TARGET IS RESPONDENT, INSERT "you and your immediate family",
ELSE INSERT "{TARGET} and their immediate family".

Ask if: Target or family has medical bills being paid over time (A11f=1) AND subsample is 1 (subsamp=1)

A11h. (A11h)

{Web/CATI: How much are the medical bills that are being paid off over time?/Was it...}

{Web/CATI: (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
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

Ask if: Bills occurred when had health insurance or both when did not and had health insurance (A11=2, 3) AND subsample is 1 (subsamp=1)

(NEW 2017)

A11hc. (A11hca, A11hcb, A11hcc)

For this question, think about the medical bills that are being paid off over time that are from the period in which {you/{TARGET}/you and your immediate family/{TARGET} and their immediate family} had health insurance. Were any of those medical bills for...

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

- a. care that was not covered by a health insurance plan?
- b. co-payments or co-insurance for care under a health insurance plan?
- c. care that had to be paid for as part of the deductible under a health insurance plan?

PROGRAM:

IF TFAM_COUNT=1

AND TARGET IS RESPONDENT, INSERT "you",
ELSE INSERT "{TARGET}".

IF TFAM_COUNT>1

AND TARGET IS RESPONDENT, INSERT "you and your immediate family",
ELSE INSERT "{TARGET} and their immediate family".

SCRAMBLE

Ask if: Target or family has medical bills being paid over time (A11f=1) AND subsample is 1 (subsamp=1)

A11i. (A11i)

hen {were you/was {TARGET}}/were you and your immediate family/was {TARGET} and their immediate family} first unable to pay the medical bills that are being paid off over time? Was it...

- 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
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

IF TFAM_COUNT=1

AND TARGET IS RESPONDENT, INSERT "were you",
ELSE INSERT "was {TARGET}".

IF TFAM_COUNT>1

AND TARGET IS RESPONDENT, INSERT "were you and your immediate family",
ELSE INSERT "was {TARGET} and their immediate family".

Ask if: Target or family had problem paying medical bills in past 12 months or has medical bills that are being paid over time (A11c = 1 OR A11f = 1) AND subsample is 1 (subsamp=1)

A11j. (A11ja, A11jb, A11jc, A11jd)

In the past 12 months, {have you/has {TARGET}/have you and your immediate family/has {TARGET} and their immediate family} {Web/CATI: done any of the following?/{INSERT}}

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

- 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

PROGRAM

IF TFAM_COUNT=1

AND TARGET IS RESPONDENT, INSERT "have you",
ELSE INSERT "has {TARGET}".

IF TFAM_COUNT>1

AND TARGET IS RESPONDENT, INSERT "have you and your immediate family",
ELSE INSERT "has {TARGET} and their immediate family".

SCRAMBLE

Ask if: All

A12. (A12)

People sometimes try different approaches to lower their health care spending, such as using lower cost providers, going without needed care, changing health insurance or going without coverage, or trying harder to stay healthy. Over the past 12 months, {have you/has {TARGET}/have you and your immediate family/has {TARGET} and their immediate family} tried to lower {your/{TARGET}'s} health care spending?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

IF TFAM_COUNT=1

AND TARGET IS RESPONDENT, INSERT "have you/your",
ELSE INSERT "has {TARGET}/{TARGET}'s".

IF TFAM_COUNT>1

AND TARGET IS RESPONDENT, INSERT "have you and your immediate family/your",

ELSE INSERT "has {TARGET} and their immediate family /{TARGET}'s".

Ask if: Target or family tried to lower health care spending in the past 12 months (A12=1)

A13. (A13a, A13b, A13c, A13d, A13e, A13f, A13f_OS)

{Web/CATI: Next is/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 {Web/CATI: indicate/tell me} whether {you/{TARGET}/you and your immediate family/{TARGET} and their immediate family} {have/has} used that approach over the past 12 months to try to lower health care spending. {Web/CATI: /Did {you.../they.../you and your immediate family.../they and their immediate family...}

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

- 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?
- e. Try harder to stay healthy, for example by eating better or exercising more or by stopping smoking?
- f. do something else to try and lower health care spending? {Web/CATI: Please specify:/{SPECIFY:}} _____

PROGRAM:

IF TFAM_COUNT=1

AND TARGET IS RESPONDENT, INSERT "you",
ELSE INSERT "{TARGET}/they".

IF TFAM_COUNT>1

AND TARGET IS RESPONDENT, INSERT "you and your immediate family/you or someone in your immediate family",
ELSE INSERT "{TARGET} and their immediate family/they or someone in their immediate family".

IF {TARGET} IS INSERTED, DISPLAY "has", ELSE DISPLAY "have".

SCRAMBLE. F IS ALWAYS LAST.

A14, A14a, A14c DELETED 2019

FAMILY MEMBERS

Ask if: Family is more than 1 person (TFAM_COUNT > 1)

HH_FA0. (HH_FA0)

The next questions focus on the members of {your/{TARGET}'s} immediate family. That is {FAMCONFIRM}.

Ask if: Target had health insurance for all of the past 12 months or refuses, doesn't know, or does not answer (H5=1, 98, 99, 97) & TFAM_COUNT > 1

HH_FA2. (HH_FA2)

Did any members of {your/{TARGET}'s} immediate family **go without** health insurance at any time in the past 12 months?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "your" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}'s"

Ask if: Target did not report unmet needs due to cost or refused, didn't know, or did not respond (A9a-A9i =2, 98, 99, 97) AND TFAM_COUNT>1

HH_FA2b. (HH_FA2ba, HH_FA2bc, HH_FA2bcc, HH_FA2bd, HH_FA2be, HH_FA2bf, HH_FA2bg, HH_FA2bh, HH_FA2bi)

Still thinking about the past 12 months, was there any time that because of cost, any members of {your/{TARGET}'s} immediate family did...

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

- a. not fill a prescription for medicine for themselves?
- c. not get doctor care that they needed?
- cc. not get care from a nurse practitioner, physician assistant{, or midwife} that they needed?
- d. not get specialist care that they 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 they needed?
- f. not get dental care that they needed?
- g. (NEW FOR 2017) not get alcohol or substance use disorder care or treatment that they needed?
- h. not get vision care that they needed?
- i. not get medical equipment that they needed?

PROGRAM: INSERT "your" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}'s"
IF (TFEM=1 OR 2) AND S6 OR S6(b-y)>=12, INSERT ", or midwife".

ONLY DISPLAY ITEMS NOT UNMET AT A9.

Ask if: subsample is 2 (subsamp=2)

HH_FA3. (HH_FA3a, HH_FA3j, HH_FA3c, HH_FA3d, HH_FA3e, HH_FA3f, HH_FA3g, HH_FA3h, HH_FA3i)
Still thinking about the past 12 months, was there any time that because of the coronavirus pandemic,
{you/{TARGET}}/{TARGET}'s parent(s)} {or any member of {your/their}immediate family} did...

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

- a. not fill a prescription for medicine for {yourself/themselves}?
- c. not get doctor care that {you/they} needed?
- cc. not get care from a nurse practitioner, physician assistant{, or midwife} that {you/they} needed?
- d. not get specialist care that {you/they} 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/they} needed?
- f. not get dental care that {you/they} needed?
- g. (NEW FOR 2017) not get alcohol or substance use disorder care or treatment that {you/they} needed?
- h. not get vision care that {you/they} needed?
- i. not get medical equipment that {you/they} needed?

PROGRAM:

INSERT "you" IF TARGET IS RESPONDENT,
ELSE IF TARGET IS NOT RESPONDENT AND ADULT (TAGE>18 OR TAGE2>=2), INSERT "{TARGET}"
ELSE IF TARGET IS CHILD (TAGE<18 OR TAGE2=1) AND RESPONDENT IS PARENT, INSERT "you",
ELSE INSERT "{TARGET}'s parent(s)".
IF (TFEM=1 OR 2) AND S6 OR S6(b-y)>=12, INSERT ", or midwife".

IF 2 OR MORE PEOPLE IN FAMILY (TFAM_COUNT>=2),
AND TARGET IS RESPONDENT OR TARGET IS CHILD (TAGE<18 OR TAGE2=1) AND RESPONDENT IS
PARENT, INSERT "or any member of your immediate family",ELSE INSERT "or any member of their
immediate family".

IN ITEM A, DISPLAY "yourself" IF TARGET IS RESPONDENT AND TFAMCOUNT=1, ELSE DISPLAY
"themselves".

IN ITEMS C-I, DISPLAY "you" IF TARGET IS RESPONDENT AND TFAMCOUNT=1, ELSE DISPLAY "they".

Ask if: TFAM_COUNT>1 AND (subsamp=2) and (e1b<>1 or e1b<>2 or e1b<>3 or e1b<>4 or e1b<>5 or e1b<>6)

Show only those 1-6 not in e1b.

HH_E1c. (HH_E1c1, HH_E1c2, HH_E1c3, HH_E1c4, HH_E1c5, HH_E1c6, HH_E1c98, HH_E1c99, HH_E1c97)

For this question, please think about any members of {your/{TARGET}'s} immediate family aged 16 and older. Have any of the following happened to them in the last 12 months because of the coronavirus pandemic?

{Web/CATI: Check all that apply./CHECK ALL THAT APPLY.}

1. Someone in the family was required to cut back hours at work
2. Someone in the family was required to stop working temporarily
3. Someone in the family lost their job permanently
4. Someone in the family chose to voluntarily cut back hours at work or to stop working
5. Someone in the family was deemed an essential worker, meaning that they were required to work outside of the home during the coronavirus pandemic
6. Someone in the family was able to telework or work from home
7. None of these
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "your" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}'s/their".

Ask if: subsample is 2 (subsamp=2)

HH_E1d. (HH_E1d)

{Have you/Have you or any member of your immediate family aged 16 or older/Has {TARGET} or any member of {TARGET}'s immediate family aged 16 or older/Has any member of {TARGET}'s immediate family aged 16 or older} had difficulty finding or keeping a job in the past 12 months?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

IF TARGET IS (RESPONDENT AND AT LEAST ONE OTHER FAMILY MEMBER IS 16 OR OLDER, DISPLAY "Have you or any member of your immediate family aged 16 or older", ELSE DISPLAY "Have you")
ELSE IF TARGET IS NOT RESPONDENT AND IS 16 OR OLDER, DISPLAY "Has {TARGET} or any member of {TARGET}'s immediate family aged 16 or older",
ELSE DISPLAY "Has any member of {TARGET}'s immediate family aged 16 or older"

Ask if: subsample is 2 (subsamp=2)

A11L. (A11La, A11Lb, A11Lc, A11Ld, A11Le)

At any time the past 12 months, {have you/has {TARGET}/has {TARGET}'s parent(s)} {or any member of {your/their} immediate family}

- 1 Yes
 - 2 No
 - 98 (DO NOT READ) DON'T KNOW
 - 99 (DO NOT READ) REFUSED
 - 97 Web Blank
-
- a. fallen behind in paying your rent or mortgage?
 - b. had problems paying for utilities?
 - c. fallen behind in paying credit card or other bills?
 - d. had problems affording health insurance?
 - e. had problems affording prescription medications?

PROGRAM:

INSERT "you" IF TARGET IS RESPONDENT,
ELSE IF TARGET IS CHILD (TAGE<18 OR TAGE2=1) AND RESPONDENT IS PARENT, INSERT "you",
ELSE IF TARGET IS CHILD (TAGE<18 OR TAGE2=1) AND RESPONDENT IS NOT PARENT, INSERT
"{TARGET}'s parent(s)",
ELSE INSERT "{TARGET}".

IF 2 OR MORE PEOPLE IN FAMILY (TFAM_COUNT>1),
AND (TARGET IS RESPONDENT OR (TARGET IS CHILD (TAGE<18 OR TAGE2=1) AND RESPONDENT IS
PARENT)), INSERT "or any member of your immediate family", ELSE INSERT "or any member of their
immediate family".

SCRAMBLE A-E.

Ask if: subsample is 2 (subsamp=2)

HH_HE7. (HH_HE7a, HH_HE7b, HH_HE7c, HH_HE7d, HH_HE7e, HH_HE7f)

How often do the following statements describe {you/{TARGET}/ {TARGET}'s parent(s)} {or any member of {your/their} immediate family}?

- a. {I worry/{TARGET} worries/We worry/They worry} that food will run out before there is money to buy more
- b. The food {I buy/{TARGET} buys/We buy/they buy} doesn't last long enough
- c. {I have/{TARGET} has/We have/They have} been hungry but couldn't afford enough food
- d. {I/{TARGET}/We/They} got emergency food from a church, food pantry, food bank, or other community program

1. Always

2. Often
 3. Sometimes
 4. Rarely
 5. Never
- 98 (DO NOT READ) DON'T KNOW
 99 (DO NOT READ) REFUSED
 97 Web Blank

PROGRAM:

IN THE QUESTION TEXT:

INSERT "you" IF TARGET IS RESPONDENT,
 ELSE IF TARGET IS CHILD (TAGE<18 OR TAGE2=1) AND RESPONDENT IS PARENT, INSERT "you", ELSE
 INSERT "{TARGET}'s parent(s)".
 ELSE INSERT "{TARGET}".

IF 2 OR MORE PEOPLE IN FAMILY (TFAM_COUNT>1),
 AND TARGET IS RESPONDENT OR TARGET IS CHILD (TAGE<18 OR TAGE2=1) AND RESPONDENT IS
 PARENT, INSERT "or any member of your immediate family", ELSE INSERT "or any member of their
 immediate family".

IN THE RESPONSE CATEGORIES:

IF TFAM_COUNT=1,
 AND TARGET IS RESPONDENT, INSERT "I worry/I buy/I have/I",
 ELSE IF (TAGE>18 OR TAGE2=2 OR 3) INSERT "{TARGET}/{TARGET} worries/{TARGET}
 buys/{TARGET} has/{TARGET}",
 IF TFAM_COUNT>1,
 AND TARGET IS RESPONDENT OR TARGET IS CHILD (TAGE<18 OR TAGE2=1) AND RESPONDENT IS
 PARENT, INSERT "We worry/We buy/We have/We"
 ELSE INSERT "They worry/They buy/They have/They".

<i>Ask if: subsample is 2 (subsamp=2)</i>

HH_HE1. (HH_HE1)

How often {do you/does {TARGET}/do {TARGET}'S parent(s)} {or any member of {your/their} immediate
 family} worry about having a steady place to live?
 {Web/CATI: /READ LIST IF NECESSARY.}

1. Always
 2. Often
 3. Sometimes
 4. Rarely
 5. Never
- 98 (DO NOT READ) DON'T KNOW
 99 (DO NOT READ) REFUSED
 97 Web Blank

PROGRAM:

INSERT “do you” IF TARGET IS RESPONDENT,

ELSE IF TARGET IS CHILD (TAGE<18 OR TAGE2=1) AND RESPONDENT IS PARENT, INSERT “do you”,

ELSE INSERT “do {TARGET}'s parent(s)”.

ELSE INSERT “does {TARGET}”.

IF 2 OR MORE PEOPLE IN FAMILY (TFAM_COUNT>1),

AND TARGET IS RESPONDENT OR TARGET IS CHILD (TAGE<18 OR TAGE2=1) AND RESPONDENT IS PARENT, INSERT “or any member of your immediate family”, ELSE INSERT “or any member of their immediate family”.

Ask if: Target is in excellent, very good, or good health or RF, DK, or does not answer (HS1=1, 2, 3, 98, 99, 97) and TFAM_COUNT>1

HH_HS1. (HH_HS1)

Earlier we asked if {you are/{TARGET} is} in excellent health, very good health, good health, fair health, or poor health. For this question, please think about the health of the members of {your/{TARGET}'s} immediate family. Are there any members in {your/{TARGET}'s} immediate family who are in **fair** or **poor** health?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT “you are/your” IF TARGET IS RESPONDENT, ELSE INSERT “{TARGET} is/{TARGET}'s”.

Ask if: Target is not limited in any way because of a physical, mental, or emotional problem, or RF, DK, or does not answer (HS2=2, 98, 99, 97) and TFAM_COUNT>1

HH_HS2. (HH_HS2)

Are any members of {your/{TARGET}'s} immediate family limited in any way in their activities because of a physical, mental, or emotional problem?

{Web/CATI: /PROBE:} Please note that your answers to this question and all other questions are completely confidential.

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT “your” IF TARGET IS RESPONDENT, ELSE INSERT “{TARGET}'s”.

INCOME

Ask if: All

IN1. (IN1)

{Web/CATI: The/My} next questions are about income. This information is important because it helps the state understand how to make health care more affordable.

IF (TAGE<26 OR TAGE2=1 OR 2) & TPAR=0 & RESPONDENT IS PARENT AND RESPONDENT IS MARRIED (RPAR=1 AND RMARR=1), INSERT:

IF HH_COUNT IS GREATER THAN TFAM_COUNT INCLUDE VERBIAGE IN PARENS.

{Web/CATI: We're/I'm} interested in your family income, that is your income **plus** the income of your immediate family. (By immediate family {Web/CATI: we/I} mean your spouse and the children **under 26** who are living with you.) For these questions, {Web/CATI: we'd/I'd} like you to think back to 2020. During 2020 did you or any of your family members receive any income from wages or salary?

IF (TAGE<26 OR TAGE2=1 OR 2) & TMARR=0 & TPAR=0 & RESPONDENT IS PARENT AND RESPONDENT IS NOT MARRIED (RPAR=1 AND RMARR=0), INSERT:

IF HH_COUNT IS GREATER THAN TFAM_COUNT INCLUDE VERBIAGE IN PARENS.

{Web/CATI: We're/I'm} interested in your family income, that is your income **plus** the income of your immediate family. (By immediate family {Web/CATI: we/I} mean the children **under 26** who are living with you.) For these questions, {Web/CATI: we'd/I'd} like you to think back to 2020. During 2020 did you or any of your family members receive any income from wages or salary?

(IF (TAGE <26 OR TAGE2=1 OR 2) & TMARR=0 & TPAR=0 & RESPONDENT IS NOT PARENT (RPAR=0) & TFAM_COUNT>1, INSERT:

IF HH_COUNT IS GREATER THAN TFAM_COUNT INCLUDE VERBIAGE IN PARENS.

{Web/CATI: We're/I'm} interested in {TARGET}'s family income, that is the income from his/her parent(s) **plus** the income of any immediate family. (By immediate family {Web/CATI: we/I} mean parent(s) and siblings **under 26** who are living with {TARGET}.) For these questions, {Web/CATI: we'd/I'd} like you to think back to 2020. During 2020, did any of {TARGET}'s family members receive any income from wages or salary?

IF TMARR=1 & TFAM_COUNT>2, INSERT:

IF HH_COUNT IS GREATER THAN TFAM_COUNT INCLUDE VERBIAGE IN PARENS.

{Web/CATI: We're/I'm} interested in {your/{TARGET}'s} family income, that is {your/ {TARGET}'s} income **plus** the income of {your/(his/her/their)} immediate family. (By immediate family {Web/CATI: we/I} mean {your/(his/her/their)} spouse and the children **under 26** who are living with {you/{TARGET}}.) For these questions, {Web/CATI: we'd/I'd} like you to think back to 2020. During 2020, did {you/{TARGET}} or any of {your/(his/her/their)} family members receive any income from wages or salary?

INSERT “your/you” IF TARGET IS RESPONDENT, ELSE INSERT “{TARGET}/his/her/their” WHERE THEIR IS USED IF GENDER IS NOT MALE OR FEMALE.

IF TMARR=1 & TFAM_COUNT = 2, INSERT:

{Web/CATI: We’re/I’m} interested in {your/{TARGET}}’s family income, that is {your/{TARGET}}’s income **plus** the income of {your/{his/her/their}} spouse. For these questions, {Web/CATI: we’d/I’d} like you to think back to 2020. During 2020, did {you/{TARGET}} or any of {your/{his/her/their}} family members receive any income from wages or salary?

INSERT “your/you” IF TARGET IS RESPONDENT, ELSE INSERT “{TARGET}/his/her/their” WHERE THEIR IS USED IF GENDER IS NOT MALE OR FEMALE.

IF TMARR=0 & TPAR=1 & TFAM_COUNT>=2, INSERT:

{Web/CATI: We’re/I’m} interested in {your/{TARGET}}’s family income, that is {your/{TARGET}}’s income **plus** the income of the children **under 26** who are living with {you/{TARGET}}. For these questions, {Web/CATI: we’d/I’d} like you to think back to 2020. During 2020, did {you/{TARGET}} or any of {your/{his/her/their}} family members receive any income from wages or salary?

INSERT “your/you” IF TARGET IS RESPONDENT, ELSE INSERT “{TARGET}/his/her/their” WHERE THEIR IS USED IF GENDER IS NOT MALE OR FEMALE.

IF RESPONDENT IS TARGET AND (TAGE>=16 OR TAGE2=2 OR 3) & TMARR=0 & TPAR=0 and TFAM=>2, INSERT:

IF HH_COUNT IS GREATER THAN TFAM_COUNT INCLUDE VERBIAGE IN PARENS.

{Web/CATI: We’re/I’m} interested in your family income, that is the income from you and your parent(s) or guardian(s) **plus** the income of any immediate family. (By immediate family {Web/CATI: we/I} mean parent(s) and siblings **under 26** who are living with you.) For these questions, I’d like you to think back to 2020. During 2020, did any of your family members receive any income from wages or salary?

IF TFAM_COUNT=1, INSERT:

For these questions, {Web/CATI: we’d/I’d} like you to think back to 2020. During 2020, did {you/{TARGET}} receive any income from wages or salary?

INSERT “you” IF TARGET IS RESPONDENT, ELSE INSERT {TARGET}.

- 1 Yes
- 2 No
- 98 {Web/CATI: Don’t know/(DO NOT READ) DON’T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT “you” IF TARGET IS RESPONDENT, ELSE INSERT “{TARGET}”.

Ask if: All

IN2. (IN2a, IN2b, IN2c)

During 2020, did {you/{TARGET}}/you or members of your immediate family/{TARGET} or members of their immediate family} immediate family} receive ...

- 1 Yes
- 2 No
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

- a. any dividend income or any interest income from bonds, money market accounts, CDs or other investments?
- b. social security benefits or any type of cash assistance? {Web/CATI: Please include/PROBE: Include} federal stimulus checks in cash assistance.
- c. 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?

PROGRAM: DON'T SCRAMBLE.

IF TFAM_COUNT=1

AND TARGET IS RESPONDENT, INSERT "you",
ELSE INSERT "{TARGET}/they".

IF TFAM_COUNT>1

AND TARGET IS RESPONDENT, INSERT "you or members of your immediate family/you or someone in your immediate family",
ELSE INSERT "{TARGET} or members of their immediate family/they or someone in their immediate family".

Ask if: All

IN3. (IN3)

Thinking about all the different sources of income {you/{TARGET}/you and your immediate family/{TARGET} and their immediate family} received in 2020, what was the combined total income from all sources before taxes and other deductions?

{Web/CATI: /(PROBE:)} Your best estimate is fine.

- \$_____ AMOUNT (Do not enter commas)
- 96 {Web/CATI: /(DO NOT READ)} No income
- 95 {Web/CATI: /(DO NOT READ)} \$1,000,000 or more
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM IF TFAM_COUNT=1

AND TARGET IS RESPONDENT, INSERT "you",
ELSE INSERT "{TARGET}/they".

IF TFAM_COUNT>1

AND TARGET IS RESPONDENT, INSERT “you and your immediate family/you or someone in your immediate family”,
ELSE INSERT “{TARGET} and their immediate family/they or someone in their immediate family”.
RANGE: HARD: \$1-\$999,999

Ask if: R does not know, refused, or leave blank the income amount (IN3 = 98, 99, 97)

IN3a. (IN3a)

Was it under {AMT5 FOR FAMILY SIZE} or was it {AMT5 FOR FAMILY SIZE} or more?

{Web/CATI: /(PROBE:)} Your best estimate is fine.

- 1 Under {AMT5}
- 2 {AMT5} or more
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

Ask if: Income was below AMT5 (IN3a = 1)

IN4. (IN4)

{Web/CATI: /Now, just stop me when I get to the right category.} Was {your/{TARGET}'S} total {family} income...

{Web/CATI: /(IF NEEDED:) The computer gives me different income values for the question depending on the size of your family.}

{Web/CATI: /(PROBE:)} Your best estimate is fine.

{Web/CATI: /(READ LIST. ENTER ONE ONLY.)}

- 1 Less than {AMT1}
- 2 {AMT1} to under {AMT1A}
- 3 {AMT1A} to under {AMT2}
- 4 {AMT2} to under {AMT3}
- 5 {AMT 3} to under {AMT4}
- 6 {AMT 4} to under {AMT5}
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT “your” IF TARGET IS RESPONDENT, ELSE INSERT “{TARGET}'s”.

IF TFAM_COUNT > 1, INSERT “family”.

NOW GO TO Q.IN6

Ask if: Income was above AMT5 (IN3a = 2)

IN5. (IN5)

{Web/CATI: /Now, just stop me when I get to the right category.} Was {your/{TARGET}'S} total {family} income...

{Web/CATI: /(IF NEEDED:) The computer gives me different income values for the question depending on the size of your family.}

{Web/CATI: /(PROBE:)} Your best estimate is fine.

{Web/CATI: /(READ LIST. ENTER ONE ONLY.)}

- 1 {AMT5} to under {AMT6}
- 2 {AMT6} to under {AMT7}
- 3 {AMT7} to under {AMT8}
- 4 {AMT8} or more
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "your" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}'s".
IF TFAM_COUNT > 1, INSERT "family".

	2020 Poverty Guidelines, rounded up to nearest thousand*								
	100%	139%	150%	200%	250%	301%	400%	500%	600%
FAMSIZE	AMT1	AMT1A	AMT2	AMT3	AMT4	AMT5	AMT6	AMT7	AMT8
1	13000	18000	19000	26000	32000	38000	51000	64000	77000
2	17000	24000	26000	34000	43000	52000	69000	86000	103000
3	22000	30000	33000	43000	54000	65000	87000	109000	130000
4	26000	36000	39000	52000	66000	79000	105000	131000	157000
5	31000	43000	46000	61000	77000	92000	123000	153000	184000
6	35000	49000	53000	70000	88000	106000	141000	176000	211000
7	40000	55000	59000	79000	99000	119000	159000	198000	238000
8	44000	61000	66000	88000	110000	133000	176000	221000	265000
9	49000	68000	73000	97000	122000	146000	194000	243000	292000
10	53000	74000	80000	106000	133000	160000	212000	265000	318000
11	58000	80000	86000	115000	144000	173000	230000	288000	345000
12	62000	86000	93000	124000	155000	187000	248000	310000	372000
13	67000	92000	100000	133000	166000	200000	266000	333000	399000
14	71000	99000	107000	142000	178000	214000	284000	355000	426000
15	75000	105000	113000	151000	189000	227000	302000	377000	453000
16	80000	111000	120000	160000	200000	241000	320000	400000	480000
17	84000	117000	127000	169000	211000	254000	338000	422000	507000

*Source: U.S. Department of Health & Human Services

PROGRAM:
CREATE VARIABLE FPL AS FOLLOWS:
OVERWRITE FPL UNTIL IT DOESN'T WRITE ANYMORE.
IF IN3=98, 99, 97, SET FPL=99

IF (IN3<AMT1A OR IN4=1, 2), SET FPL=1
IF (IN3>=AMT1A OR IN4=3), SET FPL=2
IF (IN3>=AMT2 OR IN4=4), SET FPL=3
IF (IN3>=AMT3 OR IN4=5), SET FPL=4
IF (IN3>=AMT4 OR IN4=6), SET FPL=5
IF (IN3>=AMT5 OR IN5=1), SET FPL=6
IF (IN3>=AMT6 OR IN5=2), SET FPL=7
IF (IN3>=AMT7 OR IN5=3), SET FPL=8
IF (IN3>=AMT8 OR IN5=4), SET FPL=9

CREATE VARIABLE INC AS FOLLOWS:

IF REPORTED ZERO, IN3=96: INC=0
IF REPORTED AN AMOUNT IN IN3 INC=REPORTED AMOUNT
IF REPORTED \$1M OR MORE IN IN3, IN3=95 INC=1000000
IF REPORTED RANGE IN IN4 AS UNDER ANY AMTX INC=AMTX
IF REPORTED RANGE IN IN5 AS UNDER ANY AMTX, INC=AMTX
IF REPORTED RANGE IN IN5 AS AMT8 OR MORE, IN5=4, INC=AMT8

CREATE VARIABLE CUTOFF5 AND CUTOFF10 AS FOLLOWS:

THEN CUTOFF5=INC*.05 & CUTOFF10=INC*.10

Ask if: Income is not 0 (INC>0) Ask if: All/IN6_INT.

{Web/CATI: The/My} next question is about the health care costs that {you/{TARGET}/you and your immediate family/{TARGET} and their immediate family} had in the past 12 months.

"Out of pocket" is the amount of money you pay that is not covered by any health 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. When answering this question please include costs for prescription medicines, dental and vision care, and all other medical expenses, including for doctors, hospitals, tests and equipment in your estimate. Also include any co-pays and co-insurance and costs that are covered by a flexible spending account. Finally, please include costs that are owed for care received in the past 12 months but have not yet been paid.

PROGRAM:

IF TFAM_COUNT=1
 AND TARGET IS RESPONDENT, INSERT "you",
 ELSE INSERT "{TARGET}/they".
IF TFAM_COUNT>1
 AND TARGET IS RESPONDENT, INSERT "you and your immediate family/you or someone in your immediate family",
 ELSE INSERT "{TARGET} and their immediate family/they or someone in their immediate family".
IF INCOME IS ZERO (INC=0) OR UNDETERMINED SKIP TO IN6b AND SHOW ALL RANGES.

Ask if: Income is not 0 (INC>0)

IN6. (IN6)

Was the "out of pocket" spending for health care in the past 12 months for {you/{TARGET}/you and your immediate family/{TARGET} and their immediate family} less than {CUTOFF5} or {CUTOFF5} or more?

{Web/CATI: /(PROBE:)} Your best estimate is fine.

- 1 Less than {CUTOFF5}
- 2 At {CUTOFF5} or more
- 3 {Web/CATI: Did not use care/(DO NOT READ) DID NOT USE CARE}
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: IF TFAM_COUNT=1

AND TARGET IS RESPONDENT, INSERT "you",
ELSE INSERT "{TARGET}/they".

IF TFAM_COUNT>1

AND TARGET IS RESPONDENT, INSERT "you and your immediate family/you or someone in your immediate family",

ELSE INSERT "{TARGET} and their immediate family/they or someone in their immediate family".

IF TFAM_COUNT > 1, INSERT "or member of {your/their} immediate family"

Ask if: Out of pocket costs were at CUTOFF5 or more (IN6=2)

IN6a. (IN6a)

Was the "out of pocket" spending for health care less than {CUTOFF10} or {CUTOFF10} or more?

{Web/CATI: /(PROBE:)} Your best estimate is fine.

- 1 Less than {CUTOFF10}
- 2 At {CUTOFF10} or more
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

Ask if: (CUTOFF10 is between \$200 and \$4,999 (200<CUTOFF10<4,999) AND IN6a=1, 2) OR CUTOFF10 is undetermined due to missing income

IN6b. (IN6b) Was the "out of pocket" spending for health care...

{Web/CATI: /(PROBE:)} Your best estimate is fine.

{Web/CATI: /(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
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

IF CUTOFF10<\$200, SET IN6b=1 AND DO NOT ASK.

IF CUTOFF10>=\$5,000, SET IN6b=6 AND DO NOT ASK.

IF CUTOFF IS \$200 TO \$4,999, ONLY SHOW THE RANGES ARE APPLICABLE.

IF IN6A=1 THEN, DO NOT DISPLAY ANY RESPONSE CATEGORIES WHERE THE LOWER NUMBER OF THE BRACKET IS GREATER THAN CUTOFF10

IF IN6A=2, THEN DO NOT DISPLAY ANY RESPONSE CATEGORIES WHERE THE HIGHER NUMBER OF THE BRACKET IS LESS THAN CUTOFF10

IF NO CUTOFF SHOW ALL RANGES

Ask if: subsample is 2 (subsamp=2)

HH_HA6. (HH_HA6a, HH_HA6b, HH_HA6c)

In the past 12 months, how often were the following difficult for {you/{TARGET}/{TARGET}'S parent(s)} to understand?

- a. Written or verbal information from providers about health or health care
- b. Written instructions about any medications, including over-the-counter medications
- c. Written or verbal information on the results from any blood tests, x-rays, or other tests, including COVID tests

- 1. Always
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Never
- 6. Not applicable
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM:

INSERT "do you" IF TARGET IS RESPONDENT,

ELSE IF (TAGE>18 OR TAGE2=2 OR 3) INSERT "does {TARGET}",

ELSE INSERT "do {TARGET}'s parent(s)".

Ask if: All

D12. (D12)

{Were you/Was {TARGET}} born in the United States?

- 1 Yes
- 2 No
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "Were you" IF TARGET IS RESPONDENT, ELSE INSERT "Was {TARGET}"

Ask if: Target was not born in the US (D12=2)

D13. (D13)

{Are you/Is {TARGET}} a citizen of the United States?

- 1 Yes
- 2 No
- 98 {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT "Are you" IF TARGET IS RESPONDENT, ELSE INSERT "Is {TARGET}"

HOUSEHOLD

Ask if: Landline sample or web

L1a. (L1a)

Now {web/CATI: we are/I am} going to ask you questions about telephone usage in your household. Do you, yourself, have a working cell phone?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

Ask if: R does not have a working cell phone, or DK, RF, or leaves blank (L1a=2, 98, 99, 97) and more than one adult in HH (ADLTCOUNT>1)

L1b. (L1b)

Do any adults in your household have a working cell phone?

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW

- 99 (DO NOT READ) REFUSED
- 97 Web Blank

Ask if: Cellphone in HH (L1a=1 or L1b=1)

L2. (L2)

Do you{, or do any adults in your household,} use a prepaid plan for {your/their} cellphone?
Prepaid plans, also known as pay-as-you-go or no-contract phone, are plans where the user pays for a specific amount of data usage or minutes in advance.

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT “, or do any adults in your household” IF ADLTCOUNT>1.
INSERT “their” IF ADLTCOUNT>1, ELSE INSERT “you”.

Ask if: (R or adult in HH uses a prepaid plan (L2=1) or Prepaid Cell Phone sample) AND ADLTCOUNT>1

L2a. (L2a)

{Including you, how/How} many adults in your household use a prepaid plan?

(IF NEEDED: Prepaid plans, also known as pay-as-you-go or no-contract phone, are plans where the user pays for a specific amount of data usage or minutes in advance.)

- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: INSERT “Including you, how” IF L1a=1, ELSE INSERT “How”.

Ask if: Cell phone sample or web respondent

C1. (C1)

Now thinking about your telephone use, is there at least one telephone inside your home that is currently working and is not a cell phone? Please include traditional landline or VOIP (voice over internet protocol).

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

Ask if: HH has both cell phone and landline ((L1a=1 OR L1b=1) AND C1=1) OR (SAMPSOURCE=CELL AND C1=1)

C2. (C2)

Of all the telephone calls that you answer, are...

- 1 all or almost all on your cell phones,
- 2 some on your cell phone and some on your home phone,
- 3 or very few or none on your cell phones?
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

Ask if: CATI respondents

INT1NEW. (INT1NEW)

Do you or any member of your household have access to the internet at home? This could be internet access by paying a cell phone company or an internet service provider.

- 1 Yes
- 2 No
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

Ask if: All

D10. (D10)

Next we have a few more questions about your residence. Is your residence?

{Web/CATI: /(READ LIST. ENTER ONE ONLY.)}

- 1 Owned by or being bought by you or someone in your household
- 2 Rented
- 3 Occupied without payment of rent
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

Ask if: AND subsample is 2 (subsamp=2)

D11. (D11)

How would you rate the overall quality of your housing?

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

Ask if: R indicates housing is fair or poor (D11=4, 5) AND subsample is 2 (subsamp=2)

D12b. (D12b_1, D12b_2, D12b_3, D12b_4, D12b_5, D12b_6, D12b_7OS, D12b_98, D12b_99, D12b)
 People may consider many things when they are assessing their housing. What were the most important things you were thinking about when you rated the quality of your housing as fair or poor.
 {Web/CATI: Check up to three answers./ (READ LIST. MARK UP TO THREE.)}

- 1. Size of the housing for the number of people living here
- 2. Housing structural problems (e.g., holes in roof, floor, or walls; electrical issues, leaks or plumbing issues, etc.)
- 3. Mice or roach problems
- 4. Noise levels
- 5. Location relative to work or schools
- 6. Neighborhood quality
- 7. Other {Web/CATI: Please specify:/ (SPECIFY:)} _____
- 98 (DO NOT READ) DON'T KNOW
- 99 (DO NOT READ) REFUSED
- 97 Web Blank

PROGRAM: RANDOMIZE, KEEP OTHER AS LAST OPTION.

CLOSING

Ask if: All

X1. (X1)

For future studies, 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
- 98 (DO NOT READ) DON'T KNOW

99 (DO NOT READ) REFUSED
97 Web Blank

Ask if: R is ok for recontact (X1=1)

X2. (X1Name, X1Email, X1Phone)

Thank you. Please provide your name, email address and best phone number on which to reach you.

{Web/CATI: /(RECORD ALL INFORMATION ACCURATELY.)}

{Web/CATI: /(INTERVIEWER NOTE: RESPONDENTS CAN REFUSE ANY OF THESE FIELDS. THE PROGRAM WILL ALLOW YOU TO LEAVE BLANKS.)}

Name: _____

99 (DO NOT READ) REFUSED
97 Web Blank

Email address: _____

99 (DO NOT READ) REFUSED
97 Web Blank

Phone number: _____

99 (DO NOT READ) REFUSED
97 Web Blank

PROGRAM: ADD VALIDATION FOR EMAIL (@) AND PHONE NUMBER (10 digits).

Ask if: All

X3.

{Web/CATI: Thank you for completing the Massachusetts Health Insurance Survey./ That was my last question. Do you have any questions for me?}

{Web/CATI: /(IF NEEDED: 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)

List of created variables:

TSPOUSE –

1 if S11=1 Married or 2 Living with partner
0 otherwise

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

TAGE2 -

- 1** if TARGET's age S6b1(a-y)=1 Less than 18
- 2** if TARGET's age S6b1(a-y)=2 18 years of age to 25
- 3** if TARGET's age S6b1(a-y)=3 26 or older

TFEM –

- 1** if TARGET is female
- 2** Target is transgender male
- 0** otherwise

TFAM_COUNT – Number of people in TARGET's family.