Findings from the 2023 Massachusetts Health Insurance Survey

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Methodology Report

CHIA.

THE 2023 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 2023 Massachusetts Health Insurance Survey (MHIS), which is the 16th round 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, 2021, and 2023. 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 2023 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[2]. Of most relevance is the 2021 MHIS Methodology Report[3].

This report is organized as follows: Section A describes the MHIS sample design and Section B explains the operational approach to the MHIS. The 2023 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

1. History

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 an 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.[4] This sample design was used from 2008 to 2011. The MHIS was not fielded in 2012 or 2013.

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 all, 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; McGeeney, 2015; Berzofsky et al.,2018; Goyle et al., 2022). By sampling prepaid cell phone

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[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] https://www.chiamass.gov/massachusetts-health-insurance-survey/

[3] https://www.chiamass.gov/assets/docs/r/survey/mhis-2021/2021-MHIS-Methodology.pdf

[4] Non-telephone households will, by definition, be missed in all RDD samples.

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 are 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 (Lavrakas et al., 2017), making it cost-prohibitive to continue with an 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 (16.5%) 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 (Dutwin, 2014; McGeeney, 2015; Berzofsky et al.,2018; Goyle et al., 2022). This has been documented in previous research and was also found in MHIS 2021. For instance, in MHIS 2021, the Hispanic incidence from the PPD sample was 4.3 times that of the Hispanic incidence from the ABS sample. Similarly, the uninsured incidence among the PPD sample was 3.3 times that of the uninsured incidence from the ABS samples. 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. The same design was employed in 2023.

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 and 2023 MHIS continued to incorporate such predictive models, though the modeling and the resulting stratification were updated based on the inclusion of the 2021 MHIS data. This process is explained in the 'ABS Methods' section below. For details about prior cycles' methods, please reference these methodology reports.

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
2023			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, 2020, or 2022.

2. Sample Design

In line with previous years, the goal of the 2023 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 2023 MHIS relies on a hybrid design with an ABS and an RDD prepaid cell phone sample, identical to the design used in the 2021 MHIS.

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 2023 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 for the 2023 MHIS was released in two waves, divided equally, allowing the second wave to be modified based on the results of the first wave to achieve the requisite 4,400 interviews, with representative samples for key demographic and economic subgroups. The prepaid cell sample was released in two waves to match the progress of the ABS, with a target of 600 completed prepaid cell phone interviews. The final goal for the 2023 MHIS was to gather 5,000 total interviews.

3. ABS Methods

Sample Frame

The 2023 MHIS utilized a hybrid design with ABS being the predominant frame. The ABS was selected via probability sampling methods, and SSRS' sister company, Marketing Systems Group (MSG), supplied all sample. Sample was generated from the United States Postal Service (USPS) Computerized Delivery Sequence File (CDSF). The CDSF is a computerized file that contains information on all delivery addresses serviced by the USPS, except for general delivery[5]. The CDSF is updated weekly and contains home and apartment addresses as well as Post Office boxes and other types of addresses for mail delivery. The sample was selected from all residential records apart

from addresses coded as vacant, seasonal (vacation), and PO boxes other than those defined as OWGM (only way to get mail), which avoids duplication of Massachusetts residents in the sample selection.

Geographic Stratification

The geographic strata for 2023 MHIS were based on the eight Health Service Regions (HSR) of Massachusetts (Table 2). The sample plan is designed to ensure proportionate completes within each of these health service regions. In the interest of oversampling key demographic subgroups, the sample was further stratified based on the predicted demographics as discussed in the next section.

Table 2: Estimated Distribution by HSR from the ABS Sample in 2023 MHIS

Targeted Subgroups	Estimated Incidence	Population Benchmark Source - Claritas	Estimated Survey Completes
1 Western	13.1%	11.6%	576
2 Central	10.2%	11.6%	450
3 Northeast	22.2%	21.5%	977
4 Metro West	11.1%	10.2%	487
5 Metro Boston	22.2%	23.7%	977
6 Metro South	12.8%	12.5%	561
7 Southcoast	4.4%	5.1%	193
8 Cape and Islands	4.1%	3.9%	179

Demographic Based Stratification

While providing excellent coverage, in practice, ABS designs have been shown to fall short with non-white, lower income, and younger populations (Link and Burks, 2013; Rapoport, Dutwin, & Sherr, 2012; Goyle, Sherr, Park, & Loveridge, 2022). To improve sample representativeness and achieve the Commonwealth's objectives, SSRS developed a stratified ABS design with strategic oversamples of households predicted to have certain attributes. With this aim, the sample design incorporated stratification by both geography and demographics of interest.

Within ABS, sample groups of interest are typically targeted via indicator flags such as Asian or Hispanic surname flags, through census demographics to identify areas that are high density enclaves for certain demographic groups, and through predictive modeling that uses indicator flags and census demographics among other appended variables. The stratified design used for the 2023 MHIS employed all these techniques to yield a representative sample of Massachusetts residents. As with 2021 MHIS, in addition to stratification by the 8 HSRs, the ABS sample strata were defined based on predictive models to identify and sample households predicted to have key demographic attributes. A general overview of the data modeling process and the steps undertaken to produce the suggested model-based stratification for 2023 MHIS are described below.

Targeting Demographics through Predictive Modeling

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 such as the 2021 Census Planning Database[5] to a portion of previously collected survey data (referred to as the "prior survey" data) to create the "training" dataset. The external data are 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 household characteristics that are likely to be strong predictors of harder-to-reach households. The predictive models are then evaluated on a "test" dataset, which is usually comprised of 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 were used to identify the sampling strata for each targeted attribute are determined.

Based on the analytical goals of the 2023 MHIS, which were the same as for the 2021 MHIS, the predictive models for the 2023 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 (either 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.

Oversampling households with the above listed 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 2023 MHIS. For instance, the 2023 MHIS did not seek to oversample households with adults aged 65+, so 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, all sample households for the 2023 MHIS were 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 2023 MHIS

Wave 2 of 2021 MHIS utilized a predictive model-based approach to identify, target, and reach households with children, Hispanic respondents, and Asian American respondents at higher numbers than what would be expected with MSG provided sample appends and geographic area characteristics. This modeling approach was successful in increasing the incidence and coverage of the target demographics. For further details on the 2021 sample design and results please refer to the 2021 Massachusetts Health Insurance Survey Methodology Report.

The goal for 2023 MHIS was to improve upon the 2021 approach by targeting attributes that were unable to be to be targeted in 2021 MHIS. For example, in 2021, we were unable to target low-income and uninsured respondents due to an inadequate number of cases in the dataset used for modeling. To find the specific incidence and

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[5] The Census Planning Database contains select operational, housing, demographic, and socio-economic statistics from the 2010 Census and the American Community Survey (ACS) 5-year files.

coverage for the targeted household attributes that were assessed in 2021, please reference the 2021 MHIS Methodology Report.

The process for developing the predictive models for the targeted attributes in the 2023 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. The training dataset was created using SSRS's proprietary ABS Database and half of the ABS data collected for 2021 MHIS[6]. The other half of the data collected for the 2021 MHIS was used to test the predictive models (described below). The SSRS ABS Database is maintained by the advanced methods team and archives sampling data, survey responses, and paradata from previous SSRS-administered ABS data collections. At the time of the 2023 MHIS sample design, the proprietary database included data for over 1.8 million U.S. addresses sampled for approximately 20 previous SSRS ABS data collections on a variety of topics conducted between 2019 and 2023, which generated over 150,000 survey responses. The database contains multiple tables, some at the person level others at the address level. For each person and /or address, SSRS maintains up to 780 data points, including: demographic, behavioral, and psychographic attributes appended from voter files and commercial marketing databases; responses to survey items; disposition information; and flags related to any data collection experiments (e.g., experiments with incentive levels, envelope types, etc.) implemented for the project. Because of the large volume of data accumulated over time, SSRS ABS Database includes a substantial number of survey responses from rare or harder-to-reach subgroups such as young adults, persons without college degrees, non-Internet-users, the uninsured, and members of detailed racial or ethnic categories. This allows SSRS to develop nuanced machine-learning models to identify address characteristics that are associated with a high likelihood that a person in the target subpopulation resides there.

    The database used for building the predictive models was comprised of records from the SSRS ABS Database and half of the 2021 MHIS ABS (training data). About 43% of these records were from CHIS, 6% were from MHIS, and the remaining from other health studies. The models were then tested and evaluated on the remaining half of the 2021 MHIS ABS data (test data).

3. Each address in the training and test data was matched to commercially available external data for that address. As the external data match are based on characteristics associated with the address for an earlier time period, there could be measurement error in the data match for addresses with changes in occupancy.

4. Analysis files were built for the training data and the 2021 test data with observations for each address-data match combination. This meant creating separate observations within each address for each person-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 commercial data matches were excluded from the data files for the development of the predictive models. The outcome variables in the ABS database 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 the ABS database.

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[6] The training dataset used for the 2021 MHIS comprised of data collected for the 2019-2020 California Health Interview Survey.

5. Predictions were developed for the targeted attributes that are likely to be related to the harder-to-reach household subgroups outlined above 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 lives in a household with children under 18, etc.) and the independent variables are the external data appended to the ABS training database. The goal of the random forest was to identify the best predictors and a classification model using those predictors for each targeted attribute for the individuals in the training data. Predicted probabilities for each of these targeted attributes were then estimated on the 2021 MHIS test data to evaluate the 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 identified 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 external data sources for these flags are from MSG and the 2021 Census Planning Database (CPDB). MSG appends data flags to the ABS frame. The CPDB contains population level data at the Census Block Group (CBG) level. MSG 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 that it is likely that someone at the address has a surname associated with a particular subgroup. For instance, a person at an address linked 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 likely 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. The CBG data identify geographic areas by density of certain subgroup attributes in 2021, such as the proportion of households in a particular CBG with African American members. Based on the geographic characteristics of their address, an address located in a CBG with a high proportion of Asian households 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 the targeted attributes (i.e., the random forest model-based predictions, the flags appended by MSG, and the CBG-based indicators) were then evaluated using the 2021 MHIS test data. The incidence and coverage for target attributes were compared with those obtained from the models used for the 2021 MHIS.

    a. The predictive models developed in the training data were at the person level. To evaluate them in the context of the 2021 MHIS ABS test data for households, the individual-level predictions were aggregated up to the household level. For example, if any member of a household in the combined ABS Database and 2021 MHIS ABS training data 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 for the 2021 MHIS test data, the predicted attributes of each address were compared to the actual reported attributes of the 2021 MHIS target person at that address. 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 they are predicted to have by the model. The higher the incidence for a predictive indicator, the more efficient the stratification of the sample based on that predictive indicator is 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 is 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.

Table 3 lists the predictive indicators that were evaluated for the 2023 MHIS. The 'Assessment' column indicates whether the predictive indicator was retained, discarded, or added to the 2023 MHIS stratification scheme in comparison to 2021. In the assessment column, 'discarded' notes those indicators that were used in the 2021 stratification scheme but not in the 2023 scheme because they did not add any additional value in identifying the targeted subgroup. For instance, in 2023, the self-reported Asian Predictive model was able to efficiently identify Asian households and provide both a high incidence and coverage, rendering the flag-based indicators, such as Vietnamese Surname flag redundant. 'Retained' identifies those indicators that were the same as the 2021 stratification scheme. 'Not added' were those predictive indicators that were evaluated but did not add any value beyond other predictive indicators. 'Added' were those predictive indicators that were evaluated and did add value beyond other predictive indicators by increasing the incidence, coverage, or both, for the targeted household subgroup.

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 2023 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 was significant overlap in the households they identified, 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 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 Hispanic members were defined as all addresses meeting any one of the following criteria:
        ▪ Address was flagged as a Hispanic household if any individual in the household was predicted via the random forest model as Hispanic.

- ▪ Address was flagged as a Hispanic household if any individual in the household was predicted via the random forest model as a speaker of Spanish.
- ▪ Address was flagged as a Hispanic household if external data linked to the address included anyone with an Hispanic 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.

Table 3: Assessment of Predictive Indicators by Targeted Household Attribute, Comparison between 2021 and 2023

Targeted Household Subgroup	Predictive Indicator	Assessment
Asian	Vietnamese Surname Flag	Discarded
Asian	Korean Surname Flag	Discarded
Asian	Asian Language Interview Predictive Model	Discarded
Asian	Asian Surname Flag	Discarded
Asian	Self-reported Asian Predictive Model	Retained
Asian	High Density Asian Block Group Flag	Not added
Hispanic	Spanish Language Interview Predictive Model	Retained
Hispanic	High Density "Other Language" Block Group Flag	Discarded
Hispanic	Hispanic Surname Flag	Retained
Hispanic	Self-reported Hispanic Predictive Model	Added
Hispanic	High Density Hispanic Block Group Flag	Not added
Black/African American	Self-reported Black/African American Predictive Model	Added
Black/African American	High Density Black/African American Block Group Flag	Retained
Low Income	No High School Diploma Predictive Model	Not added
Low Income	Low Income (Household income<=139% FPL) Predictive Model	Added
Low Income	Low Income (Household income < $35,000) Predictive Model	Not added
Uninsured	Uninsured Predictive Model	Added
Uninsured	Not U.S. Citizen Predictive Model	Not added
Household with Child (Age 0-17)	Presence of Child (Age 0-11) Predictive Model	Retained
Household with Child (Age 0-17)	Presence of Teen (Age 12-17) Predictive Model	Retained
Household with Child (Age 0-17)	Presence of Child (Age 0-17) Sample Frame Flag	Not added
Household with Young Adult (Age 18-29)	Presence of Young Adult (Age 18-29) Predictive Model	Not added
Household with Young Adult (Age 18-29)	Presence of Young Adult Sample (Age 18-29) Frame Flag	Not added
Household with Elderly Adult (Age 65+)	Presence of Elderly Adult (Age 65+) Predictive Model	Retained
Household with Elderly Adult (Age 65+)	Presence of Elderly Adult (Age 65+) Sample Frame Flag	Retained

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 2021 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.

8. 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.

9. The final stratification scheme was thus one that best controlled the design effect while also maximizing the incidence of the key targeted attributes.

10. The 2023 MHIS ABS sample was "scored" using the final predictive indicators selected based on how they fared with the 2021 MHIS ABS test data. "Scoring" is the process of applying the predictive models to a new set of data (the ABS for the 2023 MHIS) to generate a prediction for each address.

11. Using these predictions and the predetermined stratification scheme, the final sampling stratification variable was developed for the 2023 MHIS.

Table 4 enumerates the strata for the 2023 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 5 shows the final relative sampling fractions used for drawing the 2023 MHIS sample based on the evaluation described above.

Table 4: Stratification Groups for 2023 MHIS

Targeted Attribute	Predictor	Stratum
Asian	Self-reported Asian Predictive Model	Stratum 1
Hispanic	Self-reported Hispanic Predictive Model	Stratum 2
Hispanic	Spanish Language Interview Predictive Model	Stratum 2
Hispanic	Hispanic Surname Flag	Stratum 2
Black/African American	High Density Black/African American Block Group Flag	Stratum 3
Black/African American	Self-reported Black/African American Predictive Model	Stratum 3
Household with Child (Age 0-17)	Presence of Child/Teen Predictive Model	Stratum 4
Low Income/Uninsured	Self-reported LT 139% FPL Predictive Model	Stratum 5
Low Income/Uninsured	Self-reported Uninsured Predictive Model	Stratum 5
Household with Elderly Adult (Age 65+)	Age 65+ Predictive Model	Stratum 6
Household with Elderly Adult (Age 65+)	Age 65+ Flag	Stratum 6
Residual Addresses	No match on external data	Stratum 7
Residual Addresses	Match on external data	Stratum 8

Table 5: Strata Sampling fractions

Stratum	Stratum Description	Relative Sampling Fraction
1	Asian	1.71
2	Hispanic/Spanish Language	2.13
3	Black/African American	1.33
4	Child	0.93
5	Low Income/Not Insured	2.22
6	Age 65+	0.40
7	Residual Unmatched	0.84
8	Residual Matched	0.7

The final sample design crossed the modeling-based strata with the eight HSRs to ensure representative sampling of the HSRs. Table 6 shows the estimated incidence of each of the targeted household attributes, i.e. the estimated proportion of a given attribute within the 2021 MHIS test sample, under the final sample design, as well as the incidence in 2021 and 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 demographic based and geographic based stratum, along with the sampling fraction for the stratum.

Sample Yield and Sample Release

The yield of the study was estimated to be 10.5:1. The sample was released in two waves, divided equally across the waves. Data from the first wave allowed us to conduct an adaptive design and adjust the model for the second wave of sample selection (see details below).

The table below displays the household counts from the sample frame, the CDSF, the estimated survey completes at the time of sampling and the actual survey completes by HSR.

Table 6: Estimated Survey Incidence and Estimated Survey Completes for Targeted Household Attributes from the ABS in 2023 MHIS

Targeted Attribute	Incidence 2021	Estimated Incidence 2023	Population Benchmark Source- American Community Survey (ACS) 2021	Estimated Survey Completes 2023	Actual Incidence 2023	Actual Survey Completes 2023
Black/African American	5.5%	5.9%	6.1%	260	5.3%	244
Hispanic	7.9%	8.0%	13.0%	352	6.7%	312
Asian	9.4%	9.4%	6.9%	414	7.1%	330
Age 18-29	11.1%	11.1%	15.0%	488	10.3%	479
Uninsured	1.1%	1.3%	2.5%	57	0.7%	34
Low income (<=139 FPL)	6.9%	7.7%	14.1%	339	8.7%	403

Table 7: CDSF Household Counts, Expected Total Sample Size, and Estimated ABS Completes

HSR	Households	Sample	Estimated Survey Completes	Actual Survey Completes
1 Western	336,242	6,468	576	507
2 Central	311,983	5,384	450	462
3 Northeast	586,756	8,934	977	1059
4 Metro West	275,151	3,986	487	414
5 Metro Boston	706,805	10,482	977	1299
6 Metro South	345,279	5,989	561	526
7 Southcoast	147,362	2,848	193	191
8 Cape and Islands	137,812	2,110	179	179
Total	**2,847,390**	**46,200**	**4,400**	**4,637**

Sample Performance and Adjustment

After the first wave of data collection was completed, the SSRS Methods and Data Science team analyzed the results and used the characteristics of the initial group of ABS respondents to determine the efficacy of data modeling as well as to determine response rate to the study. The team also evaluated whether design modifications were required to achieve the desired representation based on the completes from both ABS and prepaid sample. Information about the prepaid sample and methods can be found in Chapter 4.

The analysis indicated that the data modeling was performing well overall, but some deviations were noted. Overall, a yield of 11.6 at the end of wave 1 was higher than the target yield of 10.5. As a result, the second wave was released with an expected yield of 11.4.

In addition, deviations were observed in the Asian modeled strata with a yield of 9.6 as opposed to the 7.6 expected and the Hispanic/Spanish modeled strata with a yield of 24.9 as opposed to the 20.1 expected. In terms of geography, the Western, Northeast, and Metro South regions all were over a point higher than the expected yield. As a result, adjustments were made to the sampling fractions for the wave 2 sample release, as detailed in Table 8.

Finally, the number of uninsured based on Wave 1 was much lower than anticipated among the ABS. At that point, SSRS aimed to obtain 34 completed interviews with an uninsured target by the end of the ABS data collection.

Table 8: Revised Strata Sampling Fractions for Wave 2

Stratum	Stratum Description	Relative Sampling Fraction
1	Asian	0.41
2	Hispanic/Spanish Language	1.80
3	Black/African American	1.78
4	Child	1.26
5	Low Income/Not Insured	0.25
6	Age 65+	0.53
7	Residual Unmatched	0.30
8	Residual Matched	0.74

Additional completes with uninsured targets were expected to come from the prepaid sample which is discussed in the next section. While difficult to pinpoint the exact reason for the lower number of uninsured, SSRS believed there were multiple factors responsible for the lower number of uninsured. These potential factors and remediation, if any, are listed below:

- For 2023 MHIS , it was decided to oversample children as target at a ratio of 2.5:1 in order to increase the analytical power for children. However, since children are less likely to be uninsured, it may have had an impact on the number of uninsured. The oversampling of children was stopped in Wave 2.
- In 2021, the completed interviews from the prepaid sample represented a larger proportion of the total MHIS completes, but the proportion of prepaid completed interviews was decreased in 2023 due to cost. We know however, that the prepaid sample is more likely to have more uninsured people.
- Adaptive design, which limits the number of calls to prepaid sample cases that are less likely to become completed interviews was used in Wave 1. This restriction was stopped in Wave 2 to see if more uninsured targets would ensue, but it did not prove effective. For additional detail on adaptive design please see Chapter 4.
- Finally, it is possible that the unemployment rate in MA in 2023 being approximately 2 percentage point lower than in 2021 may have had some impact (Commonwealth of Massachusetts, Department of Economic Research.)
- In addition, as discussed later in this report (section B.1), an experiment was conducted to convert partially completed interviews to completed interviews. We tested three conditions and the one including a $2 pre-incentive with a $10 promised incentive outperformed the others. We sent partials who had been part of the other experimental conditions an additional letter that included the $2 pre-incentive along with the $10 promised incentive. The goal was to increase the overall completes and thus possibly increase the number of uninsured completes, however, it did not have an impact on the number of uninsured.

4. Prepaid Cell Phone Methods

Prepaid cell phone numbers are associated with cell phones that are "pay as you go" and do not require a contract. Prepaid numbers have been found to be more likely used by Hispanic people, people with lower education, people with lower income, and other related groups who are often underrepresented in general population samples (e.g., the uninsured; Dutwin, 2014; McGeeney, 2015; Berzofsky et al., 2018; Goyle et al., 2022). These are key demographic groups that tend to be underrepresented in ABS designs.

The 2023 MHIS continued the design from 2021 where we exclusively used prepaid cell phones for the phone frame and all other interviews were conducted from the ABS frame. Such a hybrid design enhances the representativeness of the overall sample and brings total completed interviews with households from underrepresented groups closer to desired targets. Table 9 below shows the estimated incidence and estimated completes for 2023 MHIS from the prepaid cell sample and actual incidences and completes.

Sample Frame

SSRS' sister company, Marketing Systems Group (MSG), supplied the prepaid cell sample for the 2023 MHIS, as it has for prior rounds of the MHIS.

Table 9: Estimated Incidence and Survey Completes for Targeted Subgroups from the Prepaid Cell Sample

Targeted Subgroups	Estimated Incidence	Estimated Survey Completes (n=600)	Actual Survey Completes (n=629)
African American	17.7%	106	110
Hispanic	28.3%	170	158
Asian	6.0%	36	37
Age 18-29	3.5%	21	78
Uninsured	13.3%	80	16
Low income	17.7%	106	239

Sample Yield and Sample Release

Based on an estimated 136:1 yield for the prepaid cell sample; it was anticipated needing 81,600 sample pieces to achieve the target 600 completes for this sample.

Adaptive Design for Prepaid Cell Dialing

For the prepaid cell phone sample, the 2023 MHIS used a model-based adaptive design to reduce outbound dialing costs while maintaining yield and the representativeness of the responding sample. Using data from previously completed prepaid cell samples, SSRS developed a random forest model predicting the outcomes of later call attempts based on the outcomes of the first few call attempts. Specifically, for any cases that did not respond to the first 3 call attempts, this model predicted "response propensity" (RP) conditional on continued dialing—that is, the probability that a response would eventually be obtained if interviewers continued dialing that case. Model predictors included the status codes, call durations, and other paradata from the first 3 call attempts.

This model was applied to assign an RP score to each case in the MHIS prepaid sample that passed the third call attempt without yet having responded. At that point, any cases with RP scores below a prespecified "cut point" were no longer dialed, while other cases with higher RP scores continued to be called up to a maximum of 4 dials. The rationale for this approach is to direct the remaining dialing effort towards those cases for which it is most likely to be successful, while reducing effort for those that are unlikely to eventually yield a completed survey.

RP models developed for similar state health surveys were able to predict the outcomes of later call attempts with high accuracy. The use of highly accurate RP models allows to stop dialing early for some cases while minimizing the reduction in the completion rate (and therefore any reduction in sample representativeness), since very few of the cases that were stopped early would ever have responded.

The goal was to target approximately a 20% reduction in the total number of dials relative to the standard protocol of 4 dial attempts. In all, 69,330 cases were evaluated, of which 63,887 were stopped at 3 calls. Out of the cases that continued to 4 calls, 1.8% of the cases became completed interviews. Due to the lower-than-expected number of uninsured respondents, the number of calls was increased to 6 to assess whether increasing the number of calls would yield additional uninsured respondent. This approach was not successful and, therefore, additional sample was released.

One concern for prepaid cell phone dialing is that respondents will not answer calls from numbers that may appear to be spam. SSRS utilizes a variety of strategies to minimize the chance that the number being used to call potential respondents is identified as spam, spoofing, or a sales call. Specifically, the reputation management team at SSRS partners with the telcom providers as well as an industry-leading white-listing service, Numeracle, to register, monitor, and retire outbound numbers periodically or when flagged to reduce the chance of being marked as

spam, spoofing, or sales calls. Numeracle is a whitelisting vendor who provides registration and monitoring services to give outbound numbers the best chance in both displaying the intended information to recipients and allowing calls to go through without being blocked as spam. The whitelisting process takes a minimum of three weeks which is why SSRS always requests ample phone numbers for the duration of the MHIS. Numeracle also provides monitoring services and provides regular reporting of numbers that are likely flagging as spam. These numbers are then retired. In addition, they work directly with carriers to clean numbers that are flagged to reduce the likelihood that it will be flagged as spam. The SSRS receives daily health reports about all active callerIDs and a dedicated team ensures every project is kept as 'clean' as possible and mitigates spam ratings by cycling in fresh callerIDs after high-volume dialing has taken place.

5. Within Household Target Selection

Previous waves of MHIS have used an equal probability of selection method for selecting targets from within people rostered for a household. To increase the child sample size for more nuanced child-level analyses, the 2023 MHIS chose to oversample children during the target selection process. Towards this aim, data from the 2021 ACS were used to estimate how different oversampling factors for children would alter the design effect and margin of error associated with the target selection. Table 10 summarizes the results of those analyses.

Given CHIA's analytic goals, the final decision was to oversample children at factor of 2.5 for the 2023 MHIS. This was programmed within the instrument at the target selection, with children having a 2.5 greater chance of selection than any adult in the household. This effort was eliminated in Wave 2 to increase the number of uninsured in the sample.

Table 10: Child Oversampling Factor Analysis

	Sampling Factor for Children					
	1	1.5	2	2.5	3	3.5
Adults						
n	4,387	4,256	4,165	4,097	4,044	4,001
Design Effect	1.31	1.39	1.48	1.57	1.66	1.76
Effective Sample Size	3,352	3,063	2,820	2,613	2,434	2,278
Max MOE	1.7%	1.8%	1.9%	2.0%	2.0%	2.1%
Children						
n	613	744	835	903	956	999
Design Effect	1.09	1.1	1.11	1.12	1.13	1.14
Effective Sample Size	561	675	751	805	846	878
Max MOE	4.2%	3.8%	3.6%	3.5%	3.4%	3.4%
Total						
n	5,000	5,000	5,000	5,000	5,000	5,000
Design Effect	1.31	1.34	1.4	1.47	1.55	1.63
Effective Sample Size	3,813	3,728	3,568	3,394	3,223	3,062
Max MOE	1.6%	1.6%	1.7%	1.7%	1.8%	1.8%

B. MHIS OPERATIONAL APPROACH

1. ABS Operational Approach

Sample was released in two waves. Each wave followed the contact protocol described below. Dates of the mailings by wave can be found in Table 11.

1. All sample members received an initial invitation letter that included a $1 bill in a visible cash envelope. In Wave 2, those in the aged 65+ stratum were not sent a $1 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 cases in stratum 2, which were predicted to be Hispanic, 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. Respondents in stratum 6, age 65+, received the same letter but no incentive was included, since these demographics tend to respond at a higher rate. 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. Between 3-7 days after the initial invitation letter was sent, all households in the ABS received a postcard reminder. The postcard also provided the 1-800 number for call-in surveys as well as Spanish content for the Hispanic/Latino stratum.

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 $1 incentive. As with other mailings, the Hispanic/Latino stratum were sent a bilingual version.

4. About a week after the reminder letter, a reminder postcard was sent to all remaining nonrespondents. As with other mailings, the Hispanic/Latino stratum was sent a bilingual version.

5. Finally, a partial conversion letter was sent to any cases that had started the survey but did not complete it. This mailing was part of an experiment which is described in further detail later. Cases that had started the survey in Spanish received a bilingual version of the letter, while those that had started in English received an English-only version.

Table 11: Contact Protocol Dates by Wave

Mailing	Wave 1	Wave 2
Initial Invitation	4/25/23	7/14/23
Postcard	4/28/23	7/21/23
Letter Reminder	5/11/23	8/4/23
Postcard Reminder	5/19/23	8/11/23
Partial Conversion Letter	6/6/23	8/28/23

Partial Conversion Letter Experiment and Results

The partial conversion letter experiment's goal was to convert web partial interviews to completed interviews. There are a number of reasons why respondents may break off during an interview such as lack of time or interest and not necessarily due to a hard refusal to participate. Researchers on the study believed that some of these respondents would be willing to resume if offered monetary compensation. In addition, evidence from prior research (Fu et all, 2023) suggests that breakoffs tend to be more heavily Hispanic, Spanish-speaking, and lower education than other respondents, so increasing completion among this group could also help achieve a more representative sample.

The wave 1 sample was randomly divided in three groups: a control group that received a letter only, an experimental group 1 that received a letter with an offer of a $10 post-incentive, and an experimental group 2 that received a letter with an offer of a $10 post-incentive and a $2 visible cash pre-incentive.

After the first wave, the results were evaluated. Among the partials in the control group, 6.5% were converted to complete, while 8.8% and 16.4% of the partial interviews were converted to completed interviews in the experimental groups 1 and 2 respectively.

Since experimental group 2, with the $10 post-incentive and the $2 visible cash pre-incentive, outperformed the other two conditions, it was decided to use this option only for converting partial interviews to completed interviews in Wave 2.

In addition, CHIA opted to send nonrespondents from both the control group or the experimental group 1 in wave 1, a sixth mailing with the $10 post-incentive and the $2 visible cash pre-incentive.

2. Prepaid Cell Phone Operational Approach

The protocol for the prepaid cell sample for the 2023 MHIS was as follows: All sample members received an initial call plus up to 3 callbacks. As described above, a model was used to predict "response propensity" (RP) to determine whether there was continued dialing the case to 4 calls in total. 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.

Prepaid Cell Phone Experiment and Results

The prepaid sample is particularly important to the MHIS as it helps bring in some of the demographics that are hard to reach through the ABS. However, prepaid cell phone sample is high in nonresponse and therefore very expensive. For 2023, an experiment was conducted where half the sample was offered a $10 post-incentive in the form of a gift card and the other half was not. Respondents who were part of the experimental group were told about the $10 incentive very early in the conversation if they answered the phone or in the voicemail that was left on the first attempt. Upon completion of the survey, the experimental group respondents were asked for their mailing address in order for the gift card to be mailed to them.

Overall, 92,604 prepaid cell phone cases were released and divided evenly between the control and experimental conditions. We obtained 289 completed interviews from the control condition and 340 completed interviews from the experimental condition. This suggests that a $10 post-incentive is an effective recruitment methodology when compared to not offering any incentive.

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 chose to call in to complete the survey by telephone, with the same group of interviewers conducting the telephone interviews with sample members from both groups.

Interviewer Training

Prior to commencement of the study, and as 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 three or four calls, based on the adaptive design.
- 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 the interviewer's 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. 2023 MHIS INSTRUMENT

1. Survey Content

The MHIS questionnaire begins by establishing that the household is in Massachusetts, and therefore is 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, sex assigned at birth, 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.

Table 12: Summary of Topic Areas Covered in the 2023 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

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 identity, sexual orientation, education, and employment are also collected. Table 12 summarizes the questions covered in the 2023 MHIS for all members of the household and for the household member selected as the "target" individual for the survey. The 2023 MHIS instrument is included in Appendix B.

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. Tables 13 and 14 below list the modifications to the 2023 MHIS questionnaire.

Table 13: New Questions

Question Number	Question Text
S10ab	¿Qué pronombre prefiere esta persona? (English: (DO NOT SHOW): What pronoun does this person prefer?)
H0	The Health Connector is Massachusetts' health insurance Marketplace. It helps individuals, families, and small businesses find health insurance that meets their needs and fits their budget. The Health Connector is different from MassHealth, but they do share an application. Had {you/{TARGET}/{TARGET}'s parent(s)} heard of the Health Connector before?
H0a	How much {have you/has {TARGET}/have {TARGET}'s parent(s)} heard about the Massachusetts Health Connector being available for state residents in need of health insurance?
H4d	Did {you/{TARGET}/{TARGET}'s parent(s)} know that MassHealth is starting to review the eligibility of all members this year?
H5ac	Does {your/{TARGET}'s} health insurance cover any care or treatment for…mental health, such as visits to individual or group therapy, specialty outpatient services, medication management or inpatient treatment?
H5ad	Does {your/{TARGET}'s} health insurance cover any care or treatment for… alcohol or substance use problems, such as therapy, rehab, or acute residential treatment or detox programs?
E1a	{Do you/Does {TARGET}} work in a setting where health care is provided to patients as a member of the clinical, non-clinical, pharmaceutical, or administrative staff?
E1aa	Did {you/{TARGET}} ever work in a setting where health care is provided to patients as a member of the clinical, non-clinical, pharmaceutical, or administrative staff?
A2d	{Do you/Does {TARGET}} have a regular primary care provider?
A6ba	Thinking about {your/TARGET's} most recent appointment with a mental health professional, did {you/TARGET/TARGET's parent(s)} pay the entire cost of the appointment out-of-pocket? This might include payments made in cash or from special accounts {you/they} may have for health care spending, such as Flexible Spending Accounts, Health Savings Accounts, or Health Reimbursement Arrangements.
A6bb	Why didn't {you/{TARGET}/{TARGET}'s parent(s)} have to pay the entire cost of the appointment out-of-pocket?
A6bc	Why did {you/{TARGET}/{TARGET}'s parent(s)} {pay out of pocket / go to a free or sliding scale clinic} for {your/their} most recent appointment?
A6ca	Thinking about {your/TARGET's} most recent appointment for an alcohol or substance use disorder, did {you/TARGET/TARGET's parent(s)} pay the entire cost of the appointment out-of-pocket? This might include payments you made in cash or from special accounts {you/they} may have for health care spending, such as Flexible Spending Accounts, Health Savings Accounts, or Health Reimbursement Arrangements.
A6cb	Why didn't {you/TARGET/TARGET's parent(s)} have to pay the entire cost of the appointment out-of-pocket?
A6cc	Why did {you/TARGET/TARGET's parent(s)} {pay out of pocket / go to a free or sliding scale clinic} for {your/their} most recent appointment?
A6da	Thinking about the past 12 months, was there any time that {you/{TARGET}/{TARGET}'s parent(s)} did not get mental health care or counseling that {you/{TARGET}} needed?
A6db	Thinking about the past 12 months, was there any time that {you/{TARGET}/{TARGET}'s parent(s)} did not get alcohol or substance use disorder care or treatment that {you/{TARGET}} needed?
A10	Thinking about all the care that {you have/TARGET has} received in the past 12 months, was any of that care through a telehealth appointment? Telehealth appointments are when care is provided by video, phone, text, app, or chat instead of in-person.}
A10a	Thinking about {your/TARGET's} most recent in-person visit, why did {you/TARGET} go in-person instead of using a telehealth appointment?

A10aa	Thinking about {your/TARGET's} most recent in-person visit, what type of care did {you/they} receive?
A10b	For {your/{TARGET}'s} telehealth appointments in the past 12 months, what type of care did {you/they} receive?
D5	What is your/{TARGET}'s gender?
D5a	{Are you/Is {TARGET}} transgender?
D6	Which of these describes {your/{TARGET}'s} sexual orientation?
D16	How well {do you/does {TARGET}/do {TARGET}'s parent(s)} speak English?
D17	The last time {you/{TARGET}} received health care, did {you/they/TARGET's parent(s)} have a hard time understanding the health care professional because they spoke a different language than {you/{TARGET/TARGET's parent(s)}}?
HH_HS3	Do any members of {your/{TARGET}'s} family 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/mental health condition, or a developmental disability.

Table 14: Deleted Questions

Question Number	Question Text
ABSCELL	Just so that I can ask you the right questions, am I reaching you on a cell phone?
H4b	How long have {you/{TARGET}} been enrolled in {MassHealth/Health Connector Plan/individually purchased private health insurance plan}?
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.
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?
E1	{Thinking about {your/{TARGET}'s} main job, {are you currently…/is {TARGET} currently…}}
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?
HS1a	Would you say {your/{TARGET}'s} mental health, in general, is excellent, very good, good, fair, or poor?
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?
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?
HS3a	Some people have problems with alcohol or substance use. {Do you/Does {TARGET}} have an alcohol or substance use problem?
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?
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?
D4	Which best describes {your/{TARGET}'s} ancestry or heritage?
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?
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}}
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?
A13	{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…}
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?
HH_HA6	In the past 12 months, how often were the following difficult for {you/{TARGET}/{TARGET}'S parent(s)} to understand?
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).
C2	Of all the telephone calls that you answer, are…
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 2023 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. In total, 4,434 interviews were completed on the web while 832 were completed on the phone.

The 2023 MHIS was offered in English and Spanish for both CATI and web. In total, 121 interviews were completed in Spanish – 92 on the phone with bilingual interviewers and 29 self-administered on the web.

3. Survey Pretest

The pretest for the 2023 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 2021.

The CATI pretest was comprised of 5 interviews conducted on March 16th and 17th, 2023. SSRS also conducted 4 web cognitive interviews between March 15th and 17th. All of the participants took the web survey on a computer. SSRS attempted to complete a Spanish cognitive interview, but was not able to schedule a Spanish-speaking respondent. Respondents for the CATI interviews were prescreened from the SSRS omnibus survey. Two of the web respondents were from a list provided by CHIA and two came from the SSRS panel.

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

The survey was generally well received. The CATI interviews averaged 32 minutes (minimum length: 24 minutes; maximum length: 38 minutes). The cognitive interviews cannot be used to gauge time as the moderator probes throughout the interview. Most participants indicated the length was acceptable and would participate in such a survey even if not compensated.

Table 15: Demographic Characteristic of the Pretest Targets

Demographics	N (CATI)	N (web)
Male	3	3
Female	2	1
Less than 18	0	0
18-25	0	0
26-64	4	4
65+	1	0
Insured	5	4
Uninsured	0	0

Some problems with verbiage inserts (CATI and web), a programming error, additional interviewer training, and some simple needed enhancements were identified. All findings were outlined in a memo to CHIA and all were addressed before the start of the data collection.

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. The questionnaire.
3. A script to use when leaving messages on answering machines.
4. 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. MHIS Data Collection

Data collection for the 2023 MHIS began on April 26, 2023, (mailing occurred on April 23, 2023) and was completed on August 28, 2023. During this period, 4,637 interviews were completed from the ABS, and 629 interviews were completed from the prepaid cell phone sample.

Table 16 shows the number of completed interviews by mode and sample type.

The average interview length was 20.5 minutes. Specifically, the interview took 33 minutes on the phone and 18.1 minutes on the web.

Table 16: Completed Interviews by Mode and Sample Type

	ABS	Prepaid Cell Sample	Total
CATI (inbound)	195	22	217
CATI (outbound)	8	607	615
Web	4,434	0	4,434
Total	4,637	629	5,266

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).[7] Missing values were also imputed for a group of analytic variables that were needed for the reports on the 2023 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 percentage 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 13.1%.

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

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

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 2023 MHIS are summarized in Table 17. The response rate for the ABS was 13.6 percent. While this is a low, it is in line with what is observed in other state health surveys. To review response rates from another state level health surveys, review the CHIS Report 4 2021-2022 Response Rates[8]. The response rate for the prepaid cell phone sample was 1.4 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 5.8 percent.

While low, the 2023 MHIS response rate does not 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 higher[9]. Other factors beyond response rates are also important, such as levels of bias, levels of missing data, and similarity to other research findings[10]. It should be noted however that the low response rate of the 2023 MHIS may carry with it more risks and potential errors than federal government surveys that have much larger sample sizes. While survey weighting (described in the section below) aims to mitigate potential sources of bias, such as nonresponse bias, it is likely that some bias may remain.

Table 17: Response Rates for 2008-2023 MHIS

Sample	ABS	RDD – Landline Telephone	RDD Cell Phone and/or Prepaid Cell Phone	Overall Phone	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%
2023	13.6%	N/A	1.4%	1.4%	5.8%

In 2021 and 2023, the cell phone sample was limited to prepaid cell phone numbers.
N/A indicates that such sample was not applicable for a given year.

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[8] CHIS Report 4 2021-2022 Response Rates: https://healthpolicy.ucla.edu/sites/default/files/2023-09/chis_2021_2022_methodologyreport4_responserates_final_09112023.pdf
[9] 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.
[10] 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 (PCS) or via address-based sample (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, 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 strata (Predicted to be Asian, Predicted to be Hispanic or Spanish-speaking, Predicted to be Black/African American or in a High density Black/African American census block group, Predicted to have children, Predicted to be uninsured or low income, 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:

$$ABSA1F_i = \begin{cases} \left(\sum_{i \in RES} WS_i + \sum_{i \in UNK\_RES} p_{res} \times WS_i \right) \Big/ \sum_{i \in RES} WS_i, \text{if } i \in \text{RES} \\ 0, \text{if } i \in \text{UNK\_RES, NON\_RES} \end{cases}$$

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

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

where HR is the set of household respondents and HNR is the set of household nonrespondents. 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.[11]

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.[12] 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:

$$ABSA3W_i = ABSA3F_i \times ABSA2W_i$$

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

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

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.

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[11] 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.

[12] 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

PCS Weights

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

There was then an adjustment made to that weight for unknown eligibility status and ineligible phone numbers within the PCS. Ineligible cases are those that are non-working phones, or working phones that are out of state or belong to a child. The unknown cases are working phones where no information was able to be gathered to determine eligibility. 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:

$$PPDA1F_i = \begin{cases} \left(\sum_{i \in ELIG} WD_i + \sum_{i \in UNK\_ELIG} p_{elig} \times WD_i \right) \Big/ \sum_{i \in ELIG} WD_i \,, \text{if } i \in \text{ELIG} \\ \qquad\qquad\qquad\qquad 0, \text{if } i \in \text{UNK\_ELIG, NON\_ELIG} \end{cases}$$

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

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

where PR is the set of PCS respondents and PNR is the set of PCS nonrespondents. PCS respondents are cases where eligibility status was confirmed and the survey was completed. PCS nonrespondents are cases where eligibility status was confirmed, but no survey was completed. This adjustment was performed on the PCS as a whole.[13]

Combined ABS and Prepaid Cell Sample Weights

Because the two samples were 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

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[13] 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 PCS. 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 PCS 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 information was obtained from a question in the survey that is asked of respondents in the ABS sample. 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 number of households in the ABS frame containing one or more prepaid cell phones.

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

Household-Level Post-Stratification

With the household-level base weight applied, the sample was post-stratified to known household parameters based on the 2022 U.S. Census Bureau's American Community Survey (ACS)[14] and area characteristics obtained from Claritas[15]. 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 household, highest level of education attained by a member of the household, homeownership, population density

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[14] 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.
[15] https://claritas.com/

based on the population per square mile in each zip code (divided into quintiles), Massachusetts HSR, household home access to the internet, and household composition.

Table 18: Household-Level Weighting Benchmarks and Weights

Parameter	Value Label	Benchmark (%)	Unweighted Sample (%)	Weighted Sample (%)
Presence of children in household	No	71.5%	75.4%	71.4%
	Yes	28.5%	24.6%	28.6%
Number of adults in household	1	33.8%	33.4%	33.8%
	2	49.3%	49.2%	49.3%
	3	11.2%	11.2%	11.2%
	4 or more	5.7%	6.2%	5.7%
Population density in zip code	Quintile 1	20.1%	18.7%	20.1%
	Quintile 2	20.0%	19.7%	20.0%
	Quintile 3	20.1%	19.0%	20.2%
	Quintile 4	20.0%	22.0%	20.0%
	Quintile 5	19.7%	20.5%	19.7%
Region	Western MA	12.0%	11.4%	12.0%
	Central MA	11.5%	10.2%	11.5%
	Northeast MA	20.7%	22.0%	20.7%
	Metro West	9.8%	8.6%	9.8%
	Metro Boston	24.0%	27.9%	24.0%
	Metro South	12.2%	11.4%	12.2%
	Southcoast	5.4%	4.6%	5.4%
	Cape and Islands	4.4%	3.9%	4.4%
Homeownership	Owns home	62.3%	71.3%	62.3%
	Does not own home	37.7%	28.7%	37.7%
Highest Household Education	Less than high school	4.3%	2.9%	4.3%
	High school graduate	16.4%	9.9%	16.4%
	Some college	22.0%	11.1%	22.0%
	College+	57.3%	76.1%	57.3%
Home Internet Access	No Access	5.0%	2.1%	5.0%
	Access	95.0%	97.9%	95.0%
Household Composition	1 Adult, No Children	29.1%	30.0%	29.1%
	2 Adults, No Children	31.2%	33.0%	31.2%
	3 or more Adults, No Children	11.1%	12.3%	11.1%
	1 Adult, Children	4.7%	3.3%	4.7%
	2 Adults, Children	18.1%	16.1%	18.1%
	3 or more Adults, Children	5.7%	5.1%	5.8%

Target Person-Level Base Weights

The target person-level base weight was calculated by adjusting the final household-level weight, after post-stratification raking, to account for the different probabilities of selection for the target in the household. Specifically, children, ages 0 to 17, were given 2.5 times the likelihood of selection of adults by study design during wave 1 of data collection. If $n1$ is the number of children in the household and $n2$ is the number of adults, then the probability of selection is defined as:

$$PS = \begin{cases} 2.5/[(2.5 \times n1) + n2], & child\ sampled, wave\ 1 \\ 1/[(2.5 \times n1) + n2], & adult\ sampled, wave\ 1 \\ 1/[n1 + n2], & all\ cases, wave\ 2 \end{cases}$$

The final person-level base weight, BWP, can be expressed as $BWP = WHH/PS$ where WHH is the final household weight.

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 sex, Massachusetts HSR, education for targets 18 and over and parental education for targets under 18, race/ethnicity, employment status for targets 18 and over, marital status for targets 18 and over, 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), nativity status, and homeownership status by race/ethnicity.

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 2022 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 2020–2021 National Survey of Children's Health (NSCH)[16]. 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 2020–2021 NSCH.

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

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

Table 19: Target Person-Level Weighting Benchmarks and Weights

Parameter	Value Label	Benchmark (%)	Unweighted Sample (%)	Weighted Sample (%)
Gender by Age	Male 0-5	3.2%	1.8%	3.1%
	Male 6-11	3.3%	2.4%	3.3%
	Male 12-17	3.6%	2.1%	3.7%
	Male 18-29	7.7%	5.4%	7.4%
	Male 30-49	13.1%	10.0%	12.7%
	Male 50-64	10.0%	13.6%	10.1%
	Male 65+	8.0%	12.1%	8.4%
	Female 0-5	2.9%	1.9%	3.0%
	Female 6-11	3.1%	1.7%	3.1%
	Female 12-17	3.5%	2.1%	3.6%
	Female 18-29	7.5%	5.2%	7.4%
	Female 30-49	13.3%	10.8%	13.1%
	Female 50-64	10.6%	15.3%	10.7%
	Female 65+	10.1%	15.5%	10.5%
Race/ ethnicity	White, non-Hispanic	67.2%	76.9%	68.4%
	Black, non-Hispanic	6.5%	5.1%	6.0%
	Other, non-Hispanic	6.2%	3.0%	5.8%
	Hispanic	13.1%	9.3%	12.8%
	Asian, non-Hispanic	7.0%	5.7%	7.0%
Nativity status	Born in the U.S.	78.9%	85.7%	79.9%
	Not born in the U.S.	21.1%	14.3%	20.1%
Education	Age 18+, Less than high school	6.9%	3.2%	6.2%
	Age 18+, High school graduate	19.1%	12.4%	18.6%
	Age 18+, Some college	18.1%	19.3%	18.3%
	Age 18+, College+	36.2%	53.2%	37.2%
	Age 0-17, Highest Education of Parent - Less then high school	1.1%	0.3%	1.0%
	Age 0-17, Highest Education of Parent - High school graduate	2.7%	1.0%	2.6%
	Age 0-17, Highest Education of Parent - Some college	2.7%	0.9%	2.7%

	Age 0-17, Highest Education of Parent - College+	13.2%	9.7%	13.5%
Marital Status	Age 0-17	19.7%	12.0%	19.8%
	Married	40.3%	43.7%	40.8%
	Not Married	39.9%	44.2%	39.4%
Employment status	Age 0-17	19.7%	12.0%	19.8%
	Employed	53.5%	54.9%	53.2%
	Not Employed	26.7%	33.0%	27.0%
Presence of parents	Age 18+	80.3%	88.0%	80.2%
	Age 0-5, 0 Parents	0.2%	0.1%	0.2%
	Age 0-5, 1 Parent	0.9%	0.6%	0.9%
	Age 0-5, 2 Parents	5.0%	3.0%	5.0%
	Age 6-11, 0 Parents	0.3%	0.0%	0.2%
	Age 6-11, 1 Parent	1.4%	1.0%	1.5%
	Age 6-11, 2 Parents	4.7%	3.1%	4.8%
	Age 12-17, 0 Parents	0.2%	0.1%	0.2%
	Age 12-17, 1 Parent	1.9%	1.1%	1.9%
	Age 12-17, 2 Parents	5.0%	3.0%	5.1%
Region	Western MA	11.6%	11.4%	11.6%
	Central MA	11.6%	10.2%	11.1%
	Northeast MA	21.5%	22.0%	21.8%
	Metro West	10.2%	8.6%	10.3%
	Metro Boston	23.6%	27.9%	23.5%
	Metro South	12.5%	11.4%	12.5%
	Southcoast	5.1%	4.6%	5.0%
	Cape and Islands	3.9%	3.9%	4.0%
Population density in zip code	Quintile 1	20.1%	18.7%	20.2%
	Quintile 2	20.0%	19.7%	20.2%
	Quintile 3	20.1%	19.0%	20.4%
	Quintile 4	20.0%	22.0%	19.8%
	Quintile 5	19.7%	20.5%	19.3%
Homeownership by Race/Ethnicity	Own, White, non-Hisp	51.2%	59.6%	52.3%
	Own, Black, non-Hisp	3.0%	2.4%	2.8%
	Own, Other, non-Hisp	3.4%	1.8%	3.3%
	Own, Hispanic	5.1%	3.6%	4.9%
	Own, Asian, non-Hisp	4.5%	4.0%	4.6%
	Rent, White, non-Hisp	16.0%	17.3%	16.1%
	Rent, Black, non-Hisp	3.4%	2.7%	3.2%

	Rent, Other, non-Hisp	2.8%	1.2%	2.5%
	Rent, Hispanic	8.1%	5.7%	7.9%
	Rent, Asian, non-Hisp	2.5%	1.7%	2.5%

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 2023 MHIS should be conducted using the provided replicate weights detailed below. For the household-level weight, it's 1.69 with a margin of error of 1.8, and for the individual-level weight, it's 2.25 with a margin of error of 2.0.

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 rth 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 2023 MHIS. It was elected to create 80 variance estimation strata. Even though many more could have been created, 80 provide sufficient

degrees of freedom while simultaneously minimizing the computational demands for estimation. For the ABS and PCS, the 80 variance strata were formed by sorting the full sample into 65 strata (the 64 ABS strata plus one stratum for the PCS) 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 was 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).

REFERENCES

American Association for Public Opinion Research (2008). *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys*, 5th edition. Lenexa, Kansas: AAPOR.

Berzofsky, M.E., Scruggs, C.B., Lu, B., Speizer, H., and Sahr, T. (2019). "Improving representation in telephone-based health care access surveys requires purposeful efforts to include prepaid cell phone users." *Journal of Clinical Epidemiology*. Vol 1098, 143-144.

Brick, J.M., et al. (2002). "Estimating residency rates for undetermined telephone numbers." *Public Opinion Quarterly*, 66, 18-39.

Commonwealth of Massachusetts, Department of Economic Research. *Unemployment Rates in Massachusetts.* https://www.mass.gov/info-details/unemployment-rates-in-massachusetts

Deming, W. E. (1943). *The Statistical Adjustment of Data*. New York: J. Wiley and Sons.

Dutwin, D. (2014). "Cell Phone Sampling." A webinar of the American Association for Public Opinion Research, January 22, 2014. Available at www.aapor.org.

Dutwin, D. (2012). "Cell Phone Sampling." Short course presented at the national conference of the American Association for Public Opinion Research, Boston, MA.

Dutwin, D. Sherr, S., Langdale, K., and Long, S. (2017). *Findings from the 2017 Massachusetts Health Insurance Survey Methodology Report, Center for Health Information and Analysis*. December 2017.

Fu, J., Hughes, T., Park, R., and Engle-Bauer, M. (2023, May). "Impacts of Transition Statements in Survey Questions on Survey Break-off: Evidence from a Survey Experiment." Presented at the AAPOR 2023 Conference, Philadelphia, PA.

Goyle, A., Sherr, S, Park, R., and Loveridge, C. (2022, May). "Have Your Cake and Eat it Too: The Utility of a Prepaid Sample Component in Bolstering the Representativeness of an Address-Based Sample Design." Presented at the AAPOR 2022 Conference, Chicago, IL.

Groves, R.M. (2006). "Nonresponse rates and nonresponse bias in household surveys." *Public Opinion Quarterly* 70, 5, 646-75.

Kalsbeek, W., and Agans, R. (2008). "Sampling and weighting in household telephone surveys." In *Advances in Telephone Survey Methodology* (Lepkowski, J., Tucker, C., Brick, J., de Leeuw, E., Japec, L., Lavrakas, P., Link, M., and Sangster, R., eds). Hoboken, NJ: J. Wiley and Sons.

Keeter, S., et al. (2000). "Consequences of reducing nonresponse in a large national telephone survey." *Public Opinion Quarterly,* 64, 2, 125-48.

Keeter, S., et al., (2006). "Gauging the impact of growing nonresponse on estimates from a national RDD telephone survey." *Public Opinion Quarterly,* 70, 5, 759-779.

Kish, L. (1992). "Weighting for Unequal Pi." *Journal of Official Statistics*, Vol. 8, No. 2, 1992, pp. 183-200.

Lavrakas P. J., Benson G., Blumberg S., Buskirk T., Cervantes I. F., Christian L., Dutwin D., Fahimi M., Fienberg H., Guterbock T., Keeter S., Kelly J., Kennedy C., Peytchev A., Piekarski L., and Shuttles C. (2017). "Report From the AAPOR Task Force on: The Future of U.S. General Population Telephone Survey Research."

Link, Michael W. and Burks, A. T. (2013). "Leveraging auxiliary data, differential incentives, and survey mode to target hard-to-reach groups in an address-based sample design." *Public Opinion Quarterly* 77, 3, 696-713.

McGeeney, K. 2015. "Appending a Prepaid Phone Flag to the Cell Phone Sample." *Survey Practice,* 8 (4). https://doi.org/10.29115/SP-2015-0021.

Myers, T.A. (2011) "Goodbye, Listwise Deletion: Presenting Hot Deck Imputation as an Easy and Effective Tool for Handling Missing Data." *Communication Methods and Measures*, 5, 297-310.

Modeled estimates (with standard errors) of the percent distribution of household telephone status for adults aged 18 and over, by state: United States, 2017, National Health Interview Survey Early Release Program

Modeled estimates (with standard errors) of the percent distribution of household telephone status for children under age 18, by state: United States, 2017, National Health Interview Survey Early Release Program

Rapoport, R., Sherr, S., and Dutwin, D. (2012). "Does ethnically stratified address-based sample result in both ethnic and class diversity; case studies in Oregon and Houston." Presented at the annual conference of the American Association of Public Opinion Research in Orlando, FL; May 2012.

Roman, A.M. (2007). "Survey of Insurance Status 2007, Methodological Report." Report to the Massachusetts Division of Health Care Finance and Policy.

Ruggles, S., Genadek, K., Goeken, R., Grover, J., and Sobek, M., Integrated Public Use Microdata Series: Version 7.0 [dataset]. Minneapolis: University of Minnesota, 2017. https://doi.org/10.18128/D010.V7.0.

Triplett, T., Long, S.K., Dutwin, D., and Sherr, S. (2011). "Massachusetts Health Insurance Survey Methodology Report, Survey Years 2008, 2009, 2010, 2011."

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 6.2.2)[17] in R (v 4.3.0). 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, as outlined in Table A.2. 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.

Table A.1: Imputation of Analytic Variables			
Question	Missing Values	Total Responses	Missing Percent
Zip code	5	5266	0.1%
Target's age range	13	5266	0.2%
Target's age follow up, if initially refused	0	8	0.0%
Target's sex assigned at birth	47	5266	0.9%
Target's gender identity	45	5266	0.9%
Target's sexual orientation	206	4633	4.4%
Target is transgender	64	4633	1.4%
Target's race/ethnicity	50	5266	0.9%
Target's citizenship status	9	5266	0.2%
Target's nativity status	6	5266	0.1%
Target's immediate family's highest completed level of education	17	5266	0.3%
Target's level of education	5	4633	0.1%
No workers in Target's family	0	5266	0.0%
One or more workers in Target's family	0	5266	0.0%
Target did any work for pay during the previous week	3	1954	0.2%
Target worked for pay at a job or business the previous week	7	4703	0.1%
Primary reason Target did not work the previous week	1	1859	0.1%
Target's Employment Status	11	4633	0.2%
Target currently in Healthcare Workforce	18	2996	0.6%

Target has ever been in Healthcare Workforce	45	4703	1.0%
Family income as percentage of Federal poverty level (four categories)	692	5266	13.1%
Family income as percentage of Federal poverty level (nine categories)	692	5266	13.1%
Target's family's household tenure	23	5266	0.4%
Respondent has a working cell phone	2	5266	0.0%
Respondent or someone else in the HH has a working cell phone	2	5266	0.0%
Respondent or another adult in their HH uses a prepaid cell phone	18	4566	0.4%
Number of adults using prepaid cell phones in the household	26	648	4.0%
Target uses the internet at least occasionally	8	832	1.0%
Any member of the HH has access to the internet at home	8	832	1.0%
Interview was conducted in English	0	5266	0.0%
Target's level of English proficiency	7	1025	0.7%
Target had difficulty understanding written or verbal information from health care professional	11	352	3.1%
Target's health status	7	5266	0.1%
Target's activities are limited due to health concerns	12	5266	0.2%
Target's health/disability status	13	5266	0.2%
Target's health insurance status over the past 12 months	4	5266	0.1%
Target's insurance status at the time of the survey	0	5266	0.0%
Target's insurance status for all of the past 12 months	54	5266	1.0%
Target was uninsured at any point in the past 12 months	23	5266	0.4%
Target was insured at any point in the past 12 months	23	5266	0.4%
Target was insured for less than 6 of the past 12 months	23	5266	0.4%
Target was insured for 6 or more of the past 12 months	27	5266	0.5%
Target has been insured for the past 12 months or more	4	5266	0.1%
Target was insured at the time of the survey but not for all of the past 12 months	3	5266	0.1%
Target was insured at the time of the survey and for the past 2 years	277	5266	5.3%
Target was insured at the time of the survey and for the past 5 years	277	5266	5.3%
Target transitioned from being uninsured to being insured	195	5266	3.7%
Target transitioned from one type of insurance to another	195	5266	3.7%
Target was uninsured at any point in the past 12 months	23	5266	0.4%
Target was uninsured for less than 6 of the past 12 months	23	5266	0.4%
Target was uninsured for 6 or more of the past 12 months	23	5266	0.4%
Target has been uninsured for the past 12 months or more	23	5266	0.4%
Target was uninsured at the time of the survey but was insured at some point in the past 12 months	23	5266	0.4%
Target was uninsured at the time of the survey and for the past 2 years	0	5266	0.0%
Target was uninsured at the time of the survey and for the past 5 years	0	5266	0.0%
Target was uninsured because the cost of insurance is too high	5	50	10.0%
Target had employer-sponsored health insurance	0	5216	0.0%

Target had public health insurance	0	5266	0.0%
Target had private health insurance	0	5266	0.0%
Target had Medicare	0	5266	0.0%
Target had some other insurance	0	5266	0.0%
Target's primary type of insurance	0	5216	0.0%
Target had a usual source of care other than the ER	38	5266	0.7%
Target received care from a general doctor or specialist in the past 12 months	6	5266	0.1%
Target received care from a general doctor in the past 12 months	31	5266	0.6%
Target received care from a nurse practitioner or physician assistant in the past 12 months	79	5266	1.5%
Target visited a doctor, nurse practitioner or physician assistant for preventive care in the past 12 months	8	4719	0.2%
Target received care from a specialist in the past 12 months	37	5266	0.7%
Target received care from a mental health professional in the past 12 months	15	5198	0.3%
Target saw a dentist or hygienist in the past 12 months	4	5266	0.1%
Target took prescription medications in the past 12 months	14	5266	0.3%
Target visited the ER in the past 12 months	8	5266	0.2%
Target visited the ER more than once in the past 12 months	8	5266	0.2%
Target was unable to get an appointment with a doctor due to problems with their insurance	22	5266	0.4%
Target was unable to get an appointment with a doctor because they weren't accepting new patients	16	5266	0.3%
Target was unable to get an appointment with a doctor as soon as they thought one was needed	22	5266	0.4%
Target was unable to get an appointment with a specialist as soon as they thought one was needed	16	5266	0.3%
Target was unable to get to an appointment due to transportation issues	15	5266	0.3%
Target visited the ER for a non-emergency condition	12	1126	1.1%
Target visited the ER because they were unable to get an appointment with their doctor/clinic	0	355	0.0%
Target visited the ER because they needed care after normal hours at their doctor's office/clinic	0	355	0.0%
Target visited the ER because they owed money to their doctor's office/clinic	1	355	0.3%
Target visited the ER because the ER was more convenient	2	355	0.6%
Target and immediate family's out of pocket spending was more than 5% of income	1059	5266	20.1%
Target and immediate family's out of pocket spending was more than 10% of income	275	1026	26.8%
Target and immediate family's out of pocket spending was $1,000 or more	284	5266	5.4%
Target and immediate family's out of pocket spending was $3,000 or more	284	5266	5.4%
Target did not fill a prescription for medication because of cost in the past 12 months	22	5266	0.4%
Target did not get needed doctor care because of cost in the past 12 months	23	5266	0.4%
Target did not get needed care from a nurse practitioner, physician assistant, or midwife because of cost in the past 12 months	25	5266	0.5%

Target did not get needed specialist care because of cost in the past 12 months	26	5266	0.5%
Target did not get needed mental health care or counseling because of cost in the past 12 months	30	5266	0.6%
Target did not get needed dental care because of cost in the past 12 months	25	5266	0.5%
Target did not get needed alcohol or substance abuse care or treatment because of cost in the past 12 months	38	5266	0.7%
Target did not get needed vision care because of cost in the past 12 months	26	5266	0.5%
Target did not get needed medical equipment because of cost in the past 12 months	30	5266	0.6%
Target or immediate family had problems paying or were unable to pay medical bills	10	5266	0.2%
Target or immediate family had problems paying ER bills	23	631	3.6%
Target or immediate family had problems paying on-going treatment bills	20	631	3.2%
Target or immediate family had problems paying medical test or surgical procedure bills	15	631	2.4%
Target or immediate family had problems paying bills from the birth of a child	26	631	4.1%
Target or immediate family had problems paying dental bills	18	631	2.9%
Target or immediate family had problems paying prescription bills	19	631	3.0%
Target or immediate family had problems paying Mental or behavioral health bills	24	631	3.8%
Target or immediate family had problems paying bills for something else	23	631	3.6%
Target or immediate family has medical bills being paid over time	16	5266	0.3%
Medical bills paid over time are under $2,000	7	613	1.1%
Medical bills paid over time are between $2,000 and $8,000	7	613	1.1%
Medical bills paid over time are over $8,000	7	613	1.1%
Medical bills paid over time are from within the last year	7	613	1.1%
Medical bills paid over time are from 1 to 5 years ago	7	613	1.1%
Medical bills paid over time are from over 5 years ago	7	613	1.1%
Target went without care because the care wasn't covered by their health plan	135	993	13.6%
Target went without care because the copay or coinsurance was too high	135	993	13.6%
Target went without care because it had to be paid as part of their deductible	135	993	13.6%
Target went without care because they weren't sure if the care was covered	135	993	13.6%
Target went without care because they weren't sure of the care's cost	135	993	13.6%
Target went without care for another reason	135	993	13.6%
Medical bills paid over time are for care received when Target had health insurance	4	613	0.7%
Medical bills incurred while insured are for care not covered by their health plan	9	575	1.6%
Medical bills incurred while insured are for co-payments or co-insurance for care covered by their health plan	12	575	2.1%
Medical bills incurred while insured are for care that was part of their deductible	11	575	1.9%
Target's health insurance has a deductible	293	3651	8.0%
Amount of Target's annual deductible	489	2813	17.4%

Target has a chronic health condition	18	5266	0.3%
Any of Target's immediate family did not fill a prescription for medication because of cost in the past 12 months	12	3118	0.4%
Any of Target's immediate family did not get needed doctor care because of cost in the past 12 months	12	3173	0.4%
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	12	3220	0.4%
Any of Target's immediate family did not get needed specialist care because of cost in the past 12 months	12	3152	0.4%
Any of Target's immediate family did not get needed mental health care or counseling because of cost in the past 12 months	23	3114	0.7%
Any of Target's immediate family did not get needed dental care because of cost in the past 12 months	16	3052	0.5%
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	23	2879	0.8%
Any of Target's immediate family did not get needed vision care because of cost in the past 12 months	16	3155	0.5%
Any of Target's immediate family did not get needed medical equipment because of cost in the past 12 months	20	3224	0.6%
Any of Target's immediate family limited because of physical, mental, or emotional problems	9	2645	0.3%
Target or their immediate family worries that food will run out before they can afford to buy more	9	5266	0.2%
The food that the Target or their immediately family buys doesn't last long enough	17	5266	0.3%
Target or their immediate family have been hungry but couldn't afford to buy food	10	5266	0.2%
Target or their immediate family got emergency food from a church, food pantry, food bank, or other community program	11	5266	0.2%
Any of Target's immediate family members are in fair or poor health	12	3022	0.4%
How often Target or their immediate family worries about having a steady place to live	13	5266	0.2%
Target or their immediate family has had problems paying rent/mortgage over the past 12 months	8	5266	0.2%
Target or their immediate family has had problems paying for utilities over the past 12 months	11	5266	0.2%
Target or their immediate family has had problems paying credit card or other bills over the past 12 months	14	5266	0.3%
Target or their immediate family has had problems paying for health insurance over the past 12 months	13	5266	0.2%
Target or their immediate family has had problems paying for prescriptions over the past 12 months	11	5266	0.2%
Target's most recent emergency room visit was for a physical health reason	9	1126	0.8%
Target's most recent emergency room visit was for a mental health reason	9	1126	0.8%
Target's most recent emergency room visit was for a substance abuse disorder	9	1126	0.8%
Target's most recent emergency room visit was for a coronavirus-related condition	9	1126	0.8%
Target's insurance status at time of survey and the previous 12 months	14	5266	0.3%

Target's health insurance covers mental health	1027	5216	19.7%
Target's health insurance covers alcohol or substance abuse	2318	5216	44.4%
Any of Target's immediate family went without coverage at any time in the past 12 months	7	3251	0.2%
Target/Target's parent(s) have heard of Health Connector	23	5266	0.4%
Extent to which Target/Target's parent(s) have heard about Health Connector	5	3438	0.1%
Target has received care for an alcohol or substance abuse disorder in the past 12 months	12	4853	0.2%
Target has regular primary care physician	15	5266	0.3%
Received care through Telehealth in the last 12 months	200	5266	3.8%
Went in person instead of telehealth because provider did not offer telehealth services	41	3160	1.3%
Went in person instead of telehealth because poor or no internet service	41	3160	1.3%
Went in person instead of telehealth because limited internet service (data plan)	41	3160	1.3%
Went in person instead of telehealth because preferred an in-person visit	41	3160	1.3%
Went in person instead of telehealth because need more information on telehealth	41	3160	1.3%
Went in person instead of telehealth because not right for target's health needs	41	3160	1.3%
Went in person instead of telehealth because no private space for a visit	41	3160	1.3%
Went in person instead of telehealth because no device (computer, phone, tablet) for visits	41	3160	1.3%
Went in person instead of telehealth because not sure if health insurance would cover a telehealth visit	41	3160	1.3%
Went in person instead of telehealth because of other reasons	41	3160	1.3%
Received annual visit/physical examination at most recent in-person visit	15	3160	0.5%
Received pregnancy care at most recent in-person visit	10	1545	0.6%
Received care for a chronic or on-going condition lasting a year or more at most recent in-person visit	15	3160	0.5%
Received care for new symptoms or condition at most recent in-person visit	15	3160	0.5%
Received mental health care at most recent in-person visit	15	3160	0.5%
Received alcohol or other substance use treatment at most recent in-person visit	15	3160	0.5%
Received dental care at most recent in-person visit	15	3160	0.5%
Received physical therapy, speech therapy, or occupational therapy at most recent in-person visit	15	3160	0.5%
Received tests, results, follow-up at most recent in-person visit	15	3160	0.5%
Received other care at most recent in-person visit	15	3160	0.5%
Received annual visit/physical examination at most recent telehealth visit	4	1850	0.2%
Received pregnancy care at most recent telehealth visit	3	1134	0.3%
Received care for a chronic or on-going condition lasting a year or more at most recent telehealth visit	4	1850	0.2%
Received care for new symptoms or condition at most recent telehealth visit	4	1850	0.2%
Received mental health care at most recent telehealth visit	4	1850	0.2%

Received alcohol or other substance use treatment at most recent telehealth visit	4	1850	0.2%
Received dental care at most recent telehealth visit	4	1850	0.2%
Received physical therapy, speech therapy, or occupational therapy at most recent telehealth visit	4	1850	0.2%
Received tests, results, follow-up at most recent telehealth visit	4	1850	0.2%
Received other care at most recent telehealth visit	4	1850	0.2%
Target paid entire cost of mental health appointment	5	1116	0.4%
Entire cost of mental health appointment was not paid out-of-pocket because insurance covered some or all of the cost	1	926	0.1%
Entire cost of mental health appointment was not paid out-of-pocket because it was free	1	926	0.1%
Entire cost of mental health appointment was not paid out-of-pocket because discounted or sliding scale	1	926	0.1%
Entire cost of mental health appointment was not paid out-of-pocket because a family member paid	1	926	0.1%
Entire cost of mental health appointment was not paid out-of-pocket for another reason	1	926	0.1%
Went to free or sliding scale clinic for mental health care because provider does not accept any insurance	0	187	0.0%
Went to free or sliding scale clinic for mental health care because insurance plan not accepted	0	187	0.0%
Went to free or sliding scale clinic for mental health care because not sure how to find provider who accepts insurance	1	210	0.5%
Went to free or sliding scale clinic for mental health care because insurance covered some or all of the cost	1	210	0.5%
Went to free or sliding scale clinic for mental health care because too much hassle to use insurance	1	210	0.5%
Went to free or sliding scale clinic for mental health care because unable to get appointment as soon as needed	1	210	0.5%
Went to free or sliding scale clinic for mental health care because problem using insurance	1	210	0.5%
Went to free or sliding scale clinic for mental health care because of privacy concerns	1	210	0.5%
Went to free or sliding scale clinic for mental health care because of gaps in insurance	0	10	0.0%
Went to free or sliding scale clinic for mental health care because clinic for mental health care had provider or type of care you wanted	1	210	0.5%
Went to free or sliding scale clinic for mental health care because apps don't accept insurance	1	210	0.5%
Went to free or sliding scale clinic for mental health care because provider was cheaper than copay	1	210	0.5%
Went to free or sliding scale clinic for mental health care for another reason	1	210	0.5%
Target paid out of pocket for substance abuse appointment	0	55	0.0%
Entire cost of substance abuse appointment was not paid out-of-pocket because insurance covered some or all of the cost	0	47	0.0%
Entire cost of substance abuse appointment was not paid out-of-pocket because it was free	0	47	0.0%

Entire cost of substance abuse appointment was not paid out-of-pocket because discounted or sliding scale	0	47	0.0%
Entire cost of substance abuse appointment was not paid out-of-pocket because a family member paid	0	47	0.0%
Entire cost of substance abuse appointment was not paid out-of-pocket for another reason	0	47	0.0%
Went to free or sliding scale clinic for sud care because provider does not accept any insurance	0	8	0.0%
Went to free or sliding scale clinic for sud care because insurance plan not accepted	0	8	0.0%
Went to free or sliding scale clinic for sud care because not sure how to find provider who accepts insurance	0	8	0.0%
Went to free or sliding scale clinic for sud care because insurance covered some or all of the cost	0	8	0.0%
Went to free or sliding scale clinic for sud care because too much hassle to use insurance	0	8	0.0%
Went to free or sliding scale clinic for sud care because unable to get appointment as soon as needed	0	8	0.0%
Went to free or sliding scale clinic for sud care because problem using insurance	0	8	0.0%
Went to free or sliding scale clinic for sud care because of privacy concerns	0	8	0.0%
Went to free or sliding scale clinic for sud care because of gaps in insurance	0	8	0.0%
Went to free or sliding scale clinic for sud care because clinic for sud care had provider or type of care you wanted	0	8	0.0%
Went to free or sliding scale clinic for sud care because apps don't accept insurance	0	8	0.0%
Went to free or sliding scale clinic for sud care because provider was cheaper than copay	0	8	0.0%
Went to free or sliding scale clinic for sud care for another reason	0	8	0.0%
Target did not get needed mental health care in last 12 months	27	5197	0.5%
Target did not get needed alcohol or substance abuse care in last 12 months	37	5197	0.7%
Target had health insurance with unmet need	0	1017	0.0%
Any of Target's immediate family have a chronic health condition	4	1670	0.2%
Knows MassHealth is reviewing eligibility of all members	10	459	2.2%

Table A.2: Variables used in each batch of imputations

Sort Variable Description	Imputed Variable Description
Sampling strata Language of interview	Target's sex assigned at birth
Sampling strata Language of interview Target's sex (imputed)	Target's age
Sampling strata Target's sex (imputed) Target's age (imputed)	Education level of most educated family member
Sampling strata Target's sex (imputed) Target's age (imputed) Highest family education (imputed)	Target's zip code
Zip code quartile (percent white) Target's sex (imputed) Target's age (imputed) Highest family education (imputed)	Target's race/ethnicity
Target's sex (imputed) Target's race/ethnicity (imputed) Target's age (imputed) Highest family education (imputed)	Target's gender identity Target's transgender status Target's sexual orientation
Zip code quartile (percent college or above) Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Highest family education (imputed)	Target's education
Zip code quartile (percent native-born) Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Highest family education (imputed)	Target's nativity status
Zip code quartile (percent native-born) Target's nativity status (imputed) Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Highest family education (imputed)	Target's citizenship status
Zip code quartile (percent renters) Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Target's nativity status (imputed) Highest family education (imputed)	Household Tenure

Zip code quartile (percent employed) Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Highest family education (imputed) for children Target's education (imputed) for adults	Target's employment status
Zip code quartile (percent employed) Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Highest family education (imputed) for children Target's education (imputed) for adults	Target's health care worker status
Zip code quartile (percent below poverty line) Zip code quartile (median household income) Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Household Tenure (imputed) Highest family education (imputed) for children Target's education (imputed) for adults	Family income relative to poverty
Zip code quartile (percent below poverty line) Zip code quartile (median house value) Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Household Tenure (imputed) Family income relative to poverty (imputed)	Family income relative to poverty (detailed)
Zip code quartile (percent household internet access) Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Household Tenure (imputed) Family income relative to poverty (imputed)	Target's internet access measures
Zip code quartile (percent uninsured) Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Any workers in family Household Tenure (imputed) Family income relative to poverty (imputed)	Target's health insurance coverage at the time of the survey
Zip code quartile (percent uninsured)	Measures of target's health insurance coverage over the last 12 months

Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Target's health insurance coverage at the time of the survey (imputed) Family income relative to poverty (imputed)	Family health insurance coverage for all of the past 12 months measures and employer offer measures Target's other health insurance coverage measures: transitions, reasons for uninsurance; characteristics of insurance; type of insurance
Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Highest family education (imputed) for children Target's education (imputed) for adults Target's type of insurance (imputed) Family income relative to poverty (imputed)	Health Connector Awareness
Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Highest family education (imputed) Family income relative to poverty (imputed)	Target's health, mental health, disability, chronic condition measures
Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Target's health & disability status (imputed) Family income relative to poverty (imputed) Highest family education (imputed) for children Target's education (imputed) for adults	Target's health care access and use measures (excluding telehealth) Target's unmet need (due ot cost) measures
Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Target's health & disability status (imputed) ER visit status (imputed)	Target's other ER measures
Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Target's health & disability status (imputed) Number of family members	Family health & disability status
Target's sex (imputed) Target's age (imputed) Highest family education (imputed) Target's race/ethnicity (imputed)	MassHealth Redetermination Awareness (among MassHealth members)

Target's health insurance coverage in the past 12 months (imputed) Number of family members Family health & disability status (imputed) Family income relative to poverty (imputed)	
Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Target's health & disability status (imputed) Family income relative to poverty (imputed) Highest family education (imputed) Zip code quartile (percent below poverty line)	Target's SDOH
Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Family health & disability status (imputed) Family income relative to poverty (imputed) Highest family education (imputed) Zip code quartile (percent below poverty line)	Family SDOH Family medical bills, problem paying, unmet need, and OOP spending measures Target's medical bills paid off over time
Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Target's health & disability status (imputed) Family income relative to poverty (imputed) Highest family education (imputed) for children Target's education (imputed) for adults	Target's reasons for going without care
Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Highest family education (imputed) Zip code quartile (percent below poverty line) Family income relative to poverty (imputed) Family health & disability status (imputed)	Timing of target medical bills being paid off over time; reason for medical bills being paid off over time; amount of medical bills
Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Target's type of insurance (imputed) Family income relative to poverty (imputed)	Cost-sharing at last BH visit; reasons for cost-sharing at last BH visit
Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed)	Target's cell phone status

Highest family education (imputed) Household's internet access (imputed) Family income relative to poverty (imputed)	
Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Highest family education (imputed) Number of family members Family income relative to poverty (imputed) Respondent's cell phone status (imputed)	Household cell phone status
Target's age (imputed) Target's race/ethnicity (imputed) Highest family education (imputed) Respondent's cell phone status (imputed) Household cell phone status (imputed) Family income relative to poverty (imputed)	Any prepaid cell phone in household
Target's race/ethnicity (imputed) Highest family education (imputed) Number of family members Any adult 18-64 in HH (imputed) Family income relative to poverty (imputed) Any prepaid cell phone in household (imputed)	Number of prepaid cell phones in household
Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Target's health & disability status (imputed) Family income relative to poverty (imputed) Household's internet access (imputed) Household cell phone status (imputed)	Target's telehealth access and use measures
Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Highest family education (imputed) for children Target's education (imputed) for adults Family income relative to poverty (imputed) Survey language	Language barriers for Target
Target's sex (imputed) Target's age (imputed) Target's race/ethnicity (imputed) Highest family education (imputed) Family income relative to poverty (imputed) Family health & disability status (imputed)	Percentage of income used for out-of-pocket spending on health care

APPENDIX B: 2023 MHIS INSTRUMENT

Field Dates: 4/26/2023 – 8/28/2023

Massachusetts Health Insurance Survey

GLOBAL PROGRAMMING NOTES:
- MODE= Web, CATI
- SAMPTYPE= ABS, CELL
- Two experiments in 2023:
    - Experiments in Wave 1, TBD for Wave 2 based on outcomes.
        - Prepaid post-incentive (bPPD_Experiment): $10 post-incentive for the PPD sample (2 groups – experiment, control)
            - 1 = Will be offered a $10 post incentive
            - 2 = No post incentive
        - Partial conversion incentive (bABS_Experiment): 10 post-incentive for partial conversion, timing within wave TBD (3 groups: letter only, letter + visible $2 + $10 post-incentive, letter + $10 post-incentive)
            - 1 = Letter only
            - 2 = Letter + $10 post incentive
            - 3 = Letter + $10 post incentive + $2 visible cash pre incentive
- Except for screening questions, allow respondents to skip all other survey questions without a response.
- Message to show on the web if skipped (also show when "Other-Specify" is selected by the text box is left blank):
  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.
- If you have technical trouble with this survey, please contact Data.Notice@chiamass.gov.
- The URL for the survey is TBD.

- 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: jobs\V1138\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 2023 Massachusetts Health Insurance Survey. This survey is being conducted by the Center for Health Information and Analysis (CHIA), an agency of the Commonwealth of Massachusetts. SSRS, an independent research firm, is administering the survey for the Commonwealth of Massachusetts. You were randomly 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.

Ask if: Web R (MODE=Web)

WEBINTRO1. (Web)

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

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

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 to guide legislators and policymakers to provide high quality, affordable health care for Massachusetts' residents.

Risks to you in taking this survey 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, meaning we will not use the information you provide in any way that could identify you. With any online related activity, however, the risk of a breach of confidentiality is possible. Know that we take every precaution to minimize such risk by storing your answers on secure servers in secure facilities.

Ask if: Web R (MODE=Web)

WEBINTRO1B. (Web)

On this page is the contact information of the people responsible for the research. There are also phone numbers to call if you want to withdraw or to contact the Institutional Review Board (IRB). The IRB is the body that oversees the protection of study participants. There is also a webpage where you can see how we reported on data from prior surveys.

The people responsible for the research are Dr. Zi Zhang and Vanessa Harrell.

Dr. Zi Zhang	Vanessa Harrell
Center for Health Information and Analysis	SSRS
501 Boylston Street	Senior Research Director
Boston, MA 02116	1 Braxton Way, Suite 125
617-701-8100	Glen Mills, PA 19342
Data.Notice@chiamass.gov	vharrell@ssrs.com

For questions about the survey or to withdraw, please call Vanessa Harrell at SSRS. She can be reached at vharrell@ssrs.com or 484-840-4311. After completing the survey, you may withdraw while the survey is open. After all surveys are complete and data have been processed, your information may not be able to be removed.

For questions about your rights as a participant in the study, please contact the IRB at the University of Southern Maine's Office of Research Integrity and Outreach. They can be reached at 207-780-4517 or usmorio@maine.edu.

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 Data.Notice@chiamass.gov."

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 Data.Notice@chiamass.gov.

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

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 to PPD if voicemail (MODE=CATI and o/b and SAMPTYPE=CELL) LEAVE VOICEMAIL ON CALL 1ST, 3RD, AND 4TH CALL

OBVOICEMAIL. (CATI)
Hello, I'm calling from SSRS on behalf of the Center for Health Information and Analysis, an agency 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. {If SAMPTYPE=Cell and bPPD_Experiment=1: We will send you a $10 gift card to thank you if you complete this survey.} We will call you again and hope to reach you at a time that is more convenient for you.

Ask if: CATI outbound to PPD if phone is picked up (MODE=CATI and o/b and SAMPTYPE=CELL) 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 2023 Massachusetts Health Insurance Survey. This survey is being done by the Center for Health Information and Analysis, an agency of the Commonwealth of Massachusetts. {If SAMPTYPE=Cell and bPPD_Experiment=1: We will send you a $10 gift card to thank you if you complete this survey.}

For quality assurance, this call will be recorded.

PROGRAM: GO TO CELL1.

[NEW]

CATIINTRO1a. (CATI)
Hello, thank you for calling SSRS regarding the 2023 Massachusetts Health Insurance Survey. This survey is being conducted by the Center for Health Information and Analysis, an agency of the Commonwealth of Massachusetts.

For quality assurance, this call will be recorded.

PROGRAM: 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 Center for Health Information and Analysis, an agency of 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.

ABSCELL deleted 2023

Ask if: Cell phone sample R (SAMPTYPE=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 years old, 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")

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

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 SAMPTYPE=CELL, GO TO TERM3.

INTRO2. (CATI)

Before we continue, I'd like to tell you more about the survey.

It asks about health, access to health, and health insurance. You were randomly selected to participate in this survey to represent many households like yours. If you agree to participate, you will be asked to answer this survey over the phone. It takes about 25 minutes. It may take less time for smaller households. {If SAMPTYPE=Cell and bPPD_Experiment=1: If you complete the survey, we will send you a $10 gift card to thank you for participating.}

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

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 to guide legislators and policymakers to provide quality and affordable health care for Massachusetts' residents.

Risks to you in taking this survey 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, meaning we will not use the information you provide in any way that could identify you. With any online related activity, however, the risk of a breach of confidentiality is possible. Know that we take every precaution to minimize such risk by storing your answers on secure servers in secure facilities.

PROGRAM: GO TO INTRO3

INTRO3. (CATI)

Before we start, I can give you contact information of the people responsible for the research. I can also give you the phone numbers of people to call if you want to withdraw or to contact the Institutional Review Board or IRB. The IRB is the body that oversees the protection of study participants. I can also give you a webpage where you can see how we reported on data from prior surveys. 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 Vanessa Harrell.

Dr. Zi Zhang	Vanessa Harrell
Center for Health Information and Analysis	SSRS
501 Boylston Street	Senior Research Director
Boston, MA 02116	1 Braxton Way, Suite 125
617-701-8100	Glen Mills, PA 19342
Data.Notice@chiamass.gov	vharrell@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, please contact the IRB at the University of Southern Maine's Office of Research Integrity and Outreach. They can be reached at 207-780-4517 or usmorio@maine.edu.

For questions about the survey or to withdraw, please call Vanessa Harrell at SSRS. Her phone number is 484-840-4311. After completing the survey, you may withdraw while the survey is open. After all surveys are complete and data have been processed, your information may not be able to be removed.

Do you agree to start the survey?

       1   Yes   SEE PRG
       2   No   END

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

END SECTION: CATI INTRO

SECTION: LOCATION AND R IDENTIFICATION

Ask if: ABS sample R on the web or CATI (SAMPTYPE=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 (SAMPTYPE=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 SAMPTYPE=CELL, GO TO EXIT5,
    IF S2=2, 98 AND MODE=CATI AND SAMPTYPE=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 SAMPTYPE=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

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

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

TERM3. (CATI)
We are only interviewing cell phone lines at this time. Thank you.

PROGRAM: END

DRIVING. (CATI)
For safety reasons, I cannot continue the interview. Someone will call you back at a later time. Thank you.

PROGRAM: END

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.
PROGRAM: END

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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)
Please give the materials we mailed to the adult who lives or stays at this address and can answer questions about health insurance. Thank you.

PROGRAM: END

Ask if: Cell phone sample R and cannot answer or does not know about health insurance (SAMPTYPE=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 all children, foster children, related family members, 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 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 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	18 to 25 years of age	GO TO S6aa
3	26 to 64 years of age	GO TO S6aa
4	65 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, or 4)

S6aa. (S6aa) (Web, CATI)
What was your sex assigned at birth?

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

- 1 Male
- 2 Female
    - 6 Intersex
    - 7 Unspecified
    - 8 Not listed {Web/CATI: (please specify)/SPECIFY:}
    - 9 I am not sure / don't know
    - 10 I choose not to answer
- 98 {Web/CATI: /(DO NOT READ) DON'T KNOW
    - 96 {Web/CATI: I don't know what this question is asking/
        (DO NOT READ) DON'T KNOW WHAT THIS
        QUESTION IS ASKING}
- 99 {Web/CATI: /(DO NOT READ) REFUSED
- 97 Web blank

Ask if: R is 18+ (S6a>=18 or S6a1=2, 3, or 4)

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 Associate's Degree (not occupational 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, or 4)

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 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 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   18 to 25 years of age   GO TO S7b-y
       3   26 to 64 years of age   GO TO S7b-y
       4   65 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

S7b-y. (S7b-y) (Web, CATI)
What was this {child/person}'s sex assigned at birth?

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

     1   Male
     2 Female
     6 Intersex
     7 Unspecified
     8 Not listed {Web/CATI: (please specify)/SPECIFY: }
     98   {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW
     96   {Web/CATI: I don't know what this question is asking/
        (DO NOT READ) DON'T KNOW WHAT THIS QUESTION IS ASKING}
     99   {Web/CATI: I don't want to answer/(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 "child", ELSE DISPLAY "person"

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   Associate's Degree (not occupational 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

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.

RosterCheck1. (ROSTERCHECK1) (Web, CATI}
{Web/CATI: We'd/I'd} like to confirm the information you just provided {about members of your household}. Is the following correct?

{Web/CATI: /(DO NOT READ) Please read through the grid and confirm the sex and age for each member of the household. If age or sex is missing, say "Not Provided."}

Household {member/members}:	Sex at Birth	Age
You:	IF S6aa=1, DISPLAY "Male", IF S6aa=2, DISPLAY "Female", IF S6aa=6, DISPLAY "Intersex", IF S6aa=7, DISPLAY "Unspecified Sex", IF S6aa=8, 9, or 10, DISPLAY "Sex not specified" ELSE LEAVE BLANK	IF S6a= 18-110, INSERT AGE (S6a), IF S6a1=2, 3, or 4: "18 or older", ELSE LEAVE BLANK
Person 2-25:	IF S7b-y=1, DISPLAY "Male" IF S7b-y=2, DISPLAY "Female" IF S7b-y=6, DISPLAY "Intersex", IF S7b-y=7, DISPLAY "Unspecified Sex", IF S7b-y=8, 9, or 10, DISPLAY "Sex not specified", 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 or 4) 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.
CHILDREN UNDER AGE 18 SHOULD BE OVERSAMPLED AT A FACTOR OF 2.5 TO INCREASE THE PROBABILITY OF SELECTING A CHILD AS THE TARGET.

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 TARGET IS NOT RESPONDENT, FILL IN SEX AND AGE:
SEX:
    IF S7b-y=1, DISPLAY "male",
    IF S7b-y=2, DISPLAY "female",
    IF S7b-y=6, DISPLAY "intersex person" OR "intersex child" BASED ON S6a/S6a1/S6b-y/S6b1b-y,
    IF S7b-y=7, DISPLAY "person" OR "child" BASED ON S6a/S6a1/S6b-y/S6b1b-y,
    IF S7b-y=8, DISPLAY "person" OR "child" BASED ON S6a/S6a1/S6b-y/S6b1b-y,

    ELSE DISPLAY "person"

IF AGE IS NOT MISSING, DISPLAY "who is {AGE}}:
    AGE:
        IF S6b-y=1-110, INSERT AGE "(S6b-y) years old",
        IF S6b-y=0, INSERT "who is less than one year of age,"
        IF S6b1b-y=1 OR S10aa=1, DISPLAY "Less than 18",
        ELSE (S6b1b-y=2, 3 or 4 OR S10aa=2, 3, or 4) DISPLAY "18 or older",
        ELSE AGE IS MISSING.

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 REPONDENT, 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   18 to 25 years of age
        3   26 to 64 years of age
        4   65 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.
REQUIRE AT LEAST 2 CHARACTERS BE ENTERED.

[NEW QUESTION FOR 2023]

Ask if: Respondent is taking Spanish language version of survey.

S10ab. (S10ab) (Web, CATI)
¿Qué pronombre prefiere esta persona? (English: (DO NOT SHOW): What pronoun does this person prefer?)
      1   Él
      2   Ella
      3   Elle
      98   {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
      96   {Web/CATI: I don't know what this question is asking/(DO NOT READ)
            DON'T KNOW WHAT THIS QUESTION IS ASKING}
      99   {Web/CATI: I don't want to answer /(DO NOT READ) REFUSED}
      97   Web blank

PROGRAM: Based on responses above, pipe in gendered pronouns for Target as needed throughout the survey.
The -e form should follow the same patterns of orthographic changes as the feminine (-a), but using -e instead.
Note that words like "el/la ciclista" that are spelled the same in masculine and feminine would also not change in -e. Examples:
- -o: él, latino, el niño, el director, el ciclista (if S10ab=1, 98, 96, 97, or 99)
- -a: ella, latina, la niña, la directora, la ciclista (if S10ab=2)
- -e : elle, latine, le niñe, le directore, le ciclista (if S10ab=3)
If the respondent chooses 96-99 (don't know, refused, etc.), use masculine (-o) pronouns.

Ask if: Person selected is 16 or older (S6b-y>=16 or S6b1b-y=2, 3 or 4*) 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, DO NOT SHOW IF S6b-y<13)
02   Unmarried partner / significant other (SHOW IF LIVING WITH A PARTNER OR UNKNOWN S11=2, 97, 98, 99, DO NOT SHOW IF S6b-y<13)
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",
    IF S7b-y=2, DISPLAY "female",
    IF S7b-y=6, DISPLAY "intersex person" OR "intersex child" BASED ON S6a/S6a1/S6b-y/S6b1b-y,
    IF S7b-y=7, DISPLAY "person" OR "child" BASED ON S6a/S6a1/S6b-y/S6b1b-y,
    IF S7b-y=8, DISPLAY "person" OR "child" BASED ON S6a/S6a1/S6b-y/S6b1b-y,

    ELSE DISPLAY "person"

IF AGE IS NOT MISSING, DISPLAY "who is {AGE}}:
    AGE:
        IF S6b-y=1-110, INSERT AGE "(S6b-y) years old",
        IF S6b-y=0, INSERT "who is less than one year of age,"
        IF S6b1b-y=1 OR S10aa=1, DISPLAY "Less than 18",
        ELSE (S6b1b-y=2, 3 or 4 OR S10aa=2, 3, or 4) 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, 3 OR 4, DO NOT SHOW IF S6b-y<13) AND MARRIED OR SEPARATED OR UNKNOWN S11=1, 4, 98, 99, 97)
        02   Unmarried partner / significant other (SHOW IF (TAGE >=16 OR TAGE2=2, 3 OR 4, DO NOT SHOW IF S6b-y<13) AND LIVING WITH A PARTNER OR UNKNOWN S11=2, 98, 99, 97)
        03   Child / stepchild (SHOW IF (TAGE>=16 OR TAGE2=2, 3 OR 4) 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".
SEX:
    IF S7b-y=1, DISPLAY "male",
    IF S7b-y=2, DISPLAY "female",
    IF S7b-y=6, DISPLAY "intersex person" OR "intersex child" BASED ON S6a/S6a1/S6b-y/S6b1b-y,
    IF S7b-y=7, DISPLAY "person" OR "child" BASED ON S6a/S6a1/S6b-y/S6b1b-y,
    IF S7b-y=8, DISPLAY "person" OR "child" BASED ON S6a/S6a1/S6b-y/S6b1b-y,

    ELSE DISPLAY "person"

AGE:
      IF S6b-y=1-110, INSERT AGE "(S6b-y) years old",
      IF S6b-y=0, INSERT "who is less than one year of age,"
      IF S6b1b-y=1 OR S10aa=1, DISPLAY "Less than 18",
      ELSE (S6b1b-y=2, 3 or 4 OR S10aa=2, 3, or 4) DISPLAY "18 or older",
      ELSE AGE IS MISSING.

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",
    IF S7b-y=2, DISPLAY "female",
    IF S7b-y=6, DISPLAY "intersex person" OR "intersex child" BASED ON S6a/S6a1/S6b-y/S6b1b-y,
    IF S7b-y=7, DISPLAY "person" OR "child" BASED ON S6a/S6a1/S6b-y/S6b1b-y,
    IF S7b-y=8, DISPLAY "person" OR "child" BASED ON S6a/S6a1/S6b-y/S6b1b-y,
    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 4 OR S10aa=2, 3, or 4) 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	Sex at Birth (S6aa or S7b-y)	Age (S6a-y)
{you/S10aName}	IF S6aa or S7b-y=1, DISPLAY "Male", IF S6aa or S7b-y=2, DISPLAY "Female", IF S6aa=6, DISPLAY "Intersex person",	IF S6a-y= 18-110, INSERT AGE (S6a-y), IF S6a1=2, 3, or 4 OR S6b1b-y=2, 3 or 4 OR S10aa=2, 3, or 4: "18 or older", ELSE LEAVE BLANK

	IF S6aa=7, DISPLAY "Person", IF S6aa=8, 9, or 10, DISPLAY "Person", ELSE LEAVE BLANK	
{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", IF S12a-y=15, DISPLAY "Unmarried partner of significant other of the child's parent", ELSE LEAVE BLANK	IF S6aa or S7b-y=1, DISPLAY "Male" IF S6aa or S7b-y=2, DISPLAY "Female" IF S6aa=6, DISPLAY "{Intersex person/Intersex child}", IF S6aa=7, DISPLAY "{Person/Child}", IF S6aa=8, 9, or 10, DISPLAY "{Person/Child}", ELSE LEAVE BLANK	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 4 OR S10aa=2, 3, or 4, INSERT "18 or older", 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".

SEX:
    IF S7b-y=1, DISPLAY "male",
    IF S7b-y=2, DISPLAY "female",

IF S7b-y=6, DISPLAY "intersex person" OR "intersex child" BASED ON S6a/S6a1/S6b-y/S6b1b-y,
IF S7b-y=7, DISPLAY "person" OR "child" BASED ON S6a/S6a1/S6b-y/S6b1b-y,
IF S7b-y=8, DISPLAY "person" OR "child" BASED ON S6a/S6a1/S6b-y/S6b1b-y,
ELSE DISPLAY "person"

IF S6a1 OR S6b1b-y=1 OR S10aa=1, INSERT "Child" or "Intersex child",
IF S6a1 OR S6b1b-y=2, 3 or 4 OR S10aa=2, 3, or 4, INSERT "Person" or "Intersex person"

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) OR (if R is only adult in HH (ADLTCNT=1) and S12b-y NE 4))

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
    97   BLANK

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.

SEX:
    IF S7b-y=1, DISPLAY "male",
    IF S7b-y=2, DISPLAY "female",
    IF S7b-y=6, DISPLAY "intersex person",
    IF S7b-y=7, DISPLAY "person",
    IF S7b-y=8, DISPLAY "person",
    ELSE DISPLAY "person"

SETUP1:

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

<u>HH_COUNT</u> **– Number of people in household (S4).**

<u>TMARR</u> **– 1 if TARGET is living with a spouse/partner; 0 otherwise.**

<u>TPAR</u> **– 1 if TARGET is parent of child <26 in household; 0 otherwise.**

<u>TAGE</u> **– TARGET's age.**

<u>TAGE2</u> **–**　　**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 to 64 years of age**
　　　　　　　　4　　**if TARGET's age S6b1(a-y)=4 65 and 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, 3, or 4
> TAGE>=1 OR TAGE2=1, 2, 3, or 4
> *TAGE>11 OR TAGE2=2, 3, or 4*
> *TAGE<16 OR TAGE2=1*

<u>TFEM</u> **– 0 if TARGET's sex assigned at birth is male (S6aa=1 OR S7b-y=1); 1 if TARGET's sex assigned at birth is female (S6aa=2 OR S7b-y=2); 2 otherwise.**

<u>TFAM_COUNT</u> **–**

IF (TAGE<26 OR TAGE2=1 OR 2) & TMARR=0 & TPAR=0: TARGET+PARENTS+SIBLINGS<26 FROM ROSTER (S12b-y=04 OR 15 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 or 4): TARGET+SPOUSE (S11=1 OR 2)+CHILDREN<26 FROM ROSTER (S12b-y=3).

<u>ADLTCOUNT</u> **– Number of people in HH who are 18 or older (S6a-y>=18 OR S6b1b-y=2, 3 or 4).**

SET THE FOLLOWING VARIABLES (RPAR AND RMARR):

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) AND:

　　IF THE RESPONDENT INDICATED BEING THE PARENT OF THE TARGET AT S12 (S12_01=04), <u>RPAR</u>=1

　　–ELSE RPAR=0.

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)), <u>RMARR=1</u>

                         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), <u>RMARR=1</u>

–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" 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))
We are defining family as all related family members who are living with {you/{TARGET}}.

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

[NEW FOR 2023]

Ask All

HIntro. (HIntro)
{Web/CATI: The/My} next questions ask about health insurance.

[NEW QUESTION FOR 2023]

Ask if: All

H0. (H0)
The Health Connector is Massachusetts' health insurance Marketplace. It helps individuals, families, and small businesses find health insurance that meets their needs and fits their budget. The Health Connector is different from MassHealth, but they do share an application. Had {you/{TARGET}/{TARGET}'s parent(s)} heard of the Health Connector before?

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

[NEW QUESTION FOR 2023]

Ask if: Target is aware of Health Connector (H0 = 1)

H0a. (H0a)
How much {have you/has {TARGET}/have {TARGET}'s parent(s)} heard about the Massachusetts Health Connector being available for state residents in need of health insurance?

1 A lot
2 Some
3 Only a little
98 (DO NOT READ) DON'T KNOW
99 (DO NOT READ) REFUSED
97 Web blank

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

Ask if: All

H1. (H1b, H1c, H1d, H1h, H1i, H1q, H1k, H1l, H1m, H1f)
{Web/CATI: 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.   a Health Connector Plan? This is any private insurance that {you/{TARGET}/{TARGET}'s parent(s)} found
         through the Health Connector webpage. {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, 3, or 4)
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, 3, or 4)
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".
FOR H1q, INSERT "you/You" IF TARGET IS RESPONDENT, INSERT "you/TARGET" IF RESPONDENT IS CHILD (TAGE<18
OR TAGE2=1) AND RESPONDENT IS PARENT, INSERT "TARGET'S parent(s)/TARGET" IF RESPONDENT IS CHILD
(TAGE<18 OR TAGE2=1) AND RESPONDENT NE PARENT, ELSE INSERT (TARGET/TARGET).
PLACE INTRO ON THE SCREEN WITH THE FIRST INSURANCE TYPE
STOP ASKING SERIES AFTER FIRST YES RESPONSE.

*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   {Web/CATI: I 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}".
MAKE H2_8 MUTUALLY EXCLUSIVE.

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*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

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*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   Correct, {I/they} do not
       2   Incorrect, {I/they} have health insurance
      98   (DO NOT READ) DON'T KNOW
      99   (DO NOT READ) REFUSED
      97   Web Blank

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

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   {Web/CATI: I 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 "they/their/{TARGET}'s/{TARGET}".
DISPLAY RESPONSE OPTION 02 ONLY IF TAGE >=16 OR TAGE2=2, 3, or 4.
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   {Web/CATI: I don't know/(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, 3, or 4.

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

[NEW QUESTION]

Ask if: Target has MassHealth/Medicaid (H1h=1 OR H3a=8 OR H4=8)

H4d. (H4d)
Did {you/{TARGET}/{TARGET}'s parent(s)} know that MassHealth is starting to review the eligibility of all members this year?

    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 IF (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}".

H4b deleted 2023

H4c deleted 2023

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, 3, or 4) 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 has had insurance for all of the past 12 months/since birth (H5=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".
IF TARGET IS CHILD, AND SELECTED ANSWER (1-5) IS GREATER THAN TAGE, PLEASE SHOW ERROR MESSAGE: "Your response is greater than {TARGET}'s reported age, please verify your answer or click "Next" to continue."

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

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".

H6. (H6)
How many months during the past 12 months {were you/was {TARGET}} without health insurance?

        _____ months
- 00   Less than 1 month
- 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}".
RANGE: HARD 1-12

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 _____# (0-110) YEARS
- 02   ANSWER GIVEN IN MONTHS_____# (0-24) 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 0-24, ELSE MONTHS RANGE IS 0-11

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.   The person in the family who had health insurance traded health insurance for another benefit or higher
          pay
    j.   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.

H8bb deleted 2023

> 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, 3, or 4)

Ask if: Target has private insurance – through his/her work or union, through Health Connector Plan, or through health insurance bought from an insurance company (H1b=1, H1q=1, OR H1l=1) OR (H3a=2, 22, OR 12) OR (H4=2, 22, OR 12)

IF INSURED THROUGH SOMEONE ELSE (H1c = 1, H3a=3, or H4=3) OR (H1m = 1, H3a = 13, or H4 = 13) AUTO-POPULATE H1ba=1 AND DO NOT ASK.

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.

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".

H5ab. (H5ab)
Is the annual deductible for medical care for this {family} plan less than ${1,500/3,000} or ${1,500/3,000} 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   {Web/CATI: Less than/LESS THAN} ${1,500/3,000}
      2      ${1,500/3,000} {Web/CATI: or more/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 "1,500", ELSE INSERT "3,000"
INSERT "family" IF H1ba=1.
FOR WEB, INSERT LINE BREAK BETWEEN FIRST AND SECOND SENTENCE.

[NEW QUESTIONS FOR 2023]

H5ac/H5ad. (H5ac, H5ad)
Does {your/{TARGET}'s} health insurance cover any care or treatment for…

    c. mental health, such as visits to individual or group therapy, specialty outpatient services, medication
       management or inpatient treatment?
    d. alcohol or substance use problems, such as therapy, rehab, or acute residential treatment or detox
       programs?

SHOW AT H5ac BELOW QUESTION TEXT FOR CATI: (IF NEEDED) Care or treatment for substance use problems will be included in a later question.

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

PROGRAM: INSERT "your" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}'s".
SHOW IN GRID FOR WEB, AS INDIVIDUAL QUESTIONS FOR CATI.

EMPLOYMENT

Ask if: Target is 16 or older (TAGE>=16 OR TAGE2=2, 3, or 4*)*

E0.
{Web/CATI: The next questions ask about employment./My next questions ask about employment.}

Ask if: Target is 16 or older (TAGE>=16 OR TAGE2=2, 3, or 4*)*

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

E2 deleted 2023

E3 deleted 2023

E1 deleted 2023

[NEW QUESTION IN 2023]

Ask if: Target worked for pay last week (E0a=1 OR E0b=1) or was temporarily away from work (E0b=2 AND E0c=1, 2, 7, 9, 10, 12)

E1a. (E1a)
{Do you/Does {TARGET}} work in a setting where health care is provided to patients as a member of the clinical, non-clinical, pharmaceutical, or administrative staff?

        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}".

[NEW QUESTION IN 2023]

Ask if: Target is 16 or older (TAGE>=16 OR TAGE2=2, 3, or 4*) AND E1A NE 1.*

IF E1a=1, AUTO-POPULATE E1aa=1 AND DO NOT ASK.

E1aa. (E1aa)
Did {you/{TARGET}} ever work in a setting where health care is provided to patients as a member of the clinical, non-clinical, pharmaceutical, or administrative staff?

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

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

E1b deleted 2023

E13 deleted 2023

E14 deleted 2023

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 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 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".

HS1a deleted 2023

HS1aa deleted 2023

HS1ab deleted 2023

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 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/mental health condition, or a developmental disability.
{Web/CATI: /PROBE: Remember that your answers to this question and all other questions are 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"

Hs3a deleted 2023

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   {Web/CATI: Some other place (please specify)/Or, some other place? (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   {Web/CATI: I don't know/(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".

A2a deleted 2023

[NEW QUESTION FOR 2023]

Ask if: All

A2d. (A2d)
{Do you/Does {TARGET}} have a regular primary care provider?
      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}".

A2b deleted 2023

A2c deleted 2023

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 they 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}".

A3c. (A3ca, A3cb, A3cc, A3cd)
What type of condition did {you/TARGET} have, the last time {you/{TARGET}} went to a hospital emergency room?
{Web/CATI: Check all that apply./READ LIST. 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. Some other reason (please specify) _____

      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, 3, or 4)
ASK ITEM c IF (TAGE>11 OR TAGE=2 OR 3)

A3e deleted 2023

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 appointments. Telehealth appointments are when care is provided by phone, video, text, app, or chat instead of in-person.

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

A5/A5aa/A6. (A5, A5aa, A6)
{Web/CATI: Next is a list of care providers. Please indicate/Next, I'm going to read you a list of care providers. Please tell me} how many times in the past 12 months {you/{TARGET}} received care from…

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

    A5. a general doctor who treats a variety of illnesses? For example, a doctor {or pediatrician} in general
          practice, family medicine or internal medicine.
    A5aa.   a nurse practitioner or physician assistant{, or midwife}?
    A6. a specialist? Specialists are doctors like surgeons, heart doctors, OBGYN, allergy doctors, skin doctors
          and others who specialize in one area of health care.

      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".
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.

Ask if: Target is over the age of 1 (TAGE>1 OR TAGE2=1, 2, 3, or 4)

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 include in-person visits and telehealth care provided by phone, video, text, app, or chat, as well as by providers through services like BetterHelp and Talkspace.

Please do not include care received when {you were/{TARGET} was} hospitalized overnight or in hospital emergency rooms.

          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".

[NEW QUESTION FOR 2023]

Ask of: Target had mental health visit (A6b=1)

A6ba. (A6ba)
Thinking about {your/TARGET's} most recent appointment with a mental health professional, did
{you/TARGET/TARGET's parent(s)} pay the entire cost of the appointment out-of-pocket? This might include
payments made in cash or from special accounts {you/they} may have for health care spending, such as Flexible
Spending Accounts, Health Savings Accounts, or Health Reimbursement Arrangements.

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

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

[NEW QUESTION FOR 2023]

Ask if: Target did not pay in full for mental health visit (A6ba=2)

A6bb. (A6bb)
Why didn't {you/{TARGET}/{TARGET}'s parent(s)} have to pay the entire cost of the appointment out-of-pocket?

{Web/CATI: Check all that apply./READ LIST IF NECESSARY. CHECK ALL THAT APPLY.}

> 1   Insurance covered some or all of the cost (SHOW ONLY IF TARGET WAS INSURED AT ANY TIME IN PAST 12 MONTHS: H5=1 OR H6<12 or *or H6=97, 98, 99*)
> 2   It was free
> 3   It was discounted or at a sliding scale clinic
> 4   A family member paid
> 5   Other (please specify)
> 98   (DO NOT READ) DON'T KNOW
> 99   (DO NOT READ) REFUSED

PROGRAM:
- INSERT "you" IF TARGET IS RESPONDENT.
- INSERT "you" IF TARGET IS LESS THAN 18 (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}"

[NEW QUESTION FOR 2023]

Ask if: ((A6ba=1 OR A6bb=2, 3, or 4) AND A6bb NE 1) AND (H5=1 OR (H6<12 OR H6=97, 98, 99))

A6bc. (A6bc)
Why did {you/{TARGET}/{TARGET}'s parent(s)} {pay out of pocket / go to a free or sliding scale clinic} for
{your/their} most recent appointment?

{Web/CATI: Check all that apply./ READ LIST IF NECESSARY. CHECK ALL THAT APPLY.}

1   {Your/TARGET's} provider does not accept any health insurance
2   {Your/TARGET's} insurance plan is not accepted by {your/TARGET's} preferred provider
3   {You weren't/TARGET wasn't/TARGET's parent(s) weren't} sure how to find a provider who accepts {your/TARGET's} insurance
4   {You weren't/TARGET wasn't/TARGET's parent(s) weren't} sure how {your/TARGET's} insurance works for mental health
5   It wasn't worth the hassle to try to use health insurance
6   Unable to get appointment using {your/TARGET's} health insurance as soon as {you/TARGET/TARGET's parent(s)} thought it was needed
7   {You/TARGET/TARGET's parent(s)} tried using {your/TARGET's} insurance with this or another provider but ran into a problem (such as the claim was denied, or ran out of visits)
8   {You/TARGET/TARGET's parent(s)} had privacy concerns about using insurance
9   {You/TARGET} didn't have insurance at the time {you/TARGET} needed care
10 The discounted, free, or sliding scale clinic had a provider or type of care {you/{TARGET}/{TARGET}'s parent(s)} wanted
11 Apps like BetterHelp, TherapyChat, and DoMental do not accept insurance.
12 This provider was cheaper than a copay.
13 Some other reason {Web/CATI: (please specify)/(SPECIFY:)} _____
98 (DO NOT READ) DON'T KNOW
99 (DO NOT READ) REFUSED

PROGRAM:
Offer "{You/TARGET} didn't have insurance at the time {you/TARGET} needed care" if they had any insurance gap in past 12 months (H5=2 OR H6>=0).
IF TARGET IS RESPONDENT INSERT "You/your".
IF TARGET IS LESS THAN 18 (TAGE<18 OR TAGE2=1) AND RESPONDENT IS TARGET'S PARENT, INSERT "TARGET/You/Your".
IF TARGET IS LESS THAN 18 (TAGE<18 OR TAGE2=1) AND RESPONDENT IS NOT TARGET'S PARENT, INSERT "TARGET's parent(s)/their".
ELSE INSERT "TARGET".
If A6bb's response was:
"It was free" or "It was discounted or sliding scale clinic" (A6bb=2 OR 3), display "go to a free or sliding scale clinic"
"A family member paid" (A6bb=4), display "pay out of pocket"
IF A6BB=2 or 3, ONLY DISPLAY REPSONSES 3-13, ELSE DISPLAY ALL RESPONSES

Ask if: Target is over the age of 11 (TAGE>11 OR TAGE2=2, 3, or 4)
A6c. (A6c)
In the past 12 months, did {you/{TARGET}} receive care for an alcohol or substance use disorder?

Please include in-person visits and telehealth care provided by phone, video, text, app, or chat, as well as by providers through services like BetterHelp and Talkspace.

Please do not include care received when {you were/{TARGET} was} hospitalized overnight or in hospital emergency rooms.

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".

[NEW QUESTION FOR 2023]

Ask if: Target had substance use visit (A6c = 1)

A6ca. (A6ca)
Thinking about {your/TARGET's} most recent appointment for an alcohol or substance use disorder, did {you/TARGET/TARGET's parent(s)} pay the entire cost of the appointment out-of-pocket? This might include payments ~~you~~ made in cash or from special accounts {you/they} may have for health care spending, such as Flexible Spending Accounts, Health Savings Accounts, or Health Reimbursement Arrangements.

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

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

[NEW QUESTION FOR 2023]

Ask if: Target didn't pay in full for substance use visit (A6ca = 2)

A6cb. (A6cb)
Why didn't {you/TARGET/TARGET's parent(s)} have to pay the entire cost of the appointment out-of-pocket?

{Web/CATI: Check all that apply./ READ LIST IF NECESSARY. CHECK ALL THAT APPLY.}

   1   Insurance covered some or all of the cost (SHOW ONLY IF TARGET WAS INSURED AT ANY TIME IN PAST 12 MONTHS: H5=1 OR H6<12 OR H6=97, 98, 99)
   2   It was free
   3   It was discounted or at a sliding scale clinic
   4   A family member paid
   5   Other (please specify)
   98   (DO NOT READ) DON'T KNOW
   99   (DO NOT READ) REFUSED

PROGRAM:
  -    INSERT "you" IF TARGET IS RESPONDENT.
  -    INSERT "you" IF TARGET IS LESS THAN 18 (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}"

[NEW QUESTION FOR 2023]

A6cc. (A6cc)
Why did {you/TARGET/TARGET's parent(s)} {pay out of pocket / go to a free or sliding scale clinic} for {your/their} most recent appointment?

{Web/CATI: Check all that apply./ READ LIST IF NECESSARY. CHECK ALL THAT APPLY.}

1. {Your/TARGET's} provider does not accept any health insurance
2. {Your/TARGET's} insurance plan is not accepted by {your/TARGET's} preferred provider
3. {You weren't/TARGET wasn't/TARGET's parent(s) weren't} sure how to find a provider who accepts {your/TARGET's} insurance
4. {You weren't/TARGET wasn't/TARGET's parent(s) weren't} sure how {your/TARGET's} insurance works for behavioral health
5. It wasn't worth the hassle to try to use health insurance
6. Unable to get appointment using {your/TARGET's} health insurance as soon as {you/TARGET/TARGET's parent(s)} thought it was needed
7. {You/TARGET/TARGET's parent(s)} tried using {your/TARGET's} insurance with this or another provider but ran into a problem (such as the claim was denied, or ran out of visits)
8. {You/TARGET/TARGET's parent(s)} had privacy concerns about using insurance
9. {You/TARGET} didn't have insurance at the time {you/TARGET} needed care
10. The discounted, free, or sliding scale clinic had a provider or type of care {you/{TARGET}/{TARGET}'s parent(s)} wanted
11. Apps like BetterHelp, TherapyChat, and DoMental do not accept insurance.
12. This provider was cheaper than a copay.
13. Some other reason {Web/CATI: (please specify)/(SPECIFY:)} _____
98. (DO NOT READ) DON'T KNOW
99. (DO NOT READ) REFUSED

PROGRAM:
Offer "{You/TARGET} didn't have insurance at the time {you/TARGET} needed care" if they had any insurance gap in past 12 months (H5=2 OR H6>=0).
IF TARGET IS RESPONDENT INSERT "You/your".
IF TARGET IS LESS THAN 18 (TAGE<18 OR TAGE2=1) AND RESPONDENT IS TARGET'S PARENT, INSERT "TARGET/You/Your".
IF TARGET IS LESS THAN 18 (TAGE<18 OR TAGE2=1) AND RESPONDENT IS NOT TARGET'S PARENT, INSERT "TARGET's parent(s)/their".
ELSE INSERT "TARGET".
If previous question's response was:
"It was free" or "It was discounted or sliding scale clinic" (A6bb=2 OR 3), display "go to a free or sliding scale clinic"
"A family member paid" (A6cb=4), display "pay out of pocket"
IF A6CB=2 or 3, ONLY DISPLAY REPSONSES 3-13, ELSE DISPLAY ALL RESPONSES

[NEW QUESTION 2023]

A6d. (A6da, A6db)
Thinking about the past 12 months, was there any time that {you/{TARGET}/{TARGET}'s parent(s)} did

1. Yes, there was a time {you/{TARGET}} did not get needed care
2. No, there was not a time {you/{TARGET}} did not get needed care
98. (DO NOT READ) DON'T KNOW

99   (DO NOT READ) REFUSED
                    97   Web Blank

        a.   not get mental health care or counseling that {you/{TARGET}} needed?
        b.   not get alcohol or substance use disorder care or treatment that {you/{TARGET}} needed?

PROGRAM:
    -    INSERT "you/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}"

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}".

[NEW QUESTION FOR 2023]

Ask if: All

A10. (A10)
Thinking about all the care that {you have/TARGET has} received in the past 12 months, was any of that care
through a telehealth appointment?
{Web (ALWAYS SHOW) / CATI (IF NEEDED): Telehealth appointments are when care is provided by video, phone,
text, app, or chat instead of in-person.}

            1   Yes
            2   No
            3   {You/{TARGET}} didn't get any health care in the past 12 months
            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}".
SHOW OPTION 3 IF A3=0 AND A5=0 AND A5aa=0 AND A6=0 AND A6b=2 AND A6C=2 AND A7=2.

[NEW QUESTION FOR 2023]

Ask if: Did not use telehealth services in past 12 months (A10=2)

A10a. (A10a_1, A10a_2, A10a_3, A10a_4, A10a_5, A10a_6, A10a_7, A10a_8, A10a_9, A10a_10, A10a_OS)

Thinking about {your/TARGET's} most recent <u>in-person visit</u>, why did {you/TARGET} go in-person instead of using a telehealth appointment?

{Web/CATI: Check all that apply./ READ LIST IF NECESSARY. CHECK ALL THAT APPLY.}

       1   Provider did not offer telehealth visits
       2   Poor or no internet service
       3   Limited internet service (data plan)
       4   Preferred an in-person visit
       5   Need more information on telehealth
       6   Not right for {your/{TARGET}'s} health needs
       7   No private space for a visit
       8   No device (computer, phone, tablet) for visits
       9   Not sure if health insurance would cover a telehealth visit
      10   Other {Web/CATI: (please specify)/SPECIFY: } _____
      98   (DO NOT READ) DON'T KNOW
      99   (DO NOT READ) REFUSED
      97   Web blank

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

[NEW QUESTION FOR 2023]

Ask if: Did not use telehealth services in past 12 months (A10=2)

A10aa. (A10aa_1, A10aa_2, A10aa_3, A10aa_4, A10aa_5, A10aa_6, A10aa_7, A10aa_8, A10aa_9, A10aa_10, A10aa_OS)
Thinking about {your/TARGET's} most recent <u>in-person visit</u>, what type of care did {you/they} receive?

{Web/CATI: Check all that apply./ READ LIST IF NECESSARY. CHECK ALL THAT APPLY.}

       1   Annual visits/physical examinations
       2   Pregnancy {Web/CATI: (before, during or after)/(IF NEEDED) This includes any pregnancy-related care, including care before or after a pregnancy.}
       3   Care for a chronic or on-going condition lasting a year or more
       4   Care for new symptoms or condition
       5   Mental health care {Web/CATI: (counseling, therapy, medication management)/(IF NEEDED) This includes counseling, therapy, or medication management.}
       6   Alcohol or other substance use treatment {Web/CATI: (counseling, therapy, medication management) / (IF NEEDED) This includes counseling, therapy, or medication management.)}
       7   Dental care
       8   Physical therapy, speech therapy, or occupational therapy
       9   Tests, results, follow-up
      10   Other (please specify)
      98   (DO NOT READ) DON'T KNOW
      99   (DO NOT READ) REFUSED
      97   Web blank

PROGRAM: Show option 2: Pregnancy IF sex assigned at birth is female or other (TFEM=1 or 2).

[NEW QUESTION FOR 2023]

A10b. (A10b _1, A10b_2, A10b_3, A10b_4, A10b_5, A10b_6, A10b_7, A10b_8, A10b_9, A10b_10, A10b_OS)
For {your/{TARGET}'s} telehealth appointments in the past 12 months, what type of care did {you/they} receive?
{Web/CATI: Check all that apply./ READ LIST IF NECESSARY. CHECK ALL THAT APPLY.}

     1   Annual visits/physical examinations
     2   Pregnancy {Web/CATI: (before, during or after)/(IF NEEDED) This includes any pregnancy-related care, including care before or after a pregnancy.}
     3   Care for a chronic or on-going condition lasting a year or more
     4   Care for new symptoms or condition
     5   Mental health care {Web/CATI: (counseling, therapy, medication management)/(IF NEEDED) This includes counseling, therapy, or medication management.}
     6   Alcohol or other substance use treatment {Web/CATI: (counseling, therapy, medication management) / (IF NEEDED) This includes counseling, therapy, or medication management.)}
     7   Dental care
     8   Physical therapy, speech therapy, or occupational therapy
     9   Tests, results, follow up
     10   Other (please 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/they".
PROGRAM: Show option 2: Pregnancy IF sex assigned at birth is female or other (TFEM=1 or 2).

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".

A9. (A9a, A9j, A9c, A9d, A9e, A9f, A9g, A9h, A9i)
Still thinking about the past 12 months, was there any time that <u>because of cost</u>, {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, 3, or 4)
ASK ITEM g if (TAGE>11 OR TAGE2=2, 3, or 4)
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 (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)

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 GEN IN CODE 1
INSERT "you" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}/they".

Ask if: Target had at least one unmet need (any A9a-i=1) AND was at a time when target had health insurance (H5=1 or A9a2=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./ READ LIST. 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, A9bf, A9bh)
{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.
   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.

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}".

FOR WEB, ASK THESE QUESTIONS ON A SEPARATE SCREEN.
(SCRAMBLE)

BACKGROUND

D0.
{Web/CATI: Next are/Now I'd like to ask} a few general questions to describe {you/{TARGET}}.

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

D1. (D1)
{Are you/Is {TARGET}} Hispanic or {Web:Latino/a/e/x | CATI: Latino or 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}"
SPANISH VERSION: Use response from gender pronoun question earlier in the survey to display correct gender-conjugated form: {hispano o latino/hispana o latina/hispane o latine}

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./ READ LIST IF NECESSARY. 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
         6   Hispanic/{Web:Latino/a/e/x | CATI: Latino or Latina}
         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"

<table>
<tr><td colspan="3"><i>Ask if: Target has more than one race (more than one of the following is set to 1: 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) OR (identified as Hispanic or {Latino/Latina} (D1 = 1) AND one of the following is 1: D2_1, D2_2, D2_3, D2_4, D2_5, D2_7, D2_7_OS, D2_8, D2_8_OS, D2_9, D2_9_OS)</i></td></tr>
</table>

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. Hispanic/{Web:Latino/a/e/x | CATI: Latino or Latina}
7. {D2_7_OS}
8. {D2_8_OS}
9. {D2_9_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.
SHOW "6: Hispanic/Latino/a/e/x" IF D1=1 OR D2_6=1.
SPANISH VERSION: Use response from gender pronoun question earlier in the survey to display correct gender-conjugated form: {Hispano/latino, Hispana/latina, Hispane/ latine}
PN: Please add D1/D2/D3 to the fonefile

D4 deleted 2023

[NEW QUESTION for 2023]

<table>
<tr><td><i>Ask if: All</i></td></tr>
</table>

D5. (D5_1, D5_2, D5_3, D5_4, D5_5, D5_6, D5_98, D5_96, D5_99, D5_97. D5_6_OS)
What is your/{TARGET}'s gender?

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

Web/CATI: /INTERVIEWER NOTE: (DO NOT READ) 98 – "Don't know" means the respondent doesn't know their/the target's gender, 96 – "I don't know what this question is asking" means the respondent is unfamiliar with the question and/or response options.

1. {Woman/Girl}
2. {Man/Boy}
3. Non-binary
4. Agender/No gender
5. Questioning
6. Not listed {Web/CATI: (please specify)/(SPECIFY:)} _____
98. I don't know {my/TARGET's} gender
96. I don't know what this question is asking

99   {Web/CATI: I don't want to answer/(DO NOT READ) REFUSED   }

97   Web blank

PROGRAM: IF LESS THAN 18 (S6a-y<18 OR S6a1b-y=1), DISPLAY "Girl"/"Boy",
ELSE DISPLAY "Woman"/"Man".
MAKE RESPONSES 98, 96, AND 99 EXCLUSIVE SELECTIONS.

[NEW QUESTION FOR 2023]

Ask if: Target aged 18+ (TAGE>=18 OR TAGE2=2, 3, 4)

D5a. (D5a)
{Are you/Is {TARGET}} transgender?

    1   Yes
    2   No
    98   {Web/CATI: I don't know if {I am/{TARGET} is} transgender/(DO NOT READ) Don't know
    96   (DO NOT READ) I don't know what this question is asking
    99   {Web/CATI: I don't want to answer/(DO NOT READ) I don't want to answer}
    97   Web blank

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

{Web/CATI: /INTERVIEWER NOTE: (DO NOT READ) 98 – "Don't know" means the respondent doesn't know
their/the target's gender, 96 – "I don't know what this question is asking" means the respondent is unfamiliar with
the question and/or response options.}

PROGRAM: INSERT "you"/"you are" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}/"{TARGET} is"

[NEW QUESTION FOR 2023]

Ask if: Target aged 18+ (TAGE>=18 OR TAGE2=2, 3, 4)

D6. (D6)
Which of these describes {your/{TARGET}'s} sexual orientation?

{Web/CATI: Check all that apply./ ALLOW MULTIPLE.}

{Web/CATI: /INTERVIEWER NOTE: (DO NOT READ) 98 – "Don't know" means the respondent doesn't know
their/the target's gender, 96 – "I don't know what this question is asking" means the respondent is unfamiliar with
the question and/or response options.}

    1   Straight or heterosexual
    2   Lesbian or gay
    3   Bisexual or pansexual
    4   Queer
    5   Questioning
    6   Not listed {Web/CATI: (please specify)/(SPECIFY:)} _____
    98   {Web/CATI: I/You} don't know {web/CATI: {my/TARGET's} / your/TARGET's} sexual orientation
    96   {Web/CATI: I/You} don't know what this question is asking

99   {Web/CATI: I/You} don't want to answer
97   Web blank

PROGRAM: INSERT "your" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}'s"
MAKE RESPONSES 98, 96, AND 99 EXCLUSIVE SELECTIONS.

Ask if: Respondent is taking the English version of survey

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 >18 OR TAGE2= 2, 3, or 4),
ELSE INSERT "Do {TARGET}'s parent(s)".
IF RESPONDENT IS ANSWERING SPANISH VERSION OF SURVEY, PROGRAM D14 = 1 AND DO NOT ASK.

D15 deleted 2023

[NEW Question in 2023]

Ask if: A language other than English is spoken at home or respondent is taking Spanish version of survey (D14=1)

D16. (D16)
How well {do you/does {TARGET}/do {TARGET}'s parent(s)} speak English?

1   Very well
2   Well
3   Not well
4   Not well at all
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, INSERT "do {TARGET}'s parent(s)" if Target aged <18, ELSE "does {TARGET}".

[NEW Question in 2023]

Ask if: A language other than English is spoken at home and Target /TARGET's parent speaks English Well, Not well, or Not well at all or DK (D16 = 2, 3, 4, 98)

D17. (D17)
The last time {you/{TARGET}} received health care, did {you/they/TARGET's parent(s)} have a hard time understanding the health care professional because they spoke a different language than {you/{TARGET/TARGET's parent(s)}}?

1   Yes
2   No, {you/TARGET/TARGET's parent(s)} had no language difficulties with the health care professional
3   No, {you/{TARGET/TARGET's parent(s)} had someone help {you/them} understand what the health care professional was saying
98   {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
99   (DO NOT READ) REFUSED
97   Web Blank

FAMILY

Ask if: TFAM_COUNT>=2

F0.

When answering the following question, think of the <u>family, where family includes</u> {you/{TARGET}} and all related family members who are living with {you/{TARGET}}.

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

Ask if: All

A11c. (A11c)

In the past 12 months, did {you/{TARGET}/you and your family/{TARGET} and their family/{TARGET}'s 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 family have/{TARGET} and their family have/{TARGET}'s family have} had problems paying in 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 family/you and your family have",
    AND TARGET IS CHILD (TAGE<18 OR TAGE2=1), INSERT "{TARGET}'s family/{TARGET}'s family have"
    ELSE INSERT "{TARGET} and their family/{TARGET} and their family have".

Ask if: Target or family had problems paying medical bills (A11c=1)

A11e. (A11ea, A11eb, A11ec, A11ed, A11ee, A11ef, A11eg, A11gh, 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
g.   Mental or behavorial health care
h.   For some other type of medical service {Web/CATI: (please specify)/(SPECIFY:)} _____

PROGRAM:
SCRAMBLE A-F, ASK G LAST.

A11ee2 deleted 2023

A11ee3 deleted 2023

A11ee4 deleted 2023

Ask if: ALL

A11f. (A11f)
{Do you/Does {TARGET}/Do you and your family/Does {TARGET} and their 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 family",
    ELSE INSERT "Does {TARGET} and their family".

Ask if: Target or family has medical bills being paid over time (A11f=1)

A11. (A11)
Are the medical bills being paid off over time for care that was received when {you/{TARGET}/you and your family/{TARGET} and their family} **did not** have health insurance, when {you/{TARGET}/you and your family/{TARGET} and their family} **did** have health insurance, or are the bills for care from both when {you/{TARGET}/you and your family/{TARGET} and their family} did not have health insurance and when ({you/{TARGET}/you and your family/{TARGET} and their 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 family",
    ELSE INSERT "{TARGET} and their family".

Ask if: Target or family has medical bills being paid over time (A11f=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 heath insurance (A11=2, 3)

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 family/{TARGET} and their 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 family",
    ELSE INSERT "{TARGET} and their family".
SCRAMBLE

Ask if: Target or family has medical bills being paid over time (A11f=1)

A11i. (A11i)
When {were you/was {TARGET}/were you and your family/were {TARGET} and their 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 family",
    ELSE INSERT "were {TARGET} and their family".

A11j deleted 2023

A12 deleted 2023

A13 deleted

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} family. That is {FAMCONFIRM}.

HH_FA1 deleted 2023

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} 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"

HH_FA2a deleted 2023

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)
Earlier we asked if there was any time in the past 12 months that {you/{TARGET}/{TARGET}'s parent(s)} did not get certain types of health care that {you/{TARGET}} needed <u>because of cost</u>. For this question, please think about the health care of the members of {your/{TARGET}'s} family.

Are there any members of {your/{TARGET}'s} family who 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 "you/you/your/your" IF TARGET IS RESPONDENT
    ELSE IF TARGET IS CHILD (TAGE<18 OR TAGE2=1) AND RESPONDENT IS PARENT, INSERT
    "you/{TARGET}/{TARGET}'s/{TARGET}'s",
    ELSE IF TARGET IS CHILD (TAGE<18 OR TAGE2=1) AND RESPONDENT IS NOT PARENT, INSERT "{TARGET}'s
    parent(s)/{TARGET}/{TARGET}'s/{TARGET}'s",
    ELSE INSERT "{TARGET}/{TARGET}/{TARGET}'s/{TARGET}'s".

IF (TFEM=1 OR 2) AND S6 OR S6(b-y)>=12, INSERT ", or midwife".
ONLY DISPLAY ITEMS NOT UNMET AT A9.

HH_FA3 deleted 2023

HH_E1c deleted 2023

HH_FA4 deleted 2023

HH_E1d deleted 2023

<table>
<tr><td>*Ask if: All*</td></tr>
</table>

A11L. (A11La, A11Lb, A11Lc, A11Ld, A11Le)
At any time the past 12 months, {have you/has {TARGET}/have {TARGET}'s parent(s)} {or any member of {your/their} 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 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 family", ELSE INSERT "or any member of their family".

<table>
<tr><td>*Ask if: All*</td></tr>
</table>

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} 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 family", ELSE INSERT "or any member of their 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, 3, or 4) 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".

| Ask if: All |

HH_HE1. (HH_HE1)
How often {do you/does {TARGET}/do {TARGET}'S parent(s)} {or any member of {your/their} 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 family", ELSE INSERT "or any member of their 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} family. Are there any members in {your/{TARGET}'s} 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".

HH_HS1a deleted 2023

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} 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 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".

[NEW QUESTION IN 2023]

Ask if: Target has no chronic conditions or respondent says don't know / refused / web blank on this question (HS3 = 3, 97, 98, 99) and TFAM_COUNT>1

HH_HS3. (HH_HS3).
Do any members of {your/{TARGET}'s} family 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/mental health condition, or a developmental disability.

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

        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}'s.
If TARGET has 1+ CC (HS3 = 1, 2), DO NOT ASK and assign as 1 (Yes).

HH_HS3a deleted 2023

HS2c deleted 2023

HS2d deleted 2023

INCOME

Ask if: All

IN1. (IN1)
{Web/CATI: The/My} next questions are about income. This information is important because it helps the Commonwealth understand how to make health care more affordable.

1:
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. ({web/CATI: We/I} only want you to consider your spouse and the children **under 26** who are living with you for the remaining questions.) For these questions, {Web/CATI: we'd/I'd} like you to think back to 2022. During 2022 did you or any of your immediate family members receive any income from wages or salary?

2:
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. ({web/CATI: We/I} only want you to consider the children **under 26** who are living with you for the remaining questions.) For these questions, {Web/CATI: we'd/I'd} like you to think back to 2022. During 2022 did you or any of your immediate family members receive any income from wages or salary?

3:
(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. ({web/CATI: We/I} only want you to consider parent(s) and siblings **under 26** who are living with {TARGET} for the remaining questions.) For these questions, {Web/CATI: we'd/I'd} like you to think back to 2022. During 2022, did any of {TARGET}'s immediate family members receive any income from wages or salary?

4:
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/their} immediate family. ({web/CATI: We/I} only want you to consider {your/their} spouse and the children **under 26** who are living with {you/{TARGET}} for the remaining questions.) For these questions, {Web/CATI: we'd/I'd} like you to think back to 2022. During 2022, did {you/{TARGET}} or any of {your/their} immediate family members receive any income from wages or salary?
INSERT "your/you" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}/their".

5:
IF TMARR=1 & TFAM_COUNT = 2, INSERT:
{Web/CATI: We're/I'm} interested in {your/{TARGET}'s} family income. {Web/CATI: We/I} only want you to consider {your/{TARGET}'s} income **plus** the income of {your/their} spouse for the remaining questions. For these questions, {Web/CATI: we'd/I'd} like you to think back to 2022. During 2022, did {you/{TARGET}} or any of {your/their} immediate family members receive any income from wages or salary?
INSERT "your/you" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}/their".

6:
IF TMARR=0 & TPAR=1 & TFAM_COUNT>=2, INSERT:
{Web/CATI: We're/I'm} interested in {your/{TARGET}'s} family income. {web/CATI: we/I} only want you to consider {your/{TARGET}'s} income **plus** the income of the children **under 26** who are living with {you/{TARGET}} for the remaining questions. For these questions, {Web/CATI: we'd/I'd} like you to think back to 2022. During 2022, did {you/{TARGET}} or any of {your/their} immediate family members receive any income from wages or salary?
INSERT "your/you" IF TARGET IS RESPONDENT, ELSE INSERT "{TARGET}/their".

7:
IF RESPONDENT IS TARGET AND (TAGE>=16 OR TAGE2=2, 3, or 4) & 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 **plus** the income of any immediate family. ({web/CATI: We/I} only want you to consider parent(s) and siblings **under 26** who are living with you for the remaining questions.) For these questions, I'd like you to think back to 2022. During 2022, did any of your immediate family members receive any income from wages or salary?

8:
IF TFAM_COUNT=1, INSERT:
For these questions, {Web/CATI: we'd/I'd} like you to think back to 2022. During 2022, 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 REPSONDENT, ELSE INSERT "{TARGET}'.

Ask if: All

IN2. (IN2a, IN2b, IN2c)
During 2022, 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?
     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? If you received a 2022 Massachusetts tax rebate, <u>do not
              include</u> this amount.

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 2022, 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)
                1000096   {Web/CATI: /(DO NOT READ)} No income
                1000095   {Web/CATI: /(DO NOT READ)} $1,000,000 or more
                1000098   {Web/CATI: Don't know/(DO NOT READ) DON'T KNOW}
                1000099   (DO NOT READ) REFUSED
                1000097   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".

	2022 Poverty Guidelines, rounded to nearest thousand*								
	100%	139%	150%	200%	250%	300%	400%	500%	600%
FAMSIZE	AMT1	AMT1A	AMT2	AMT3	AMT4	AMT5	AMT6	AMT7	AMT8
1	14000	19000	20000	27000	34000	41000	54000	68000	82000
2	18000	25000	27000	37000	46000	55000	73000	92000	110000
3	23000	32000	35000	46000	58000	69000	92000	115000	138000
4	28000	39000	42000	56000	69000	83000	111000	139000	167000
5	32000	45000	49000	65000	81000	97000	130000	162000	195000
6	37000	52000	56000	74000	93000	112000	149000	186000	223000
7	42000	58000	63000	84000	105000	126000	168000	210000	251000
8	47000	65000	70000	93000	117000	140000	187000	233000	280000
9	51000	71000	77000	103000	128000	154000	205000	257000	308000
10	56000	78000	84000	112000	140000	168000	224000	280000	336000
11	61000	84000	91000	122000	152000	182000	243000	304000	365000
12	66000	91000	98000	131000	164000	197000	262000	328000	393000
13	70000	98000	105000	140000	176000	211000	281000	351000	421000
14	75000	104000	112000	150000	187000	225000	300000	375000	450000
15	80000	111000	120000	159000	199000	239000	319000	398000	478000
16	84000	117000	127000	169000	211000	253000	338000	422000	506000
17	89000	124000	134000	178000	223000	267000	356000	446000	535000

*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 NE 0)

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 <u>money you pay that is not covered by any</u> <u>health insurance or special assistance</u> 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: (CUTOFF5 is between $200 and $4,999 and IN6=1) OR (CUTOFF10 is between $200 and $4,999 (200<CUTOFF10<4,999) AND IN6a=1, 2) OR CUTOFF10 is undetermined (CUTOFF10=missing) |

IN6b. (IN6b) Was the "out of pocket" spending for health care…

{Web/CATI: Your best estimate is fine./IF NEEDED: 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 IN6=1, THEN DO NOT DISPLAY ANY RESPONSE CATEGORIES WHERE THE LOWER NUMBER OF THE BRACKET IS GREATER THAN CUTOFF5.

IF IN6=2 AND:

IN6A=1, THEN DO NOT DISPLAY ANY RESPONSE CATEGORIES WHERE THE LOWER NUMBER OF THE BRACKET IS GREATER THAN CUTOFF10

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

HH_HA6 deleted 2023

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: ABS CATI 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

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

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".

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".

C1 deleted 2023

C2 deleted 2023

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 question 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

D11 deleted 2023

D12b deleted 2023

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. (PII_X1Name, PII_X1Email, PII_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).

[NEW]

Ask if: Phone number provided. PII_X1Phone NE 99 or 97.

X2aa. (X2aa)
Is the phone number you provided a cell phone number?

1   Yes
2   No
99 (DO NOT READ) REFUSED
97   Web blank

[NEW]

Ask if phone number is cell phone. X2aa=1.

X2ab. (X2ab)
Do we have permission to text you? Messaging and data rates may apply.

1   Yes
2   No
99 (DO NOT READ) REFUSED
97   Web blank

[NEW]

Ask if: SAMPTYPE=CELL and bPPD_Experiment=1.

X2a. We would like to send you a $10 gift card to thank you for your participation in this survey. Can you please provide your address so we can mail you the gift card?

IF NEEDED: This information will only be used to mail you the gift card.

INTERVIEWER: CONFIRM ADDRESS INFORMATION BEFORE CONTINUING

1   Name: _____

2   Street: _____
        3   City: _____
        4   State: _____
        5   Zip code:_____

[NEW]

Ask if: SAMPTYPE=ABS and bABS_Experiment=2 or 3 and selected.

X2b. We would like to send you a $10 electonic gift card as a thank you for completing the survey. Can you please provide your email address?

This information will only be used to email you the gift card.

INTERVIEWER: CONFIRM EMAIL ADDRESS INFORMATION BEFORE CONTINUING.

        Email: _____
        99   (DO NOT READ) REFUSED
        97   Web blank

Ask if: All

X3.

{Web/CATI: Thank you for completing the Massachusetts Health Insurance Survey./ That was my last question. If you'd like, I can provide you with the phone numbers for MassHealth or the Health Connector.}

{Web/CATI: /(IF NEEDED:

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 to 64 years of age	
4	if TARGET's age S6b1(a-y)=4 65 and older	

TFEM –
    0   if TARGET's sex at birth is male (S6aa=1 OR S7b-y=1)
    1   if TARGET's sex at birth is female (S6aa=2 OR S7b-y=2)
    2   otherwise

TFAM_COUNT – Number of people in TARGET's family.

APPENDIX C: 2023 MHIS COMMUNICATION

M1 – Invitation, Non-Hispanic

Center for Health Information and Analysis
An Agency of the Commonwealth of Massachusetts

Massachusetts Resident   <date>
<address1> <address2>
<city>, <state> <zip>-<zip+4>

Dear Massachusetts Resident,

Your household has been randomly selected for this year's **Massachusetts Health Insurance Survey.**

This important survey is conducted by the Commonwealth of Massachusetts. It collects information about the health of people in Massachusetts and about issues they may have getting health care. Your responses will represent many other households like yours, and the results may help people in your community.

We are not selling anything or asking for money. To thank you in advance for your participation, we are enclosing a $1 bill. This small gift is for you to keep whether or not you decide to participate.

_____

Complete the Survey Online

This survey should be completed by an adult in your household aged 18 or older who can answer questions about healthcare for everyone in the household.

1. Access the survey by typing the URL OR scanning the QR code from your mobile device.	**2.** Click or tap the survey icon.	**3.** Enter your secure access code.
mahealthsurveys.gov/mhis		<XXXXXX>

_____

If you do not have access to the internet or would prefer to complete the survey over the phone, please call 1-888-918-8176.

On behalf of the Commonwealth of Massachusetts, thank you for your participation.

Sincerely,

[signature]

Dr. Zi Zhang
Deputy Executive Director for Research
Center for Health Information and Analysis

> *Para completar la encuesta en español, visite mahealthsurveys.gov/mhis, o si no tiene acceso a Internet, llame al 1-888-918-8176 para hacer la encuesta por teléfono.*

Center for Health Information and Analysis   501 Boylston Street, Suite 5100, Boston, MA 02116   T: 617. 701. 8100   www.chiamass.gov

M1 – Invitation, High-Hispanic

Center for Health Information and Analysis
An Agency of the Commonwealth of Massachusetts

Massachusetts Resident   <date>
<address1> <address2>
<city>, <state> <zip>-<zip+4>

Dear Massachusetts Resident,

Your household has been randomly selected for this year's **Massachusetts Health Insurance Survey**.

This important survey is conducted by the Commonwealth of Massachusetts. It collects information about the health of people in Massachusetts and about issues they may have getting health care. Your responses will represent many other households like yours, and the results may help people in your community.

We are not selling anything or asking for money. To thank you in advance for your participation, we are enclosing a $1 bill. This small gift is for you to keep whether or not you decide to participate.

Complete the Survey Online

This survey should be completed by an adult in your household aged 18 or older who can answer questions about healthcare for everyone in the household.

1. Access the survey by typing the URL <u>OR</u> scanning the QR code from your mobile device.

mahealthsurveys.gov/mhis

2. Click or tap the survey icon.

3. Enter your secure access code.

<XXXXXX>

If you do not have access to the internet or would prefer to complete the survey over the phone, please call **1-888-918-8176**.

On behalf of the Commonwealth of Massachusetts, thank you for your participation.

Sincerely,

Dr. Zi Zhang
Deputy Executive Director for Research
Center for Health Information and Analysis

Center for Health Information and Analysis   501 Boylston Street, Suite 5100, Boston, MA 02116   T: 617. 701. 8100   www.chiamass.gov

Centro de Información y Análisis sobre la Salud
Una agencia de la Commonwealth de Massachusetts

Residente de Massachusetts   <date>

<address1> <address2>

<city>, <state> <zip>-<zip+4>

Estimado(a) residente de Massachusetts:

Su hogar fue seleccionado al azar para participar en la **encuesta sobre seguros médicos de Massachusetts** correspondiente a este año.

La Commonwealth de Massachusetts lleva a cabo esta importante encuesta con el fin de recopilar información sobre la salud de los residentes de Massachusetts y los problemas que pueden enfrentar para obtener atención médica. Sus respuestas representarán a muchos otros hogares como el suyo y los resultados podrían ayudar a las personas de su comunidad.

No vendemos nada ni estamos pidiendo dinero. Para agradecerle de antemano por su participación, adjuntamos un billete de $1. Esta pequeña gratificación es para usted, independientemente de que decida participar o no.

Cómo completar la encuesta en línea

La encuesta debe ser completada por un adulto de su hogar que tenga 18 años o más y que pueda responder preguntas sobre la atención médica de todos los integrantes de su hogar.

1. Para acceder a la encuesta, escriba la URL O escanee el código QR en su dispositivo móvil.

mahealthsurveys.gov/mhis

2. Haga clic en el ícono de la encuesta o presiónelo.

3. Su código de acceso seguro es.

<XXXXXX>

Si no tiene acceso a Internet o preferiría contestar la encuesta por teléfono, llame al **1-888-918-8176**.

Le agradecemos su participación en nombre de la Commonwealth de Massachusetts.

Atentamente,

Dr. Zi Zhang
Director Ejecutivo Adjunto para Investigación
Centro de Información y Análisis sobre la Salud

Center for Health Information and Analysis   501 Boylston Street, Suite 5100, Boston, MA 02116   T: 617. 701. 8100   www.chiamass.gov

M1 – Invitation, Non-Hispanic, 65+

CHIA.

Center for Health Information and Analysis
An Agency of the Commonwealth of Massachusetts

Massachusetts Resident   \<date\>
\<address1\> \<address2\>
\<city\>, \<state\> \<zip\>-\<zip+4\>

Dear Massachusetts Resident,

Your household has been randomly selected for this year's **Massachusetts Health Insurance Survey**.

This important survey is conducted by the Commonwealth of Massachusetts. It collects information about the health of people in Massachusetts and about issues they may have getting health care. Your responses will represent many other households like yours, and the results may help people in your community.

We are not selling anything or asking for money.

Complete the Survey Online

This survey should be completed by an adult in your household aged 18 or older who can answer questions about healthcare for everyone in the household.

1. Access the survey by typing the URL OR scanning the QR code from your mobile device.

mahealthsurveys.gov/mhis

2. Click or tap the survey icon.

3. Enter your secure access code.

\<XXXXXX\>

If you do not have access to the internet or would prefer to complete the survey over the phone, please call **1-888-918-8176**.

On behalf of the Commonwealth of Massachusetts, thank you for your participation.

Sincerely,

Dr. Zi Zhang
Deputy Executive Director for Research
Center for Health Information and Analysis

Para completar la encuesta en español, visite mahealthsurveys.gov/mhis, o si no tiene acceso a Internet, llame al 1-888-918-8176 para hacer la encuesta por teléfono.

Center for Health Information and Analysis   501 Boylston Street, Suite 5100, Boston, MA 02116   T: 617. 701. 8100   www.chiamass.gov

M2 – Reminder Postcard, Non-Hispanic

CHIA.

Center for Health Information & Analysis
An Agency of the Commonwealth of Massachusetts

Please don't miss your opportunity to participate in the Massachusetts Health Insurance Survey!

About a week ago, we mailed you a letter asking you to participate in this survey. You may recall a $1 bill as a small token of our appreciation. If you or someone in your household already responded, thank you!

If not, please have an adult aged 18 years or older in your household go to the website listed below to complete the survey.

1. Access the survey by typing the URL <u>OR</u> scanning the QR code from your mobile device.

mahealthsurveys.gov/mhis

2. Click or tap the survey icon.

3. Enter your secure access code.

<XXXXXX>

If you prefer to complete over the phone, call us at **1-888-918-8176**. Thank you.

Para completar la encuesta en español, visite www.mahealthsurveys.gov/mhis, o si no tiene acceso a Internet, llame al 1-888-918-8176 para hacer la encuesta por teléfono.

M2 – Reminder Postcard, High-Hispanic

CHIA. | Center for Health Information and Analysis
An Agency of the Commonwealth of Massachusetts

Participate in the **Massachusetts Health Insurance Survey!**	¡Complete la **Encuesta sobre seguros médicos de Massachusetts!**
1. Access the survey by typing the URL OR scanning the QR code from your mobile device. mahealthsurveys.gov/mhis	**1.** Para acceder a la encuesta, escriba la URL O escanee el código QR en su dispositivo móvil. mahealthsurveys.gov/mhis
2. Click or tap the survey icon.	**2.** Haga clic en el ícono de la encuesta o presiónelo.
3. Enter your secure access code. **<XXXXXX>**	**3.** Su código de acceso seguro es. **<XXXXXX>**
If you prefer to complete over the phone, call us at **1-888-918-8176**.	Si prefiere contestar la encuesta por teléfono, llame al **1-888-918-8176**.
If you already completed, thank you!	Si ya ha completado, ¡gracias!

M2 – Reminder Postcard, Non-Hispanic, 65+

Center for Health Information & Analysis
An Agency of the Commonwealth of Massachusetts

Please don't miss your opportunity to participate in the Massachusetts Health Insurance Survey!

About a week ago, we mailed you a letter asking you to participate in this survey. If you or someone in your household already responded, thank you!

If not, please have an adult aged 18 years or older in your household go to the website listed below to complete the survey.

1. Access the survey by typing the URL <u>OR</u> scanning the QR code from your mobile device.

mahealthsurveys.gov/mhis

2. Click or tap the survey icon.

3. Enter your secure access code.

<XXXXXX>

If you prefer to complete over the phone, <u>call</u> us at **1-888-918-8176**. Thank you.

Para completar la encuesta en español, visite www.mahealthsurveys.gov/mhis, o si no tiene acceso a Internet, llame al 1-888-918-8176 para hacer la encuesta por teléfono.

M3 – Reminder Letter, Non-Hispanic

Center for Health Information & Analysis
An Agency of the Commonwealth of Massachusetts

Massachusetts Resident   <date>
<address1> <address2>
<city>, <state> <zip>-<zip+4>

Dear Massachusetts Resident,

This is a reminder to complete the Massachusetts Health Insurance Survey.

Your participation is important!

This important survey collects information about the health of people in Massachusetts and about issues they may have getting health care. Your household was randomly selected to represent many other households like yours. The results may help people in your community.

What do you need to do?

Please have an adult in your household aged 18 or older complete this survey in the next few days. This person should be able to answer questions about healthcare for everyone in the household.

1. Access the survey by typing the URL OR scanning the QR code from your mobile device.

mahealthsurveys.gov/mhis

2. Click or tap the survey icon.

3. Enter your secure access code.

<XXXXXX>

If you do not have access to the internet or would prefer to complete the survey over the phone, please call **1-888-918-8176.**

On behalf of the Commonwealth of Massachusetts, thank you for your participation.

Sincerely,

Dr. Zi Zhang
Deputy Executive Director for Research
Center for Health Information and Analysis

Para completar la encuesta en español, visite mahealthsurveys.gov/mhis o si no tiene acceso a Internet, llame al 1-888-918-8176 para hacer la encuesta por teléfono.

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M3 – Reminder Letter, High-Hispanic

Center for Health Information & Analysis
An Agency of the Commonwealth of Massachusetts

Massachusetts Resident   <date>
<address1> <address2>
<city>, <state> <zip>-<zip+4>

Dear Massachusetts Resident,

This is a reminder to complete the Massachusetts Health Insurance Survey.

Your participation is important!

This important survey collects information about the health of people in Massachusetts and about issues they may have getting health care. Your household was randomly selected to represent many other households like yours. The results may help people in your community.

What do you need to do?

Please have an adult in your household aged 18 or older complete this survey in the next few days. This person should be able to answer questions about healthcare for everyone in the household.

1. Access the survey by typing the URL OR scanning the QR code from your mobile device.

mahealthsurveys.gov/mhis

2. Click or tap the survey icon.

3. Enter your secure access code.

<XXXXXX>

If you do not have access to the internet or would prefer to complete the survey over the phone, please call **1-888-918-8176**.

On behalf of the Commonwealth of Massachusetts, thank you for your participation.

Sincerely,

Dr. Zi Zhang
Deputy Executive Director for Research
Center for Health Information and Analysis

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Centro de Información y Análisis sobre la Salud
Una agencia de la Commonwealth de Massachusetts

Residente de Massachusetts   <date>
<address1> <address2>
<city>, <state> <zip>-<zip+4>

Estimado(a) residente de Massachusetts:

Este es un recordatorio para completar la encuesta sobre seguros médicos de Massachusetts.

¡Su participación es importante!

Esta importante encuesta recopila información sobre la salud de los residentes de Massachusetts y los problemas que pueden enfrentar para obtener atención médica. Su hogar fue seleccionado para representar a muchos otros hogares como el suyo. Los resultados pueden ayudar a las personas de su comunidad.

¿Qué debe hacer?

Pídale a un adulto de su hogar que tenga 18 años o más que complete esta encuesta en los próximos días. Esta persona debe poder responder preguntas sobre la atención médica de todos los integrantes del hogar.

1. Para acceder a la encuesta, escriba la URL O escanee el código QR en su dispositivo móvil.

mahealthsurveys.gov/mhis

2. Haga clic en el ícono de la encuesta o presiónelo.

3. Su código de acceso seguro es.

<XXXXXX>

Si no tiene acceso a Internet o preferiría contestar la encuesta por teléfono, llame al **1-888-918-8176**.

Le agradecemos su participación en nombre de la Commonwealth de Massachusetts.

Atentamente,

Dr. Zi Zhang
Director Ejecutivo Adjunto para Investigación
Centro de Información y Análisis sobre la Salud

M4 – Last Reminder Postcard, Non-Hispanic

Center for Health Information & Analysis
An Agency of the Commonwealth of Massachusetts

This is your **final reminder** to complete the
Massachusetts Health Insurance Survey.
Complete your survey today! Your opinions matter.

1. Access the survey by typing the URL <u>OR</u>
scanning the QR code from your mobile device.

mahealthsurveys.gov/mhis

2. Click or tap the survey icon.

3. Enter your secure access code.

<XXXXXX>

If you prefer to complete over the phone,
call us at **1-888-918-8176**.

If you already completed, thank you!

*Para completar la encuesta en español,
visite www.mahealthsurveys.gov/mhis, o si
no tiene acceso a Internet, llame al 1-888-
918-8176 para hacer la encuesta por
teléfono.*

M4 – Last Reminder Postcard, High-Hispanic

Center for Health Information and Analysis
An Agency of the Commonwealth of Massachusetts

This is your **final reminder** to complete the **Massachusetts Health Insurance Survey.** Complete your survey today! Your opinions matter.

1. Access the survey by typing the URL OR scanning the QR code from your mobile device.

mahealthsurveys.gov/mhis

2. Click or tap the survey icon.

3. Enter your secure access code.

<XXXXXX>

If you prefer to complete over the phone, call us at **1-888-918-8176**.

If you already completed, thank you!

Este es su **último recordatorio** para completar **la encuesta sobre seguros médicos de Massachusetts.** Complete la encuesta hoy! Sus opiniones son importantes.

1. Para acceder a la encuesta, escriba la URL O escanee el código QR en su dispositivo móvil.

mahealthsurveys.gov/mhis

2. Haga clic en el ícono de la encuesta o presiónelo.

3. Su código de acceso seguro es.

<XXXXXX>

Si prefiere contestar la encuesta por teléfono, llame al **1-888-918-8176**.

Si ya ha completado, ¡gracias!

Partial Conversion Letter, English

Center for Health Information and Analysis
An Agency of the Commonwealth of Massachusetts

Massachusetts Resident   <date>
<address1> <address2>
<city>, <state> <zip>-<zip+4>

Dear Massachusetts Resident,

A few weeks ago, an adult in this household started the **Massachusetts Health Insurance Survey** but was not able to finish it. If you are not the person who started the survey, please give this letter to that person.

We know your time is valuable. However, we encourage you to just take a few minutes to answer the rest of the questions on the survey. {**Please reconsider completing the survey. / We are offering a $10 gift card as a thank you for completing the survey.**}

What do you need to do?

1. Access the survey by typing the URL OR scanning the QR code from your mobile device.

mahealthsurveys.gov/mhis

2. Click or tap the survey icon.

3. Enter your secure access code.

<XXXXXX>

Your participation is important!

This important survey collects information about the health of people in Massachusetts and about issues they may have getting health care. Your household was randomly selected to represent many other households like yours. The results may help people in your community.

On behalf of the Commonwealth of Massachusetts, thank you for your participation.

Sincerely,

Dr. Zi Zhang
Deputy Executive Director for Research
Center for Health Information and Analysis

Para completar la encuesta en español, visite
www.mahealthsurveys.gov/mhis.

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Partial Conversion Letter, Spanish

CHIA.

Centro de Información y Análisis sobre la Salud
Una agencia de la Commonwealth de Massachusetts

Residente de Massachusetts   <date>

<address1> <address2>

<city>, <state> <zip>-<zip+4>

Estimado(a) residente de Massachusetts:

Hace unas semanas, una persona adulta de su familia empezó la Encuesta sobre seguros médicos de Massachusetts, pero no la pudo terminar. Si usted no es esa persona, le pedimos que le entregue esta carta a quien corresponda.

Sabemos que su tiempo es valioso. Pero le animamos a que se tome unos minutos para responder el resto de las preguntas de la encuesta. {Considere la posibilidad de completar la encuesta. / Como agradecimiento por completar la encuesta, le ofrecemos una tarjeta de regalo $10.}

¿Qué debe hacer?

1. Para acceder a la encuesta, escriba la URL O escanee el código QR en su dispositivo móvil.

mahealthsurveys.gov/mhis

2. Haga clic en el ícono de la encuesta o presiónelo.

3. Su código de acceso seguro es.

<XXXXXX>

¡Su participación es importante!

Esta importante encuesta recopila información sobre la salud de los residentes de Massachusetts y los problemas que pueden enfrentar para obtener atención médica. Su hogar fue seleccionado para representar a muchos otros hogares como el suyo. Los resultados pueden ayudar a las personas de su comunidad.

Le agradecemos su participación en nombre de la Commonwealth de Massachusetts.

Atentamente,

Dr. Zi Zhang
Director Ejecutivo Adjunto para Investigación
Centro de Información y Análisis sobre la Salud

Center for Health Information and Analysis   501 Boylston Street, Suite 5100, Boston, MA 02116   T: 617. 701. 8100   www.chiamass.gov

Center for Health Information and Analysis
An Agency of the Commonwealth of Massachusetts

Massachusetts Resident   <date>
<address1> <address2>
<city>, <state> <zip>-<zip+4>

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A few weeks ago, an adult in this household started the Massachusetts Health Insurance Survey but was not able to finish it. If you are not the person who started the survey, please give this letter to that person.

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<XXXXXX>

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