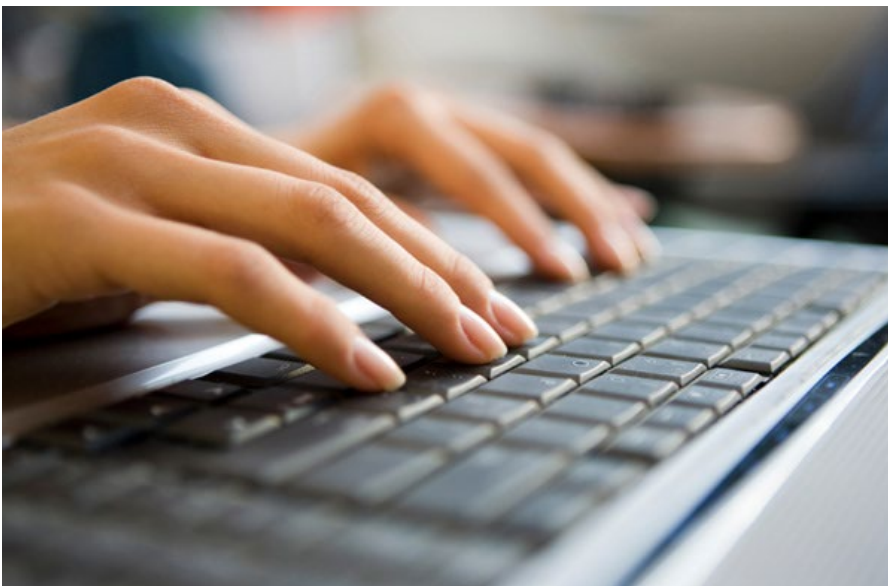




511 Congress Street
Suite 801
Portland, ME 04101

(207) 767-6440
www.marketdecisions.com



2024 Rhode Island Health Information Survey Technical Documentation

June 2024

Prepared For:
HealthSource RI & Freedman Healthcare

Prepared By:
Brian Robertson, PhD, Vice President of Research
Elisa Ungaro, MA, Research Manager
Xiaolei Pan, Research Analyst

Table of Contents

I. SAMPLING METHODOLOGY	1
II. QUESTIONNAIRE DESIGN	5
III. DATA COLLECTION	8
IV. TOTAL INTERVIEWS	14
V. SURVEY RESPONSE RATES AND FINAL DISPOSITIONS	14
VI. DATA CLEANING	17
VII. DATA IMPUTATION	19
VIII. DATA WEIGHTING	21
APPENDICES	26
Appendix 1. Defining Eligibility for Medicaid or Subsidies through the Exchange	26
Appendix 2. Defining the Underinsured	26
Appendix 3. Survey Questionnaire (Short Version)	26
Appendix 4. Survey Invitation Letter	26
Appendix 5. Survey Invitation Email	26
Appendix 1. Defining Eligibility for Medicaid or Subsidies through the Exchange	27
Appendix 2. Defining the Underinsured	29
Appendix 3. Survey Questionnaire (Short Version)	33
Appendix 4. Survey Invitation Letter	45
Appendix 5. Survey Invitation Email	48

I. Sampling Methodology

This section outlines the sampling process used during the 2024 Rhode Island Health Information Survey.

Target Population

The target population for the 2024 Rhode Island Health Information Survey (RI HIS) consisted of all persons in families living in the state of Rhode Island excluding persons residing in group homes with nine or more persons, group quarters such as dormitories, military barracks, and institutions, and those with no fixed household address (i.e., the homeless or residents of institutional group quarters such as jails or hospitals)¹. In addition, the sample excluded non-permanent residences and vacation residences (qualified households are those in which someone resided at least six months of the year).

Based on population estimates derived from the American Community Survey (ACS), the target population was 1,081,407 residents.

Since the sampling approach relied on the use of a dual frame Random Digit Dial (RDD) cell phone sample combined with a listed landline telephone sample, the sample population will only include those households (and residents therein) with working telephones.

Sample Definition

The stated goal of the sampling approach was to obtain statewide population information on health coverage and gathering data on several demographic, health care, and access variables. The sampling methodology was based on a dual frame telephone sample.

Per requirements, Market Decisions Research (MDR) completed over surveys with 3,000 Rhode Island households over the course of data collection.

Note that when MDR refers to ‘surveys’ throughout this document, we mean to imply completed surveys. Each completed survey contains data on multiple members of a household. Thus, the final individual level dataset contains information on more than 3,000 individuals. Additionally, this allowed for greater confidence in reporting on subgroups than would normally be associated with a given number of completes.

¹ The initial screening will code as ineligible such group quarters. In this survey, group quarters’ telephone numbers were considered those where a number of unrelated people living in more than one “unit” relied on the same telephone. An example of a unit in this case might be a fraternity house where all those residing in the house use the same phone.

Sampling Design

The sampling plan for the 2024 Rhode Island Health Information Survey is detailed in the document 2024 Rhode Island Health Information Survey Sampling Plan.

The overall strategy of MDR's sampling plan provided complete coverage of all Rhode Island households except for those without a telephone. The sample design relied on a dual frame listed landline and Random Digit Dialing (RDD) cell phone sampling methodology.

Statewide Sample: A statewide sample of listed landline and RDD cell phone numbers was generated at random. The statewide sample was generated in a ratio of five cell phone sample records to every one landline sample record.

Sample Source

Market Decisions Research used both the listed landline and RDD cell phone sample for the study generated by Marketing Systems Group (MSG). The sample was generated in a ratio of five cell phone numbers for every one landline number.

For the landline sample we relied on MSG's Listed Household (LHH). LHH Sample is a telephone and address sample drawn from commercial consumer databases licensed by MSG. These databases contain a wealth of household level characteristics and demographics including household composition such as age, gender, race, ethnicity, income, and other demographics. Listed household samples can be identified by demographics as well as a wide range of geography, from census block to national.

For the RDD cell we used MSG's Advanced Cellular Frame. This frame used enriched data sources used in today's fast-paced digital world. Data sources such as those used in identity authentication and validation of digital transactions, feed into ongoing updates of the Advanced Cellular Frame. These data sources are continuously updated and corroborated daily using over 200 authoritative sources. Accurately relating cellular telephone numbers to names and addresses has always been a challenge. With these new data sources, MSG's Advanced Cellular Frame now has information for over 90 percent of all assigned cellular telephone numbers in the United States. Using the cellular RDD frame as the base, name, address, geography, and demographics are appended to each cellular telephone number, where available and permissible (not restricted). The data used in the construction of the enhanced cellular frame is both CCPA and GDPR compliant.

Note that the data collection protocols used dual-mode online and telephone survey methodology. Records with an available address were first sent as an invitation to complete the survey online with telephone follow-ups. Records without an available address were contacted by telephone. For many of the cell phone records, MSG was also able to identify an email address. Email invitations and reminders were sent to those that had not responded to the letter invitation and/or telephone call attempts.

Surveying Under-represented Groups

The sample design will allow the identification of specific segments of the population to ensure sufficient data for analysis including:

- Asian households
- Black or African American households
- Hispanic households
- Lower income households
- Potentially uninsured residents

MDR will use the geodemographic information appended to both the landline and cell phone samples to target these groups of interest by prioritizing attempts to reach these groups.

Targeting Households with Uninsured Residents

Propensity scoring will serve as the methodology for identifying socio-demographic characteristics associated with individuals lacking insurance coverage, facilitating a more targeted approach to this population. Propensity scoring, a statistical technique employed in observational studies, aims to equalize the distribution of covariates between treatment and control groups. The primary objective is to match individuals in the treatment group with one or more counterparts in the control group who possess similar propensity scores. These scores are typically estimated using logistic regression.

Propensity scoring finds utility in sampling when the objective is to select a representative sample of individuals resembling a larger population in terms of group membership or behavior, such as the uninsured population.

Rhode Island Health Information Survey data will be leveraged to estimate the propensity, or predicted probability, of being uninsured based on geodemographic factors. These factors include:

- Age
- Gender
- Income
- Education Level
- Rurality
- Housing Status
- Marital Status
- Number of Children in Household

Following the calculation from the BRFSS dataset, the propensity scores will be appended to records in the survey sample file, aligning with geodemographic characteristics. This matching

process ensures a more nuanced understanding of the socio-demographic composition associated with individuals lacking insurance, enabling a targeted and informed approach in addressing this specific population.

Reducing the Number of Surveys with Seniors

A consistent issue with broad based telephone surveys is overrepresentation of older Americans. For several reasons, individuals aged 65+ are more likely to answer telephone surveys, crowding resources that could be dedicated toward completing surveys with younger respondents. This presents a problem in health insurance surveys not only because of concerns about representativeness, but also because most senior Americans receive health insurance through Medicare. Thus, their insurance status is neither unknown nor largely within the influence of the state of Rhode Island.

As such, MDR plans to limit the number of surveys done with households containing only individuals aged 65 and older (approximately 19% of surveys). To reduce the number of residents aged 65 and older that complete the survey, MDR will remove 75% of records in which the head of household is 65 or older from the sample prior to calling. If this is insufficient to keep the percentage of residents aged 65 and older in the data set approximately 19%, MDR will initiate a screening question after completing 1,500 surveys.

Fifty percent of randomly selected households will be asked the following screening question, “Is anyone who primarily lives in your household under the age of 65?” For cases where the respondent answers no, the household would be screened out and not asked to complete the survey. MDR will consult with Freedman Healthcare and Rhode Island staff as necessary to make any adjustments to the screening protocols.

II. Questionnaire Design

The survey questionnaire used during the 2024 Rhode Island Health Information Survey was based on the prior 2022 Rhode Island Health Information Survey. The final survey was designed in collaboration with Freedman Healthcare and HealthSource RI.

The initial steps in survey design focused on a review of the prior 2022 survey instruments. During this initial review, questions related specifically to the COVID-19 pandemic were eliminated.

A specific focus was to identify questions where answers were expected to be impacted by the COVID 19 pandemic. Questions were carried over from 2020 to assess whether the steps taken to combat COVID 19 had led to a person losing their health insurance coverage or had led to a gap in coverage.

In 2022 the survey included a question gathering data on government services and childcare among families with young children. These questions were dropped from the 2024 survey.

With the end of the health emergency due to COVID-19, changes were made to determinations of eligibility for Medicaid and hence impacted the way in which people signed up for and were enrolled in Medicaid. A sequence of questions was added to assess any challenges people had with this change in the enrollment procedures.

An initial draft of the survey instrument was submitted to Freedman Healthcare on December 7, 2023. The survey instrument was reviewed by staff at Freedman Healthcare and HealthSource RI. After incorporating changes, a final version of the survey was completed on January 31, 2024. The basic components of the 2024 survey gathered information from Rhode Island residents in the following areas:

1. Household Characteristics
2. Enumeration of the Household
3. Demographic Characteristics of each Household Member
4. Relationships Between Household Members
5. Type of Health Insurance Coverage
6. Private Health Insurance Coverage Characteristics
7. Experiences Enrolling in State Health Insurance Programs
8. Characteristics of the Uninsured
9. Awareness and Knowledge of State Health Insurance Programs
10. Barriers to Enrolling in Health Insurance Among the Uninsured
11. Efforts at Enrolling in Health Insurance Among the Uninsured
12. Interruptions in Insurance Coverage
13. Awareness of the State Health Insurance Mandate

14. Dental Insurance
15. Health Care Expenditures
16. Barriers to Receiving Health Care
17. Visits to Health Care Providers
18. Use of ER Services
19. Use of Mental Health Services
20. General Health Status
21. Employment Characteristics
22. Access to and Enrollment in Employer Sponsored Health Insurance
23. Income (family level)

Family Formation

One important concept that was incorporated into the Rhode Island Health Information Survey was that of family units. This concept is important because of the relationship between variables such as private or governmental insurance coverage and family level characteristics such as income. The survey logic was designed so that all members of a household were grouped into family units based upon their relationships. The survey was structured to ask questions about each family unit separately.

Family units were identified by establishing the relationship of each member of the household to the identified head of the household. This was done by first collecting the number of people in the household and a name or other identifier for each person. The household was then rostered, and basic demographic information was gathered on each household member (age, gender, marital status, ethnicity, race, level of education, and where the resident was born). The respondents were then asked to describe the relationship of each member of the household to the head of the household. Two follow-up questions then clarified marital relationships between household members besides the head of household and their spouse and any guardian/ward relationships. Based upon this sequence of questions, household members were classified into family units. In general, the rules to assign members to family units were:

1. The head of the household and his/her spouse were classified in the same family unit (always family unit 1).
2. Adults 19 years of age and older who were not married to the head of household were classified as a separate family unit.
3. Adults 18 years of age were initially classified as a separate family unit. An assessment was later made to determine if they should be classified into the same family unit as their parents (see below).
4. Married couples were classified in the same family unit. This included married couples involving someone under the age of 17.
5. Children aged 17 and younger were classified in the same unit as their parent(s)/guardians. If their parent(s) or legal guardian did not live in the household, they were considered a separate family unit. With the exceptions that:

- Children aged 17 and younger were classified into a separate family unit from their parents in cases where they were married and/or had a child of their own, no matter what their residence.
- 6. Adults that were 18 years of age were classified into a family unit based upon whether they were currently living with their parents, were married and/or had children. If they were not married and did not have any children, they were classified in the same family unit as their parents (if living in the same household). If they were married and/or had a child of their own, they were classified as a separate family unit (with their spouse and/or child)
- 7. Finally, those who were identified as the ward of another household member were classified in the same unit as that household member, unless prior rules determined the ward should be classified separately.

Bilingual Interviews

Once the survey was finalized, it was translated into Spanish to allow for bilingual interviewing. Translation of the survey was completed by MDR staff.

Survey Invitation/Pre-Notification Mailing

MDR sent a survey invitation/pre-notification letter to all sampled households with an available mailing address. These letters were designed to inform individuals of the survey, its purpose and importance, and to provide a survey link and household ID to allow the household to complete the survey online. In total, 94,000 households received a survey invitation letter.

The pre-notification letter indicated that the household was selected to participate in the 2024 Rhode Island Health Information Survey, the purpose of the survey, and why the household was selected, provide the link to an information website where the household can learn more about and access the survey, schedule an appointment time to be called if they preferred to complete the survey by telephone, or ask for their number to be removed from calling. The letter provided contact information for the study project manager. A copy of the survey invitation letter is provided in Appendix 4.

The household letters were mailed out two weeks prior to calling the telephone number. This allowed respondents to go online if they choose to complete the survey. After two weeks, sample records were released for calling.

Survey Website

A survey website was created for the 2024 survey at rihealthsurvey.com. The website was designed to provide any potential respondent with information about the RI HIS, its purpose, and the importance of participation. A FAQ page provided answers to commonly asked questions about the survey.

A survey access link for the online survey and a survey workbook were included as webpages and downloadable format, to assist respondents in completing the survey. The website included contact information for the respondent to reach out to the MDR team to answer any questions, schedule a telephone survey, or to simply be removed from future contacts. Finally, the website provided an outlet for HSRI to provide information to residents about important services, such as links to Rlte Care or health insurance through the Exchange. MDR worked with Freedman Healthcare and HSRI in developing the content for the website.

III. Data Collection

The data collection for the 2024 Rhode Island Health Information Survey began on February 1, 2024 and was completed by May 12, 2024. A total of 3,525 households completed the survey online or were interviewed during this period for the core survey.

Data collection for the 2024 RI Health Information Survey used a dual mode data collection protocol.

- For those without a mailing address, calls began immediately. This included records from the listed land line telephone same and the portion of the cell phone sample that did not include address information (unlisted cell).
- An initial survey invitation letter was then sent to all households with a mailing address in the sample. The letter included a link and unique household ID to complete the survey online. Invitation letters were sent out weekly in batches of approximately 12,000 during data collection. In all, 94,000 invitation letters were mailed.
- After two weeks, telephone follow-up calls began to households sent the invitation letter. During the calls, respondents were given the option to complete the survey by telephone or to complete the survey online. If they preferred to complete the survey online, an email was sent to the respondent providing the survey link and unique household ID. At this point the record was put on hold for further calling.
- Once all invitation letters had been sent and attempts were made by telephone, a mail invitation was sent to any households that had not previously completed the survey for which an email was available. In total, 63,258 unique email addresses were sent invitations. A reminder email was sent approximately one week after the initial email invitation.
- To increase survey response among key groups (the uninsured and race/ethnic minority groups), a second invitation letter was sent to 1,430 select non-respondents.

Data Collection Schedule

The following describes the data collection schedule broken down into mailings and email reminders.

Pre-notification Letter Mailings Schedule:

- Mailing List 1 sent on February 21, 2024
- Mailing List 2 sent on February 21, 2024
- Mailing List 3 sent on March 1, 2024
- Mailing List 4 sent on March 8, 2024
- Mailing List 5 sent on March 15, 2024
- Mailing List 6 sent on March 22, 2024
- Mailing List 7 sent on March 29, 2024
- Mailing List 8 sent on April 5, 2024
- Reminder Mailing sent on April 12, 2024

Email reminders Schedule:

- Batch 1 Initial Emails sent on April 11, 2024
- Batch 1 Reminder Emails sent on April 15, 2024
- Batch 2 Initial Emails sent on April 15, 2024
- Batch 3 Initial Email sent on April 16, 2024
- Batch 3 Reminder Emails sent on April 22, 2024

Survey Invitation Mailings

The 2024 survey relied on the use of pre-notification letters throughout the data collection period. This letter provided basic information about the survey and was intended to help solicit a response by building legitimacy. The letter included a link to the online survey along with the unique household ID to access the online survey. In all communications to households, the research team referred to this survey as the Rhode Island Health Information Survey rather than the Rhode Island Health Information Survey, to prevent unwanted bias and ensure respondents were not deterred by the mention of health insurance within pre-notification letters.

It also included a contact number for the project manager if individuals wanted to request more information. It also provided a web address where respondents could learn about the survey, verify its legitimacy, sign up to participate or have their number remove from calling. In total, 94,000 records were sent this letter. A copy of the pre-notification letter is included within Appendix 4.

Survey Email Invitations

After receiving the pre-notification letter and initial calls to complete the survey, unresponsive households with available email addresses were sent a follow up email inviting them to

complete the survey online. Households were split into three batches and sent email invitations according to the schedule described above. In total, 102,743 emails were sent. A copy of the email invitation is provided in Appendix 5.

Online Survey Data Collection

Online survey data collection was conducted utilizing MDR's Voxco A4S online survey software. The software integrates with our Computer Assisted Telephone Interviewing (CATI) software to track survey responses across online and telephone data collection; if a person completed the survey online this was noted in the sample file and no calls were made to the household.

A survey invitation was mailed to all sampled households with an available address. The survey invitation letter described the purpose of the survey and provided a link to the survey site along with the unique ID number assigned to the household to access the survey. This unique ID number was required to access the online survey, those without an ID were not able to access the survey.

As with the telephone survey, the online survey was programmed in both English and Spanish.

Support for Completing the Survey Online

In developing and administering the online version of the survey it is important to keep in mind that the RI Health Insurance Survey is a complicated survey. The survey asks respondents to provide a great deal of information not only about themselves but about all household members. The questions include terms that respondents must understand to answer questions appropriately. Based on experience conducting similar online surveys, we understand that it is important to provide support to respondents.

MDR implemented methods to provide needed support. These supportive elements included the following.

- A dedicated survey website to provide survey background and answer FAQs.
- A survey workbook that provided detailed information on the content of the survey, including definitions of key terms, and guidance on how to access the information necessary to complete the survey.
- Dedicated help staff that were available to answer respondent questions and help them complete the survey online or by telephone. All communication with respondents included contact information to allow them to reach out to MDR to receive assistance either by telephone or by email.

MDR provided technical support to survey respondents. Technical support handled technical issues that occurred with respondents completing the survey online. Contact information for resolution of technical issues was provided in all communications.

Review of Online Survey Responses

Self-administered surveys, whether paper or online, are traditionally more economical and effective but also come with challenges. For instance, without an interviewer present to monitor the quality of responses, respondents can speed through questions providing inaccurate information. MDR will implement steps in our online survey to mitigate such circumstances and will implement strategies to identify and remove cases with inaccurate information.

One important strategy is to allow respondents to complete the survey at their own pace; not requiring they complete it in one sitting. Our A4s software is designed to allow people to partially complete a survey, close it down, and come back to it later, even multiple times later. When respondents re-enter the survey, they are taken to the point they last accessed.

Current research indicates that online surveys should include several layers of quality checks (in addition to the standard programming of skips, verification of important value ranges, etc.). MDR uses a comprehensive series of checks to assess data quality and in cases where issues were found, the survey response was deleted from the data set.

Telephone Survey Data Collection

MDR used a response telephone data collection protocol. The approach is designed to maximize the representativeness of the data as well as achieving the highest possible survey response. At its core are rules that govern the process of data collection by setting the number of callback attempts, call scheduling, and other data collection activities. The other key aspect is that these rules are not universally applied to all records but rather adapted best to meet the overall needs of sampling.

Typically, telephone data collection protocols use a standard set of rules and apply these rules equally to all sample records. For example, all numbers are called a minimum number of times. The weakness of this approach is that it treats easy to reach and harder to reach populations the same. This results in a survey process that tends to complete the most surveys with the easiest to reach and most cooperative survey respondents (which does maximize response). In the end, however, the dataset has certain groups that are under-represented (harder-to-reach like minorities or lower income residents) while others are over-represented which tends to add bias and decrease the accuracy of the data (how representative the data is of the actual population). The example seen in most telephone surveys is that survey respondents tend to have a higher percentage of residents aged 65 and older than observed in the population.

Further, since the data collection protocol also includes an online survey, there is a further risk of having certain groups under-represented as those most likely to complete an online survey tend to be more educated and have a higher income.

Responsive data collection protocols are designed to target under-represented groups more effectively. In practice, it takes data collection resources and allocates these resources in a fashion designed to maximize the representativeness of the data rather than the overall survey response. It attempts to increase the number of surveys completed among the more difficult survey respondents by using some of the resources that would have been assigned to complete surveys among groups most likely to respond.

The other key benefit of such a data collection protocol is that it can be adjusted at any time during the data collection process; it isn't a static protocol arbitrarily established at the beginning of data collection. The protocols can be adjusted at any time to increase or decrease the effort dedicated towards specific sample records. Further, these changes can be implemented rapidly based on changing conditions.

Data Collection Protocols

To provide the highest quality data, a rigorous data collection strategy was used in conducting this survey. This included the following:

- Rotation of call attempts across all seven days at different times of the day according to industry standards for acceptability and legality in telemarketing

For Landline Phones:

- A minimum of 7 callback attempts per telephone number at the screener level (before number was identified as a qualified residential number)
- 2 attempts to convert refusals (the exception were those households that made it clear they were not to be contacted again)
- A minimum of 5 callback attempts for "no answer" or answering machine only telephone non-contacts and for inappropriate contacts (contact only, no most knowledgeable adult home), and scheduled callback appointments.
- A brief message with a toll-free number was delivered to the answering machine only attempts to encourage participation (messages were left on the first answering machine dispositions). This included providing the name and contact number for the project manager as well as the web address of an information website.

For Cell Phones

- A minimum of 5 callback attempts per telephone number at the screener level (before number was identified as a qualified residential number)
- 1 attempt to convert refusals (the exception were those households that made it clear they were not to be contacted again).
- A brief message with a toll-free number was delivered to the answering machine only attempts to encourage participation (messages were left on the first answering machine

dispositions). This included providing the name and contact number for the project manager as well as the web address of an information website.

Per industry standards, interviews were only conducted during the hours from 9 AM to 9 PM and seven days a week. The only exceptions were specific, scheduled appointments outside this range.

Throughout data collection, MDR analyzed survey data and looked at the demographic profile of the survey respondents focusing on households with race and ethnic minorities and lower income households. This will identify groups that are under-represented in the data and may need additional data collection efforts. In the sample, such groups are identified by geodemographic information that is included by MSG in the sample files they generate. MDR adjusted our data collection protocols to prioritize households that were identified in the sample as more likely to include race or ethnic minorities or have incomes below the state median.

Respondent Selection

The adult in the household aged 18 and older that is most familiar with the health insurance coverage of the members of the household was asked to complete the survey either online or by telephone. The respondent was asked to answer questions regarding all members of the household. That is, the survey gathered data on all household members.

There will be instances where a respondent was not familiar with everyone residing in the household, such as with a boarder or renter. Our survey design incorporated an option that would allow a respondent to exclude a household member for which they felt they had insufficient knowledge to answer questions. This will avoid burdening the respondent with questions about a person for which they lack knowledge.

Survey Incentives

To elicit participation, MDR provided a \$20 gift card incentive for completing the survey (either online or by telephone). Incentives were provided to respondents via email or, as requested, arranged via mail to respondents without an email.

Responding to Rhode Island Residents Inquiries about the Survey

One strategy that was used to increase response rates was providing reluctant residents with the web address for an informational website created about the survey. This website offered information about what the survey asked and allowed residents to remove themselves from being called or volunteer to take the survey at a time that worked well for them. Respondents were informed about the website during calls, the address was left as a part of the voicemail message and the web address was also included in the pre-notification letter.

Scheduling Callback Appointments

The CATI (Computer Assisted Telephone Interviewing) system used by MDR during this survey is designed to allow interviewers to set callback appointments for a specific date and time. It is also designed to allow a respondent who had begun the survey to complete it later. This is done so that the respondent can complete the survey at a time that is most convenient for him or her. The interviewer entered the date and time the respondent provided, and the respondent is then contacted at that time.

Survey Length

The 2024 Rhode Island Health Information Survey required respondents to provide information about themselves and other family members. The goal was to obtain accurate information about all household members while limiting the time commitment required of the respondent. On average, online survey respondents required 25.1 minutes to complete the survey. The average time to complete a telephone interview was 31.5 minutes.

Exclusion of Household Members

In multiple-family households, it was expected that there would be cases where the respondent would not be able to provide accurate data on every person living in the household. During the survey, the respondent was asked to identify any household member for which he/she felt accurate information could not be provided. During the interview, the respondent was not asked questions relating to these individuals. Over the course of data collection, 345 household members were excluded since the respondent did not have sufficient knowledge to answer questions about these household members. This represents 4% of the total number of members residing in the households contacted during data collection.

IV. Total Interviews

A total of 3,525 households completed the survey online or by telephone with 2,507 completing the survey online and 1,018 completing the survey by telephone. Data quality checks eliminated 269 completed surveys with issues or concerns about the data (248 online surveys and 21 phone surveys).

The final data includes responses from 3,256 Rhode Island Household with information on includes information on 8,459 Rhode Island residents.

V. Survey Response Rates and Final Dispositions

A total of 2,507 households responded to the survey online providing a yield of 2.7%. The yield represents the total number of households completing the survey online divided by the total

number of households sent a survey invitation letter and/or an email invitation. The response, cooperation, and refusal rates to the 2024 Rhode Island Health Information Survey are presented in Table 1 for the telephone survey component of data collection.

The rates reported are based on the standard formulas developed by the American Association for Public Opinion Research (AAPOR). The reported response rate is based on AAPOR RR3 formula. This final sample disposition report for the telephone survey component of data collection is presented in Table 2.

Table 1. Summary of Response, Cooperation, and Refusal Rates by Survey Component and Strata

	Response Rate	Respondent Cooperation Rate	Respondent Refusal Rate
Total	11.4%	86.6%	1.6%

Table 2. Final Sample Disposition Codes

Complete	1,020
Partial - Callback	276
Terminate partial survey	290
Cell Phone < 18	24
Scheduled Callback	2,304
Hard Respondent Refusal	40
Soft Respondent Refusal	45
Hard Household Refusal	1,035
Soft Household Refusal	2,065
Contact Only	1,409
Not Available in Time Frame	110
Language Barrier Not Spanish	405
Not available at this number	3
Group Quarters or Institution	15
Not a Permanent Residence	699
Vacation Home	2
Business	857
Hang Up	17,128
Fax or Modem	189
Disconnected Phone	25,564
Other	1,387
Not a Working Number	194
Number Has Been Changed	21
Temporarily Out of Service	454
No Ring	422
Fast Busy	98
Answer Machine	57,704
Busy	100
No Answer	2,097
Total	117,595

VI. Data Cleaning

A detailed analytical plan for the 2024 Rhode Information Health information Survey is provided as a separate document: 2024 Rhode Island Health Information Survey Analytical Plan.

Any survey process can result in erroneous reporting or recording of data. To ensure the accuracy of the data, MDR conducted data consistency checks on the data files as part of the data file preparation and analysis. The first stage of this process involved checking all data to ensure that responses were consistent. This process involves ensuring that respondents were asked appropriate questions based upon earlier responses to variables, that skip patterns were followed based upon appropriate responses to earlier items, and that respondents provided consistent answers to questions on related concepts.

The initial steps of data consistency checks were programmed into the survey instrument themselves. These included verification items on key issues. An example includes the verification of Medicare coverage as opposed to Medicaid coverage among those under 65. The programmed data checks ensured that respondents were directed to appropriate questions and that answers to some key issues were verified.

There are three possible sources of data errors that the survey programming could not fully account for in its design. These were:

1. Respondents, who after completing questions or entire sections of the survey, changed their minds about the answer they had provided.
2. Respondents, whether due to lack of information or unfamiliarity, provided inaccurate information.
3. Respondents who answered a question or questions in one fashion and then provided a different answer to a related question later in the interview.

In the first case, interviewers could back up the survey instrument and enter the corrected information. The CATI software used by MDR would then correct answers based upon new branching or skip patterns.

The second case is largely related to knowledge of specific insurance plans, primarily government sponsored plans, which provide coverage to family members. The two most notable examples were respondents who confused Medicare and Medicaid coverage, and respondents that confused Medicaid coverage with coverage through private health insurance.

Final Data Quality Checks

A series of final data quality checks were run during the processing of the survey data. These checks were used to identify any cases where there were concerns about the quality of the data

and how they might impact key survey measures. In total, 269 surveys were eliminated during data processing due to issues with the survey response.

Cases were deleted from the data set if key information was not provided by a respondent or if there were inconsistencies in responses. These quality checks focused on key survey measures and variables that were used in weighting the data set.

- The respondent did not provide responses (other than don't know or refused) for all or a majority of household members for the key demographics of age and gender.
- The respondent did not provide responses (other than don't know or refused) for a majority of members of the household for race, ethnicity, marital status (for those 16 and older), and/or education (those 17 and older).
- When asked if there were members of the household for which they could not answer survey questions, the respondent excluded members of their immediate family (spouse and/or non-adult children).
- The respondent indicated don't know or refused to provide their type of health insurance coverage.
- The respondent indicated don't know or refused to provide the type of health insurance coverage for members of their immediate family (spouse and/or non-adult children) when it is reasonable to assume they should know this information. The program did allow the respondent to indicate don't know to other members residing in the household where it was reasonable they might not know this information. In such cases these other household members were excluded from the remainder of the survey.
- The presence of inconsistencies in the data set indicates that the respondent was not providing accurate information. Such cases include cases where a child was older than a parent or grandparent, the age span between a parent and child was unlikely (for example a 20-year-old parent have a 16-year-old son), a person had more than one spouse, there were other inconsistent relationships such as two children of the respondent married to each other, or a child married to a grandparent or grandchild.

Finally for the online survey, the length of time that the respondent took to complete the survey was assessed. This was used to evaluate whether the respondent simply "Sped" through the survey to collect the incentive. One challenge in assessing the length of survey was that its length varied greatly based on the size of the household and the type of health care coverage. Thus, there was set standard to evaluate the response time for each respondent (typical metrics eliminate respondents that were 3 or more standard deviations below the average survey time). As a proxy, we examined the length of time for completing the survey based on the size of the household comparing the time for each respondent to complete the survey against households of similar size and looking as cases that fell three standard deviations below the average for that household size. In this case no cases fell outside this threshold.

VII. Data Imputation

Data Imputation

Given the nature of the survey data collected, it was decided that missing values would be imputed on certain key values, particularly weighting variables. Data imputation is a procedure that determines the likely value of a given variable based upon other known characteristics of the respondent. Imputation relies on answers to other questions to derive the most likely value for the missing value. MDR used data imputation on several of the variables in this research. In the cases where a variable was imputed, the final dataset contains a copy of the variable with imputed values, a copy of the original variable with missing values retained, and a flag variable which identifies which values were imputed and the method used. The research staff used three primary methods of data imputation.

1. Logical Imputation

This step involved an assessment of answers to other questions (within the case) to determine if it was possible to deduce the answer to a question with a missing value. In some cases, this was done by evaluating a question that was very similar in nature and content. In other cases, it involved assessing several related questions to derive the most likely value. The initial survey design anticipated this approach, somewhat. Several consistency checks were programmed throughout the survey on certain key variables. These consistency checks were used during imputation to impute missing values to certain key variables.

2. Donor Substitution Imputation – Hot Deck Imputation

Hot deck imputation relies on the fact that individuals with similarities on several variables are likely to be similar on those variables with missing values. The process involves identifying an individual with similar values on other variables and substituting this person's response for the missing value. In each of these cases, several variables were used to identify those respondents that were like a respondent with a missing value for a specific variable. The types of variables that were used to define characteristics that are "similar" varied depending on the nature of the variable to be imputed. These included key demographic characteristics and variables with a high correlation to the variable imputed. Once defined, the process of imputing the missing value relied on replacement. Based upon defined characteristics, the file was sorted in "serpentine" fashion (alternating ascending and descending sorts on variables). The value from the "nearest neighbor" was then used to replace that of the missing value.

3. Regression-Based Imputation

For certain variables, such as income, the use of regression-based imputation was the most suitable method. This process relied on regression analysis to predict the value of the variable. The use of analytical software that is designed to conduct missing values analysis was involved. As with hot deck imputation, the number and type of variables used during regression analysis varied by the variable that was imputed but this also relied on key demographic variables and those correlated with the variable containing missing data.

The primary variables that were imputed were those used in weighting the survey data (gender, race, and ethnicity). In addition, income was also imputed. This was important since missing values would cause problems with the post stratification weighting of the data. Those cases with missing values would not have appropriate adjustments made and this would lead to an increase in variance since their weights would differ from those cases with complete demographic data. The data imputation process “estimated” any missing values in those variables used in post stratification weighting to minimize their impact on data quality. The method of imputation used for these variables is as follows.

Table 3. Imputed Variables and Methods

Sex	Logical Imputation
Gender Identity	Logical Imputation
Age	Logical and Hot Deck Imputation
Ethnicity	Logical and Hot Deck Imputation
Race	Logical and Hot Deck Imputation
Income	Regression Based Imputation
Company size (# of employees)	Logical and Hot Deck Imputation
Medical Expenditures	Regression Based Imputation
Monthly Premium (those with private health insurance)	Regression Based Imputation
Annual Deductible those with (private health insurance)	Regression Based Imputation

VIII. Data Weighting

The data has been weighted to adjust for non-response and also to match the state profile based upon sex, age, race, ethnicity, area of residence, and income. Weighting adjustments were also made for households based upon their access to landlines, cell phones, or both. The weighting procedures involved two primary phases: design weights and raking weighting adjustments.

Market Decisions Research developed design weights based on the probability of selection within a frame with an adjustment for those potentially in two frames. Additionally, MDR incorporated a weighting adjustment for the cell phone only population.

An initial sample weight was assigned to each record in the sample file. This base weight was equal to the inverse of the probability of selecting a number. Since the sample was drawn statewide, all records started with the same base weight.

Raking Weighting Adjustments

The purpose of raking is to standardize the weights so they sum to the actual population within Rhode Island as well as summing to the population by area, age, gender, race, ethnicity, income, and whether the household was a cell phone only household. Raking adjustments were made by these various demographic characteristics.

Demographic data on population counts was developed from American Community Survey (ACS) single year estimates, from the US Census Bureau. The data for the cell phone only population was provided by Marketing Systems Group, which provided estimates of cell phone only households for each Rhode Island county.

An initial review of survey and census data was conducted to determine the appropriate steps in the weighting process. The general guideline in post-stratification weighting is that no cell should have fewer than 20 cases. The initial post-stratification weighting was done in six steps:

1. Age by gender by county of residence
2. Race by age by gender
3. Ethnicity by age by gender
4. Income by age by region of the state (Providence County, other counties)
5. Enrollment in a health plan purchased through HSRI

The categories used in the weighting adjustments are provided in Table 4.

The initial raking weighting adjustment applied to the dataset was age within gender within county. This initial weight adjusted the survey data to match the population counts by age cohort and gender within each county within Rhode Island. An adjustment factor was calculated within each county by age by gender cell:

$$\text{Adj(AS)} = \text{AS}(\text{area} - \text{census} - \text{actual}) / \text{AS}(\text{area} - \text{survey})$$

Where:

- Adj(AS) was the age cohort by gender weighting adjustment within each county
- AS (area – census – actual) was the actual population within a specific county by age cohort by gender cell
- AS (area – survey) was the weighted survey count within a specific county by age cohort by gender cell (weighted by final family weight)

Adjustments were made to this initial person level weight to adjust for the actual number of residents by race (race by age by gender), then ethnicity (ethnicity by race by gender), income (income by age by area), an adjustment to account for cell phone only households, and an adjustment for enrollment in an exchange plan.

Since the application of any weighting adjustment to the initial person level weight causes the age/gender/county survey counts to vary, raking was utilized. That is, once the race, ethnic origin, income, and other adjustments were applied, the survey counts of age by gender by county did not match the actual population counts. The raking process alternates making weighting adjustments by variables for which there are only marginal counts (for example, weighting by age/gender/county and then by race/age/gender) by making alternating adjustments. Thus, the initial person level weight was adjusted by race, ethnic origin, income, and cell phone only households all in separate adjustments. Then, this new weight was adjusted by age/gender/county, so it again matched the demographic profile of Rhode Island by these characteristics. This weight was then adjusted to match the counts based on the other five weighting adjustments so that the survey counts now accurately reflect the population based on race, ethnicity, income, exchange health plan enrollment, and whether they were a cell phone only household. The raking process was repeated until the weighting adjustments converged and the weighted counts matched the state demographic profile by age, gender, county of residence, race, ethnic origin, income, enrollment in a private health plan obtained through the exchange, and the presence of cell phone only households.

Table 4. Variables Used in Raking Weighting Adjustments

Area	
	Bristol County
	Kent County
	Newport County
	Providence County
	Washington County
Age	
	0-9
	10-17
	18-34
	35-49
	50-64
	65+
Gender	
	Female
	Male
Ethnic Origin	
	Hispanic
	Non-Hispanic
Race (based on primary race)	
	White
	African American
	Asian
	Other Race or More than One Race
Family Income (as a percentage of Federal Poverty Level)	
	< 100%
	100% to 199%
	200% to 299%
	300% to 399%
	400% to 499%
	500%+
Exchange Plan Enrollment	
	Person enrolled in a private health plan obtained through HSRI
	Person not enrolled in a private health plan obtained through HSRI

Post Stratification Weighting Adjustments for Enrollment in Medicaid and Other State Sponsored Programs

An issue that is common in all studies that try to measure health insurance coverage is that the population enrolled in Medicaid and other state health insurance programs is generally undercounted. There are several reasons that might account for this, such as a greater difficulty in reaching these populations given their lower incomes, and reluctance among some respondents to report enrollment in such programs. This is often referred to as a response driven by social desirability. Among many people, there may be a sense of embarrassment associated with enrollment in a state sponsored health program. Another aspect is confusion of state sponsored insurance programs with Medicare or private insurance. Survey design elements were incorporated to identify cases where there was potential confusion.

To determine the potential for an undercount of Medicaid in the survey data, an analysis was undertaken using available administrative data on program enrollees. Based on administrative data, a total of 322,435 Rhode Island residents were enrolled in RItE Care or other Medicaid programs. After post-stratification weighting, the survey estimates of the population enrolled in RItE Care or other Medicaid programs was 299,783 Rhode Island Residents. This represents an undercount of 7%, which is significantly lower than the undercount during the 2022 survey which was 25%.

Given this undercount, though not as large as in 2022, post stratification weighting adjustments were recalculated to adjust for the undercount of enrollees in RItE Care and Medicaid. These adjustments were based on the number of enrollees calculated from the administrative records. A post-stratification weighting adjustment was made by enrollment in these programs by age by gender to correct for this undercount. The adjustments were made at the state level.

This Medicaid weighting adjustment was then included in the raking process with the six other weighting adjustments so that a total of seven adjustments were made during the raking process:

1. Age by gender by county of residence
2. Race by age by gender
3. Ethnicity by age by gender
4. Income by age by region of the state (Providence County, other counties)
5. Enrollment in a health plan purchased through HSRI
6. Medicaid program enrollment by age by gender

The raking process was repeated until the weighting adjustments converged and the weighted counts matched the state demographic profile by age, gender, county of residence, race, ethnic origin, income, enrollment in a private health plan obtained through HSRI, the presence of cell phone only households, as well as enrollment in a Medicaid program.

Population Size Reflected in the Final Dataset

The weighted dataset is designed to provide data that can be generalized to the non-institutionalized population of Rhode Island (based on ACS estimates) and to allow statements to be made about the state as well as for various sub-populations with a known standard error and confidence. The population size reflected in the final dataset is 1,081,407 residents.

Appendices

Appendix 1. Defining Eligibility for Medicaid or Subsidies through the Exchange

Appendix 2. Defining the Underinsured

Appendix 3. Survey Questionnaire (Short Version)

Appendix 4. Survey Invitation Letter

Appendix 5. Survey Invitation Email

Appendix 1. Defining Eligibility for Medicaid or Subsidies through the Exchange

Defining Eligibility for the Uninsured and Potential Eligibility for those with Private Health Insurance

Under the guidelines in the Patient Protection and Affordable Care Act (PPACA), uninsured as well as some privately insured residents are eligible for coverage under the expanded Medicaid program or eligible for some level of premium assistance (tax credits) to assist in purchasing health insurance through the Health Exchange. The new eligibility rules in Rhode Island extend coverage in Medicaid to most adults with incomes under 139% of FPL (including the 5% income offset). Children in families with incomes of 265% of FPL or less would also potentially be eligible for coverage through the state Medicaid program. In addition, those who are pregnant are eligible for Medicaid if their income is less than 258% of FPL.

For those residents that do not meet the income requirements for Medicaid coverage, the PPACA provides tax credits that reduce premium costs. This includes those in families with incomes up to 400% of FPL. Adults in families with incomes between 139% and 400% of FPL (including a 5% income offset) and children in families with incomes between 266% and 400% of FPL who purchase coverage through the Health Insurance Exchange will be eligible for a tax credit to reduce the cost of coverage that began in 2014.

Based on income guidelines, adults with a family income of less than 139% of Federal Poverty Level (FPL) and children in families earning less than 266% FPL are eligible for coverage through the Medicaid Program. Those not meeting the eligibility requirements for Medicaid but still residing in families earning 400% FPL or less are eligible to receive help to purchase insurance through the Health Exchange (exchange subsidies).

Eligibility for Medicaid or Exchange Subsidies

	Income Level for Eligibility Adults	Income Level for Eligibility Children
Eligible for Medicaid	< 139% FPL	< 266% FPL
Eligible for Subsidies to Purchase Exchange Plan	139% - 400% FPL	266% - 400% FPL
Not Eligible for Subsidies to Purchase Exchange Plan	> 400% FPL	> 400% FPL

Using these general income guidelines, survey data were used to model eligibility for Medicaid or purchasing health insurance through the Exchange among the uninsured. The analyses were based solely on income determinations of eligibility based on self-reported family income. They did not factor in other factors that may impact actual eligibility (such as potential access to other health insurance) or impact income which would affect either eligibility for Medicaid or the level of subsidy through purchase through the Exchange (such as additional state based income offsets that would reduce income in making determinations of eligibility).

Appendix 2. Defining the Underinsured

After the passage of the Affordable Care Act and many state innovations that work toward expanding health care coverage, the population of uninsured individuals is at an all-time low. Thus, it has become more important for states interested in the problems of medical expenses and their effects on individuals to begin to study and understand the under-insurance phenomenon. MDR has begun reporting on under-insurance as a standard part of all state health insurance surveys and has developed new methods of computing and understanding under-insurance that presents a more robust picture. MDR will calculate a series of under-insurance variables for VT DPH and include them both in the data set provided and the data compendium.

Under-insurance is a status that threatens individuals in a similar way to uninsurance. While an under-insured individual has an insurance policy, this policy is not robust enough to either cover current medical expenses sufficiently or leaves the individual and their family in danger of excess medical expenses should a serious medical condition or illness emerge. Under-insured individuals have insurance coverage, so are not taken into account in traditional measures of insurance status. However, if the root problem of uninsurance is excess exposure to unaffordable medical expenses, the under-insured are often equally at risk.

MDR calculated the under-insured population of Vermont in several ways. The first of these is known as the Commonwealth Fund model. The second of these we call the MDR model and was developed by Market Decisions Research in order to account for some perceived blind-spots in the Commonwealth Fund model.

The most commonly used model to understand the under-insured population is the Commonwealth Fund model. This model defines under-insurance in largely economic terms. An individual can be under-insured if either of two conditions are true. If an individual has current medical expenses, excluding the cost of insurance premiums, equal to or greater than 10% of household income (or equal to or greater than 5% of household income if they are below 200% of FPL) or a deductible equal to or greater than 5% of household income, that individual is considered under-insured. That is, either their current or their potential future medical expenses are more than what their income could bear.

The Commonwealth Fund Model of Underinsurance

Variables used in calculating underinsurance	
Medical expenses	Condition
<200% FPL	Out of pocket costs \geq 5% of household income
\geq 200% FPL	Out of pocket costs \geq 10% of household income
Private insurance deductible	Condition
Privately insured	Deductible \geq 5% of household income

The MDR model takes the Commonwealth Fund model and expands upon it in several ways. The first is by expanding the markers of under-insurance to reports of deferred care or difficulty paying medical bills. While these are the dangers that under-insurance purports to measure, the Commonwealth Fund model’s purely economic perspective does not include them. A deferred doctor’s appointment has a cost of \$0, and thus is not factored into the Commonwealth Fund model’s headline figure (the Commonwealth Fund traditionally presents these as co-variates).

In addition to this, the Commonwealth Fund model understands under-insurance as a strictly individual phenomenon. Unfortunately, that is not really how medical expenses work. Like income, expenses are pooled among all members of a family unit. If one person in a family is at risk of unacceptable medical expenses, then that will impact all members of the family. Under-insurance is better understood as something that affects entire families, rather than individuals. The Commonwealth Fund model also accounts only for expenses traditionally covered by health insurance, excluding things like dental and vision care. This distinction is largely arbitrary, due to the related nature of all types of medical care. An individual paying too much for health care may defer dental care, or vice versa. All medical expenses, whether they are traditionally covered by health insurance or not, are included in the MDR model of under-insurance.

Table 10. The MDR Model of Underinsurance

Variables used in calculating underinsurance	
Medical expenses	Condition
<200% FPL	Household out of pocket costs \geq 5% household income
\geq 200% FPL	Household out of pocket costs \geq 10% household income
Private insurance deductible	Condition
Privately insured	Deductible \geq 5% household income
Financial stress	Condition
Any	Difficulty paying medical bills
Cost barriers to care	Condition
Any	Deferred care due to costs

Most measures of under-insurance are applied only to individuals under the age of 65 and exclude individuals on government-provided health care such as Medicaid. The justification for this is that individuals on benefit rich plans with low individual costs such as these essentially can't be under-insured. However, MDR has frequently run analysis of underinsurance on these populations and found that notable portions of them meet the criteria. Individuals over the age of 65 have significantly higher medical expenses than other populations. Low-income populations served by government-sponsored health care plans can easily spend a great deal on aspects of health care not covered by their plan. They also are more likely to defer care or have difficulty paying even relatively modest medical bills.

MDR calculated under-insurance using the MDR model and the more common Commonwealth Fund model. Both are included in the 2024 data set.

- Note that underinsurance has been calculated for all residents with health insurance, not just those with private coverage.
- For the Commonwealth Fund model, the variable 'underinsall' identifies the source of underinsurance (medical expenses, deductible, or both).
- For the MDR model, the variable 'underinsurance' identifies the source of underinsurance:
 - Due to deductible
 - Due to expenses
 - Due to cost barriers
 - Due to financial stress
 - Due to deductible and expenses
 - Due to deductible and cost barriers
 - Due to expenses and cost barriers
 - Due to deductible and financial stress
 - Due to expenses and financial stress
 - Due to cost barriers and financial stress

- Due to deductible, expenses, and cost barriers
- Due to deductible, expenses, and financial stress
- Due to deductible, cost barriers, and financial stress
- Due to expenses, cost barriers, and financial stress
- Due to deductible, expenses, cost barriers, and financial stress
- For both the Commonwealth Fund model and MDR model, a variable identifies a person as underinsured or not underinsured (underinsflga, underinsuranceflg)

Appendix 3. Survey Questionnaire (Short Version)

Included in this document is the short version of the survey instrument that provides the questions but not the response categories. The long version of the survey which includes the response categories is provided as a separate document.

RI Health Insurance 2024 Survey (Short Version)

Household Level Information

1. In what Rhode Island County is your home located?
2. What is your zip code?
3. Including yourself, how many people are in your household? This includes family members, roommates and anyone else who lives there most of the year.

Person Level Demographics

1. What sex was PERSON assigned at birth?
2. What is PERSON's gender identity?
3. And PERSON's age on her/his/your last birthday? (IF THEY REFUSE: ASK FOLLOW-UP WITH AGE CATEGORIES)
4. What was the highest grade in school that PERSON have/has completed?
5. What is the Marital Status of PERSON?
6. Is PERSON of Hispanic, Latino, or Spanish origin?
7. Which of the following would you say is PERSON(r/'s) race?
8. Was PERSON born in the United States?
9. IF NOT BORN IN THE UNITED STATES: How long has PERSON lived in the United States?
10. Does anyone in the household speak a language other than English at home?
11. IF PERSON SPEAKS A LANGUAGE OTHER THAN ENGLISH AT HOME: What is this language?

Family Unit Formation

1. What is PERSON(r/'s) relationship to FILL HEAD OF HOUSEHOLD?
2. Is/Are PERSON married to anyone who currently lives here or to someone outside the household?
3. Is anyone living here the parent or guardian of PERSON?
4. Who in the household is the main person taking care of PERSON?

Health Insurance

The next questions will be about HEALTH INSURANCE. By this I mean any program or plan that pays any part of hospital or doctor bills. For example, Medicare, Medicaid, Rite Care, Military or Veteran benefits, or insurance companies such as Blue Cross, United Health Care or Neighborhood Health Plan.

1. Is PERSON covered by ANY type of health insurance? IF YES ASK: Which of the following types of insurance is this person covered by?
 - Private health insurance (Employer based or company like Blue Cross)
 - Medicare
 - Rite Care
 - Medicaid or Rhode Island Medical Assistance
 - Military, Veterans, or TRICARE (formally known as CHAMPUS)
 - Some other type of insurance? (SPECIFY)
 - RITE SHARE
 - HEALTHSOURCE RI, HEALTH EXCHANGE, OBAMACARE
 - THROUGH THE STATE (BUT NOT AS STATE EMPLOYEE)
 - SSI/SSDI/WELFARE/DISABILITY
 - INDIAN HEALTH SERVICES
 - NO HEALTH INSURANCE
 - DK/REF
2. SOURCE OF CARE FOLLOW-UP FOR THE UNINSURED: Does anyone else pay for PERSON's bills when they seek medical care?

Health Insurance Verifications:

3. FOR THOSE 65+ THAT INDICATE PRIVATE HEALTH INSURANCE: You indicated PERSON is covered by private insurance. Is this private insurance policy a PRIVATE Medicare supplement such as those offered by AARP, United Health Care, or Blue Cross Blue Shield, or other plans that help cover expenses not paid by Medicare, OR is this a separate private health insurance plan?

4. ASK OF THOSE 65+ WITH MEDICARE: Does PERSON have a PRIVATE Medicare supplement such those offered by AARP, United Health Care, or Blue Cross Blue Shield, or other plans to help cover expenses not paid by Medicare or a Medicare Advantage Plan?

Private Insurance Follow-ups

1. A policy holder is the person who obtains their insurance through an employer, school, or a retirement plan. They may also purchase it directly through HealthSource RI. It may cover others in the family besides themselves. Are the people you indicated previously as covered by private health insurance ALL covered under the SAME health insurance plan?

2. IF YES: Are they all covered by your health plan or by another member of the family (which member)?

3. IF NO: Which members of your family are policy holders for a private health insurance plan?

4. Is PERSON's PRIVATE HEALTH INSURANCE provided through Blue Cross, United Healthcare, Neighborhood Health Plan or some other company?

5. ASK OF THOSE WITH NEIGHBORHOOD, UHC (UNITED), TUFTS: Does PERSON have insurance through Rhode Island's Rite Care Program?

6. ASK OF THOSE WITH BLUE CROSS, NEIGHBORHOOD: Did PERSON enroll for this health plan through HealthSource RI?

7. ASK OF THOSE INDICATING COVERAGE SOURCE IS HEALTHSOURCE RI: Is this insurance provided by Blue Cross Blue Shield or Neighborhood Health Plan?

8. Is PERSON's plan provided through YOUR OR SOMEONE ELSE'S EMPLOYER?

9. ASK OF ALL WITH EMPLOYER BASED INSURANCE: Is PERSON receiving premium assistance from the state of Rhode Island's Rite Share program to help pay the cost of PERSON's monthly premium?
10. IF NOT ESI: Is PERSON (r/'s) insurance provided by COBRA or a former employer, a retirement plan, a school, college, or university, or was the plan purchased directly or the premium paid out of pocket?
11. ASK OF THOSE WITH A PLAN THROUGH HEALTHSOURCE RI: Did PERSON receive financial assistance or tax credits to help pay for the health insurance plan PERSON purchased through HealthSource RI? (Financial assistance is provided to certain people to help them pay their monthly premiums. The amount is based on a number of factors, including your family size and income).
12. ASK OF THOSE WITH A PLAN THROUGH HEALTHSOURCE RI: Would you have enrolled in a plan through HealthSource RI if financial assistance was not available to PERSON?
13. What is the monthly premium paid for PERSON's health insurance? This is the amount you must pay every month to maintain your active health plan.?
14. How much is the deductible for everyone covered under this health plan? This is the amount you must pay every year for medical care BEFORE the health insurance begins to pay the bills. Please do not include premium expenses.
15. Does PERSON have a Health Savings Account or HSA? A Health Savings Account is a type of savings account that lets you set aside money on a pre-tax basis to pay for qualified medical expenses.
16. IF HAVE HSA: How much did PERSON contribute to their HSA account during the past 12 months?
17. IF HAVE HSA: How much did PERSON's employer contribute to their HSA account during the past 12 months?
18. Can dependents be covered under PERSON's health insurance?
19. How would you rate the choice of doctors and other providers available?
20. How would you rate the range of services covered by PERSON's current health insurance?
21. How would you rate the quality of care available?

Medicaid Insurance Follow-ups

1. For these next questions, please think about the household members that are currently covered by Rite Care, Rite Share or other state sponsored health insurance programs, such as Medicaid.
2. If state sponsored health insurance programs were no longer available for members of your household, would they be able to get private health insurance?
3. How would you rate the choice of doctors and other providers available?
4. How would you rate the range of services covered by PERSON's current health insurance?
5. How would you rate the quality of care available?
6. Please think about the last time household members needed to renew Rite Care or Medicaid. Did you understand what was needed for household members to do to renew coverage?
7. How easy was it to renew compared to the last time members of the household signed up for Rite Care or Medicaid? Was it...

Prior Insurance Coverage through Medicaid

1. Are there any household members that now have health insurance BESIDES Rite Care or Medicaid but were enrolled in Medicaid or Rite Care at some time during the past 12 months?
2. Did you understand what household members needed to do to renew coverage through Medicaid or Rite Care?
3. How easy was it to sign up for their current health insurance compared to the last time members of the household signed up for Rite Care or Medicaid? Was it...

Questions of Those Who Are Uninsured

1. How long have/has PERSON been without health insurance?
2. What are the main reasons that PERSON is not currently covered by any government or private health insurance plan?
3. Next, I am going to read some possible reasons why PERSON may no longer have health insurance. Is this a reason PERSON no longer has health insurance?

- PERSON lost their job.
 - PERSON is longer eligible for health insurance through their employer because of a reduction in the number of hours they work.
 - An employer stopped offering health insurance to PERSON.
 - Our family could no longer afford the cost of the premiums for health insurance through an employer for PERSON.
 - PERSON lost or became ineligible for Rite Care or Medicaid.
 - PERSON is not interested in health insurance.
4. Was Person enrolled in Rite Care or Medicaid at any time during the past 12 months?
 5. Was communication clear about Person's Medicaid coverage, including actions Person had to take and updates about Person's coverage?

Medicaid Awareness and Knowledge

(Asked of households with uninsured members)

1. What are the reasons that members of the household have not enrolled in one of the State's Health Insurance Programs?
2. Next I would like to ask you about possible reasons why the uninsured residents in the household have not enrolled in Rite Care. Please tell me whether each of the following is a major reason, a minor reason, or not a reason at all.
 - I don't think we would be eligible for it because our employer offers health insurance.
 - I don't think we would be eligible because my household makes too much money.
 - We would be concerned about being able to see the doctors or health care providers I want to.
 - Our household wouldn't want to be receiving government assistance.
 - The uninsured members of our household don't really need health insurance.
 - Our household would worry that the costs would be too high.
 - I would be concerned about the quality of care.
 - I would be concerned that health care professionals would treat me or my family differently.
3. Have you or others in your household visited the web site for HealthSource RI?
4. IF THEY HAVE VISITED HEALTHSOURCE RI WEBSITE: What types of information did you look for on the website?

5. IF THEY HAVE VISITED HEALTHSOURCE RI WEBSITE: How easy was it to find the information you were looking for ?
6. At any time since October 2022, did any of the uninsured members of your household apply for health insurance insurance through HealthSource RI or some other way?
7. ASK IF HH APPLIED FOR HEALTH INSURANCE: Did the uninsured members of the household apply for Medicaid or Rite Care, Private Health Insurance (through HealthSource RI), or some other insurance?
8. ASK IF HH APPLIED FOR HEALTH INSURANCE: What happened with the application(s)?
9. ASK OF THOSE VISITING OR CONTACTING HEALTHSOURCE RI BUT NOT APPLYING: Next, I would like you to think about the reasons you did not CHOOSE a health plan through HealthSource RI. Why didn't you select a health plan?
10. How familiar are you with the help that is available through the Affordable Care Act to pay for health insurance?
11. As you may know there is help to pay for health insurance as a result of the Affordable Care Act and state assistance. Did you check to see if you were eligible for any help to pay for your health insurance?

Interruptions in Health Insurance

1. Have/has PERSON been without health insurance anytime in the last 12 months?
2. For how long was PERSON without health insurance, even if that gap in health insurance was longer than 12 months?
3. Why were/was PERSON without health insurance?
4. IF LESS THAN 12 MONTHS: What type of health insurance did PERSON have prior to their current health insurance during the past 12 months?

State Health Insurance Mandate

1. Are you aware of Rhode Island's state requirement for all residents to have health insurance or pay a penalty at tax time?

Dental Insurance

1. Is anyone now covered by an insurance plan that pays for routine dental care, such as cleanings and fillings?

Doctor Visits and Point of Medical Care

1. How many times did PERSON see a doctor or health care provider during the past 12 months?
2. How many times did PERSON see a doctor or health care provider using telehealth services during the past 12 months?
3. How many of those visits were for strictly routine check-ups, that is, when PERSON were/was not sick?
4. Does PERSON have a type of medical facility that they go to when you/he/she is sick or needs medical attention?
5. What type of medical facility do/does PERSON go most often?
6. How long does it usually take to travel to the household's primary source of medical care for routine medical care?
7. Next, I'm going to read you a list of issues some people may experience when accessing health care. Please tell me if you or other family members faced any of the following issues during the past 12 months:
 - Unable to get an appointment at the doctor's office or clinic as soon as one was needed?
 - Unable to get an appointment with a primary care physician at a convenient time?
 - Were unable to get an appointment with a specialist as soon as you thought one was needed.
 - Were unable to get an appointment with a specialist at a convenient time
8. DURING THE PAST 12 MONTHS, did PERSON or anyone in the household seek medical care in a hospital emergency room for any reason?
9. In the past 12 months, how many times did PERSON receive care in a hospital emergency room?

10. During the past 12 months, did anyone visit a walk-in or urgent care facility when they were sick or injured?
11. During the past 12 month did anyone in the household receive mental health care?
12. Was this mental health care received in person, through telehealth, or both in person and telehealth?
13. Did those seeking mental health care experience any problems accessing it??

Health Care Expenses and Barriers

1. Over the last 12 months, about how much has your family had to pay OUT OF POCKET for:

PROMPT: Out of pocket expenses includes any services NOT covered by a health plan or special assistance. It DOES NOT include the premium you may pay for your health insurance.

- Your family's prescription medications.
 - Dental and Vision care.
 - Mental health care.
 - All OTHER medical expenses, including for doctors, hospitals, and tests. This would include common medical expenses such as over the counter medications, first aid materials, and so on.
2. During the past 12 months, was there any time when anyone in the household needed any of the following but didn't get it because they could not afford it:
 - Routine medical care?
 - Medical care from a doctor or surgeon?
 - Mental health care or counseling?
 - Dental care including checkups?
 - A diagnostic test such as a CAT scan, MRI, lab work, or x-ray that was recommended by a doctor or other care provider?
 - Prescription Medicines?
 3. During the past 12 months, was there any time that you or anyone in the household skipped doses or took smaller amounts of their prescription drugs to make them last longer?
 4. During the past 12 months, did anyone in the household receive any medical bill for more than \$500 that had to be paid out-of-pocket?

5. During the last 12 months, did your household experience difficulty paying medical bills for anyone in your household?
6. During the past 12 months, has your household experienced any of the difficulties as a result of having to pay for medical bills?
 - Unable to pay for basic necessities like food, heat or rent
 - Used up all or most of savings to pay off the medical bill
 - Had large credit card debt or had to take a loan or debt against the home to pay off the medical bills
 - Filed for medical bankruptcy
7. Has anyone in the household ever delayed or avoided seeking health care because they could not find a health care provider or because a healthcare provider was not available at the time they needed care? (What type of care?)
8. Has anyone in your household ever delayed or avoided seeking PHYSICAL OR MENTAL health care because they could not find or did not know a health care provider who accepts their insurance? (What type of care?)

General Health Status

1. How would you describe PERSON's health, in general
2. Is any household member currently pregnant?
3. Does anyone in your household have limitations due to physical, mental or emotional difficulties?

Employment

1. We are almost done with the survey. This next series of questions is about jobs and employment. I want to emphasize that the information you provide will be kept confidential and will only be used in combined form and will not be combined with other information that could identify you in any way.
2. Is PERSON currently... [EMPLOYMENT CATEGORIES]
 - Self-employed
 - Employed by the military
 - Employed by someone else
 - An unpaid worker for a family business or firm

- Unemployed and looking for work (SPECIFY)
 - Retired
 - Unable to work due to a disability, or
 - Something else? (SPECIFY)
3. Do/Does PERSON typically work for pay?
 4. What is the total number of hours PERSON usually works per week?
 5. On this job, are/is PERSON employed by a private company or business, a government agency, in active military duty, self-employed, working in a family business or farm, or something else?
 6. Thinking about the employer PERSON works for, which industry most closely describes the employer's main business? – LONG VERSION INCLUDES CODES
 7. Do/Does PERSON work for the federal government, state government, or local government such as a county or city, or a public school or college?
 8. About how many people are employed by this employer, at all locations?

Employer Sponsored Insurance

(Asked of those who do not currently have health insurance through their employer)

1. Does the place where PERSON works at offer health insurance as a benefit to any of its employees?
2. Can dependents be covered under that health insurance?
3. Why was health insurance not taken?
4. Next, I am going to read some possible reasons why PERSON may not have health insurance through his/her employer or labor union. For each let me know if this is a reason why PERSON did not enroll in his/her employer's health insurance.
 - PERSON has not worked for his/her employer long enough to qualify for health insurance.
 - PERSON works too few hours to qualify for health insurance/.
 - The health insurance offered through PERSON's employer costs too much.
 - The health insurance offered through PERSON's employer does not meet PERSON's needs in terms of what type of health care is covered.

5. If PERSON had the option, how likely would PERSON be to enrolling his/her employer's health insurance? (IF NOT LIKELY ASK: Why is this?)

Family Income

(Questions will be asked for each identified family unit)

1. The next questions are about income that your FAMILY received during 2023. During the entire year of 2021, what was the total income for THIS FAMILY before taxes, including money from jobs, investments, social security, retirement income, child support, unemployment payments, public assistance, and so on?

IF REFUSE OR DK: It is important for us to learn about household incomes so we can better understand how Rhode Island residents access health coverage and concerns that they may have. Which of the following income ranges is closest to your family's 2023 total income from all sources? (INCOME CATEGORIES WILL BE BASED ON FPL DEFINITIONS)

Closing

IF SOMEONE IN HOUSEHOLD IS UNINSURED: If you or any other UNINSURED member of your household would like more information about health coverage that you may be eligible for, visit HealthSourceRI.com.

Six out of seven HealthSource RI customers qualify to receive financial help to lower their monthly coverage costs – some even qualify for no-cost coverage through Medicaid.

We have reached the end of our survey. Thank you for taking the time to complete our survey today. Your answers will help us learn more about how Rhode Island residents access, use, and enroll in health coverage.

Appendix 4. Survey Invitation Letter



Español al Otro

Dear X,

Your household has been selected to participate in the Rhode Island Health Information Survey!

This important survey is conducted by phone or online and asks questions about health coverage for all members of your household. Results from this survey will help the state improve access to health insurance for all Rhode Islanders. Your household's participation is greatly appreciated!

To take the survey, go to RIHealthSurvey.com click "Take Survey" and enter your survey access code, which is: [PIN]

Or scan this personalized QR code to open the survey.

Open the camera on your smartphone or tablet and hold it over the QR code.

Due to the length of this survey, it is recommended to complete it via computer or tablet.

[QR]

This survey is sponsored by HealthSource RI, Rhode Island's state-based health coverage marketplace. If you have not responded online, you will receive a call from Market Decisions Research, an independent research firm located in Portland, Maine or their partner M. Davis and Company. You should see "RI Health Survey," "M. Davis & Comp," or a call from a 401-area code.

Participation is voluntary and can be stopped at any time. The survey asks about your household's current health coverage, experience of healthcare services, and general demographics questions. Responses are confidential and no one at HealthSource RI will be able to tie your name to your answers.

Those who answer the survey completely and honestly will receive a \$20 gift card for their time. For more information, visit our website, RIHealthSurvey.com. For further assistance contact the Project Manager, Elisa Ungaro at eungaro@marketdecisions.com or via phone at 1-800-293-1538 ext. 1650.

Thank you,



Elisa Ungaro
Elisa Ungaro
Project Manager
Rhode Island Health Information Survey



Estimado/a:

¡Su hogar fue seleccionado para participar en la Encuesta de Información de salud de Rhode Island!

Esta importante encuesta se realiza por teléfono o en línea y se le hacen preguntas sobre la cobertura de salud de todos los miembros de su hogar. Los resultados de esta encuesta ayudarán al estado a mejorar el acceso al seguro médico para todos los habitantes de Rhode Island. ¡Apreciamos mucho la participación de su hogar!

Para realizar la encuesta, vaya a RIHealthSurvey.com haga click en “Realizar la encuesta” e ingrese su Código de acceso a la encuesta, que es: [PIN]

O escanee este Código QR personalizado para abrir la encuesta.

Abra la cámara de su teléfono inteligente o tableta y manténgala sobre el Código QR. Debido a la extensión de esta encuesta, se recomienda completarla a través de una computadora o tableta.

[QR]

Esta encuesta está patrocinada HealthSource RI, el mercado de cobertura de salud estatal de Rhode Island. Si no completa esta encuesta en línea, recibirá una llamada de Market Decisions Research, una firma de investigación independiente ubicada en Portland, Maine o su socio M. Davis and Company. Debería ver “Encuesta de salud de RI”, “M. Davis y Comp,” o una llamada desde un código de área 401.

La participación es voluntaria y puede detenerse en cualquier momento. La encuesta pregunta sobre la cobertura de salud actual de su hogar, la experiencia de los servicios de atención médica y preguntas demográficas generales. Las respuestas son confidenciales y nadie en HealthSource RI podrá vincular su nombre a sus respuestas.

Aquellos que respondan la encuesta de manera completa y honesta recibirán una tarjeta de regalo de \$20.00 por su tiempo. Para obtener más información, visite nuestro sitio web, RIHealthSurvey.com. Para obtener más ayuda, comuníquese con la gerente de proyecto, Elisa Ungaro, en eungaro@marketdecisions.com o por teléfono al 1-800-293-1538 ext. 1650.

Gracias,

Elisa Ungaro
Elisa Ungaro
Gerente de Proyecto
Encuesta de información de salud de Rhode Island
Appendix 5. Survey Invitation Email

Hello,

Recently, we sent you a letter and called you about an important survey of Rhode Island residents. This important survey is conducted by phone or online and asks questions about health coverage for all members of your household. If you have already completed this survey thank you for your time. If not, your participation would be greatly appreciated! Results from this survey will help the state improve access to health insurance for all Rhode Islanders.

To take the survey please use the following link: <https://us1se.voxco.com/S2/8/RI/>

And enter your unique access code: [\$PIN]

or click on your individual link below:
[\$PURL]

This survey is sponsored by HealthSource RI, Rhode Island's state-based health coverage marketplace. Participation is voluntary and can be stopped at any time. The survey asks about your household's current health coverage, experience of healthcare services, and general demographics questions. Responses are confidential and no one at HealthSource RI will be able to tie your name to your answers.

Those who answer the survey completely and honestly will receive a \$20 gift card for their time. For more information, visit our website, RIHealthSurvey.com. For further assistance contact the Project Manager, Elisa Ungaro at eungaro@marketdecisions.com or via phone at 1-800-293-1538 ext. 1650.

Thank you,

Elisa Ungaro
Project Manager
Rhode Island Health Information Survey