



Methodology Report

OCTOBER 2019

Summary

The Colorado Health Institute (CHI) contracted with Social Science Research Solutions (SSRS) to conduct the 2019 Colorado Health Access Survey (CHAS). The goal of the CHAS is to document health insurance coverage and access to and use of health care for the non-institutionalized population in Colorado. This report provides information about the methods used to collect, clean, and document the data in the CHAS data files.

The study was conducted for CHI via a mixed-mode design, web, and phone. In 2019, a transition to address-based sampling (ABS) was implemented, with a random digit dialing (RDD) comparison study conducted as well.

Prior to production interviewing, SSRS conducted pretests via computer assisted telephone interviewing (CATI) and web. The CATI interviews followed a traditional interview protocol with live interviewers conducting the survey. The web pretest was conducted utilizing the online meeting software, Zoom, which allowed the participants and SSRS project team to share their screens and record the conversation.

Interviews for the ABS design were conducted from February 26, 2019 – July 14, 2019 among a sample of Colorado households containing at least one person age 18 or older. Interviews were stratified by 21 health statistics regions (HSRs) to ensure adequate representation within each of these regions within the state of Colorado. In total, 9,162 interviews were completed online, and 1,103 interviews were completed from call-ins, for a total of 10,265 interviews.

The RDD companion survey was conducted from March 18, 2019 – May 19, 2019 among a sample of Colorado households containing at least one person age 18 or older. In total, 1,000 interviews were completed with Colorado households, with 400 interviews completed from landline, and 600 from cell phones.

Details of the sample design, questionnaire development, data collection procedures, weighting, and response rates follow. To access more information including the survey questionnaire, go to <https://www.coloradohealthinstitute.org/research/CHAS>.

Sample Design

The sampling objectives of the CHAS are to produce estimates of health and health-related indicators for adults in Colorado. SSRS utilized an address-based sample (ABS), push-to-web and call-in design. As a side-by-side comparison, SSRS conducted an RDD study. The RDD portion informed the assessment of the impact of the design change to ABS and understand methods by which the ABS can be weighted to preserve trends from prior cycles and to future cycles.

A multi-wave responsive survey design was executed to adjust for the uncertainty in yields due to the change in sample design. The data collected during early phases of production informed the design for later phases.

ABS Sample Wave 1 – Stratified 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. The CDSF is updated weekly and contains home and apartment addresses as well as Post Office boxes and other types of residential addresses for mail delivery. SSRS pulled sample from all residential records except for addresses coded as vacant, seasonal (vacation), and PO boxes other than those defined as OWGM (only way to get mail), which avoids duplication of Coloradans in the sample selection.

SSRS utilized a disproportionately-stratified design to produce a representative sample of Coloradans. The sample was stratified by the 21 Health Statistics Regions (HSR). The HSR's were developed by the Colorado Department of Public Health and Environment (CDPHE) for public health planning purposes. The boundaries for the regions were determined according to the size of the population in each county—counties with smaller populations were aggregated—and key demographic factors for each county, including the number of communities served by each county health department.

In addition to geographical stratification, the design included strata to target populations that typically get underrepresented in ABS samples. These groups include people who are non-white, live in lower income households, and whose households include children. These groups are targeted using flags that are present on the ABS frame. An additional feature of the design is the incorporation of strata that target Census block groups high in African American or Hispanic incidences.¹

The strata definitions are shown in Table 1. Strata 1-5, which are based on flags appended to the CDSF, are hierarchically exclusive with stratum 1 being at the top of the hierarchy and stratum 5 being at the bottom. In addition to the sample stratification, SSRS continued the practice of excluding, at random, 75 percent of addresses flagged as having only 65+ year old residents. Strata 5-9 were based on race/ethnicity densities at the Block Group level. The remaining strata 10-30 were the residual addresses from each HSR.

¹ Unlike the telephone design that historically has only been able to effectively target exchanges in Denver, Arapahoe, and El Paso counties, this design is also able to incorporate areas in Adams, Fremont, Jefferson, and Lincoln counties.

Table 1: Strata Definitions

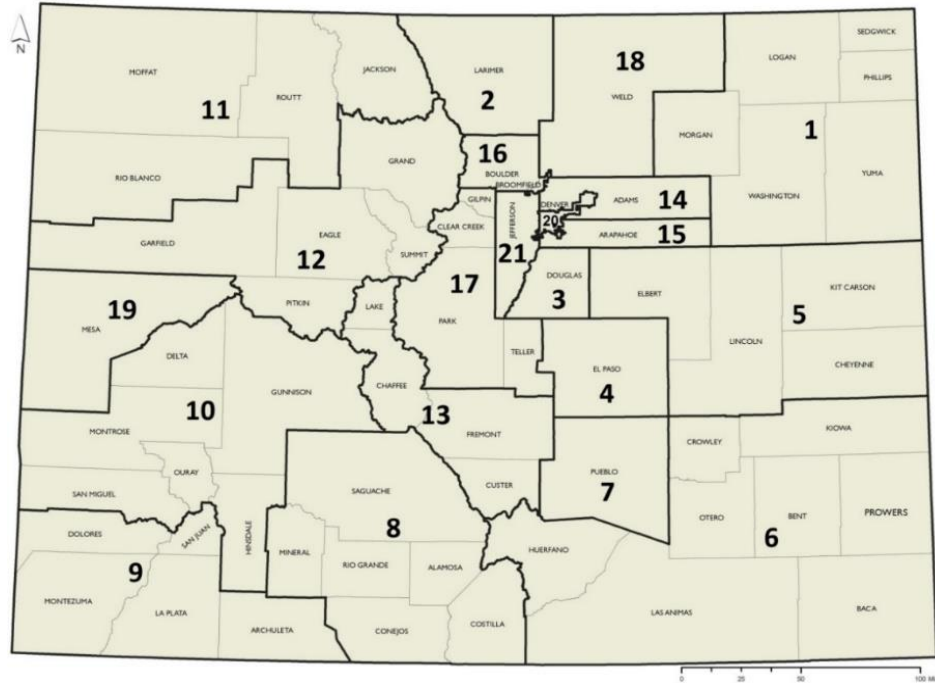
Stratum	Description
1 Statewide presence of child	Flagged as having a child
2 Statewide Listed young (18-34)	Flagged as having 18-34 year-old
3 Statewide Hispanic surname	With Hispanic surname appended
4 Statewide listed AA	Flagged having African American resident
5 Statewide HD Hispanic (50%+)	In Census block groups (CBGs) that are 50%+ Hispanic
6 HSR 4 HD AA (12%+)	CBGs in HSR 4 that are 12%+ African-American
7 HSR 14 HD AA (7%+)	CBGs in HSR 14 that are 7%+ African-American
8 HSR 15 HD AA (20%+)	CBGs in HSR 15 that are 20%+ African-American
9 HSR 20 HD AA (20%+)	CBGs in HSR 20 that are 12%+ African-American
10 HSR 1 residual	In HSR 1 and not in strata 1-5
11 HSR 2 residual	In HSR 2 and not in strata 1-5
12 HSR 3 residual	In HSR 3 and not in strata 1-5
13 HSR 4 residual	In HSR 4 and not in strata 1-5, 6
14 HSR 5 residual	In HSR 5 and not in strata 1-5
15 HSR 6 residual	In HSR 6 and not in strata 1-5
16 HSR 7 residual	In HSR 7 and not in strata 1-5
17 HSR 8 residual	In HSR 8 and not in strata 1-5
18 HSR 9 residual	In HSR 9 and not in strata 1-5
19 HSR 10 residual	In HSR 10 and not in strata 1-5
20 HSR 11 residual	In HSR 11 and not in strata 1-5
21 HSR 12 residual	In HSR 12 and not in strata 1-5
22 HSR 13 residual	In HSR 13 and not in strata 1-5
23 HSR 14 residual	In HSR 14 and not in strata 1-5, 7
24 HSR 15 residual	In HSR 15 and not in strata 1-5, 8
25 HSR 16 residual	In HSR 16 and not in strata 1-5
26 HSR 17 residual	In HSR 17 and not in strata 1-5
27 HSR 18 residual	In HSR 18 and not in strata 1-5
28 HSR 19 residual	In HSR 19 and not in strata 1-5
29 HSR 20 residual	In HSR 20 and not in strata 1-5, 9
30 HSR 21 residual	In HSR 21 and not in strata 1-5

Table 2 shows how the ABS sample frame was distributed across the strata. The table also includes the frame distribution excluding 75 percent of addresses that were exclusively flagged as having only 65+ residents. Strata 1 through 9 are targeted to key subgroups were sampled at higher rates. In addition, sample across the residual strata were distributed to help reach HSR quotas.

Table 2: Sample Frame and Allocation

Stratum	Total ABS Frame		Frame excluding 75% of 65+ flagged addresses		Sample Drawn	
	Count	%	Count	%	By Strata	By HSR
1 Statewide presence of child	290,784	13.3%	290,784	14.7%	21.4%	NA
2 Statewide Listed young (18-34)	109,082	5.0%	109,082	5.5%	8.0%	NA
3 Statewide Hispanic surnames	231,049	10.6%	212,943	10.7%	15.7%	NA
4 Statewide listed AA	35,391	1.6%	29,929	1.5%	5.9%	NA
5 Statewide HD Hispanic (50%+)	106,721	4.9%	96,818	4.9%	4.7%	NA
6 HSR 4 HD AA (12%+)	17,555	0.8%	15,899	0.8%	2.3%	NA
7 HSR 14 HD AA (7%+)	6,029	0.3%	5,560	0.3%	0.7%	NA
8 HSR 15 HD AA (20%+)	25,874	1.2%	23,894	1.2%	2.9%	NA
9 HSR 20 HD AA (20%+)	20,802	1.0%	19,613	1.0%	1.4%	NA
10 HSR 1 residual	17,412	0.8%	14,517	0.7%	1.4%	2.2%
11 HSR 2 residual	104,705	4.8%	90,957	4.6%	2.2%	5.6%
12 HSR 3 residual	88,647	4.1%	79,511	4.0%	1.9%	5.4%
13 HSR 4 residual	166,243	7.6%	146,138	7.4%	0.4%	9.9%
14 HSR 5 residual	8,688	0.4%	7,366	0.4%	1.8%	2.1%
15 HSR 6 residual	11,793	0.5%	9,785	0.5%	2.4%	3.1%
16 HSR 7 residual	23,174	1.1%	19,216	1.0%	0.9%	3.0%
17 HSR 8 residual	7,296	0.3%	6,328	0.3%	1.6%	2.0%
18 HSR 9 residual	29,741	1.4%	25,534	1.3%	3.1%	3.9%
19 HSR 10 residual	28,439	1.3%	23,731	1.2%	2.9%	3.7%
20 HSR 11 residual	10,510	0.5%	9,327	0.5%	2.3%	2.6%
21 HSR 12 residual	36,822	1.7%	33,522	1.7%	1.6%	2.8%
22 HSR 13 residual	24,306	1.1%	20,176	1.0%	2.0%	2.6%
23 HSR 14 residual	70,751	3.2%	63,449	3.2%	3.1%	9.1%
24 HSR 15 residual	136,947	6.3%	120,800	6.1%	0.3%	9.5%
25 HSR 16 residual	117,909	5.4%	104,243	5.3%	1.3%	4.9%
26 HSR 17 residual	17,613	0.8%	15,403	0.8%	1.9%	2.3%
27 HSR 18 residual	58,090	2.7%	50,939	2.6%	1.2%	4.6%
28 HSR 19 residual	46,995	2.2%	39,796	2.0%	2.0%	3.5%
29 HSR 20 residual	168,900	7.7%	154,273	7.8%	0.8%	9.2%
30 HSR 21 residual	<u>166,687</u>	<u>7.6%</u>	<u>143,976</u>	<u>7.3%</u>	<u>1.8%</u>	<u>7.9%</u>
Total	2,184,955	100.0%	1,983,509	100.0%	100.0%	100.0%

Map 1. Colorado Health Statistics Regions (HSRs)



ABS Sample Waves 2 and 3 - Modeled Sample

As Wave 1 data collection proceeded, SSRS assessed sample yields across the 30 sampling strata 21 HSR's and 9 population targeted strata. SSRS estimated 3,450 completed surveys from Wave 1 sample (data collection was ongoing). To garner more interviews with demographic groups of interest, such as minorities and those with children, SSRS proposed a modeled sample design.

The modeled sample plan was developed specifically as follows:

1. Predictive models were built on the production data from Wave 1 for whether a household was self-reported as demographic group of interest, such as households with children.
2. The models were merged onto the Wave 1 data to test their efficacy.
3. The models were then merged onto the full sample file of the Wave 1 to develop the proposed sample plan and obtain sample yields.
4. The sampling strata were developed hierarchically.
 - a. Residual
 - b. Age 65 or older household
 - c. Ages 18 to 34 household
 - d. Hispanic household
 - e. Low income household
 - f. African-American household
 - g. Household with children age 0 to 17
 - h. If no auxiliary data were found to build a model, a household was defined into the "no match" stratum.
 - i. Spanish or resides in a high Spanish language Census block group (defined as 30 percent or more households speak Spanish) and the household was not previously

defined in the above strata, they were placed into the Spanish stratum.

5. With this model in place and information about yields assigned across HSR's and the eight predicted groups, SSRS drew sample accordingly (see Table 4).

The Wave 2 and 3 modeled design followed the initial sampling procedures of selecting Colorado addresses utilizing the CDSF. The sample was then appended with surname flags as well as with consumer and voter registration data from Aristotle, and Census Planning Database data, so that the sample flags and stratification could be created. Since this is a post-appending process, a random sample that is 2.5 times larger than what is needed for the actual study was ordered.

Table 3: Wave 2 and 3 Final Sample Distribution

HSR	.00 Residual	1.00 Age65+	2.00 Age18+	3.00 Hisp	4.00 Low inc	5.00 AA	6.00 Kids	7.00 No match	8.00 Spanish	Sample Selected
1	752	272	1,141	168	764	67	895	389	1,139	5,587
2	420	111	624	128	126	51	546	92	97	2,195
3	796	165	1,094	207	88	63	1,998	111	83	4,605
4	1,546	324	2,135	656	595	942	1,804	341	817	9,160
5	2,629	268	1,320	208	383	91	1,644	686	220	7,449
6	583	190	522	267	808	109	413	322	1,866	5,080
7	621	183	694	488	655	162	631	191	2,984	6,609
8	665	174	429	196	851	57	400	803	2,976	6,551
9	882	235	823	212	505	66	722	362	220	4,027
10	700	264	550	142	586	40	538	397	351	3,568
11	1,143	240	1,000	141	461	28	1,023	539	158	4,733
12	1,180	284	808	125	517	57	780	997	885	5,633
13	1,200	403	742	217	960	36	770	626	184	5,138
14	1,544	237	1,534	584	838	496	1,839	513	3,555	11,140
15	1,488	312	1,756	437	487	2,970	1,643	381	1,081	10,555
16	579	143	869	158	113	58	835	138	228	3,121
17	1,143	370	689	158	401	31	858	609	58	4,317
18	613	161	925	271	217	75	1,064	181	1,244	4,751
19	881	228	880	183	563	67	777	193	334	4,106
20	1,383	227	1,222	413	606	2,986	1,041	501	2,508	10,887
21	1,046	266	1,358	483	279	149	1,334	155	483	5,553
CO	21,794	5,057	21,115	5,842	10,803	8,601	21,555	8,527	21,471	124,765

RDD Sample

The RDD comparison study employed a dual-frame sampling design that includes landline and cell phone sample. The dual frame design seeks to ensure complete coverage of all households that own at least one type of phone (approximately 98 percent of all Colorado households are listed in telephone banks or own a cell phone). Phone status was obtained from the NHIS Modeled

estimates (with standard errors) of the percent distribution of household telephone status for adults 18 and over, by state: United States, 2017, and projected for year 2019 for Cellphone Only (CPO) vs. Not-CPO. We determine that approximately 64.8 percent of all Colorado households own only a cell phone.²

Of the 1,000 interviews, 413 were conducted with respondents who owned only a cell phone. This represents 41.3 percent of completed interviews. This is still an underrepresentation of cell-phone-only households compared with CDC estimates. Weighting procedures described later in this report adjust for this underrepresentation.

Development of the Mail Materials

CHI provided SSRS with initial drafts of all mail materials. Letters, envelopes, and postcards were reviewed by CHAS and SRSS (see Appendix C for letters). Letters and postcards were printed in both English and Spanish.

SSRS provided final proofs of all mailing materials to CHI and received CHI approval before printing. All mail materials utilized two-color printing. SSRS was responsible for providing printing, postage, and incentives for all mailings.

An initial invitation was sent to all sampled addresses. This initial invitation letter included the survey URL and a secure access code unique to the household.

A postcard reminder was sent after the initial invitation to all sampled addresses. The postcard also included the survey URL and a secure access code unique to the household.

A second invitation letter was sent one week after the postcard reminder to any sampled addresses who did not have a confirmed adult survey completion or refusal. This invitation also included the survey URL and a secure access code unique to the household.

Developing the Survey Instrument

The questionnaire was originally developed by the Colorado Health Institute, based on questions contained in the 2008 Massachusetts, Oklahoma and Minnesota Household Surveys, which closely followed the State Health Access Data Assistance Center (SHADAC) model of health interview survey questionnaires. Specific sections were modified for the State of Colorado.

More significant additions and deletions from the 2017 to the 2019 version of the CHAS instrument are as follows:

Questions Added

INTRO: An introductory screening section specific to web and inbound phone calls was added with questions confirming mailing address, state residency, and primary residence.

² <https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201812.pdf>

S8b-j and S12b-j: Additional descriptors added to sibling answer category: foster brother/sister.

RosterCheck1: After S8 and S12 series, a roster check was shown to web respondents to verify their previous responses were correct.

H1 item L: Added wording referring to Medicare supplements, "This would also include a Medicare supplement you bought directly".

H2: Answer categories added to include: Railroad retirement plan, Indian Health Service, and A student health insurance plan.

H3a: Added wording to answer category that references Medicare supplements, "This would also include a Medicare supplement you bought directly".

H5b: Added wording to answer category that references Medicare supplements, "This would also include a Medicare supplement you bought directly".

H7a: Added wording to answer category that references Medicare supplements, "This would also include a Medicare supplement you bought directly".

H8fa: Added question asking why uninsured person doesn't need health insurance.

A6d: New question to gauge incidence of unfair treatment in medical care.

A6e: New question to gauge perceived reasons for unfair treatment in medical care.

A6f: New question to gauge stressfulness of unfair treatment in medical care.

A9b item g: New items to gauge incidence of skipping care due to unfair treatment in medical care.

A12: New question indicating whether one has been surprised by a medical bill that they thought would be covered by health insurance.

A13: New question measuring food insecurity.

SU3: New question assessing experience with issues related to substance abuse.

SU5: New question measuring perceptions of how large a problem opioid addiction is in local community.

INT1 and INT3: New question to measure internet usage.

D11: New question to gauge housing insecurity.

Questions Deleted

S4a: For a period of time, the screening out of one-half of those age 65 and older was removed. That is all households qualified for the survey.

H1: Items deleted include: Railroad retirement plan, Indian Health Service, and A student health insurance plan.

H3a: Items deleted include: Railroad retirement plan, Indian Health Service, and A student health insurance plan.

H4: Items deleted include: Railroad retirement plan, Indian Health Service, and A student health insurance plan.

H5b: Items deleted include: Railroad retirement plan, Indian Health Service, and A student health insurance plan.

H7a: Items deleted include: Railroad retirement plan, Indian Health Service, and A student health insurance plan.

E10: Question deleted which asked if employer offered health insurance to any of its employees.

A3a: Deleted word 'hospital' when referencing 'emergency room'.

A3b: Deleted word 'hospital' when referencing 'emergency room'.

A5: Deleted word 'hospital' when referencing 'emergency room'.

A10: Deleted question about out of pocket expenses.

A10b: Deleted question about out of pocket expenses.

AF1f: Deleted question about satisfaction with health insurance coverage.

AF4: Deleted question about public health programs.

INT1 and INT2: Deleted questions to collect incentive information removed.

Questions Changed

General: For purposes of self-administration in the web survey, a "Don't know" category was specifically offered as an answer category.

General: For purposes of self-administration in the web survey, all other specify responses were directed to 'Please type your specific response here' alongside a blank text box.

H1 item f: item wording updated to "Veteran's Affairs, Military Health, TRICARE, formerly known as the Civilian Health and Medical Program of the Uniformed Services or CHAMPUS, a health care program of the United States Department of Defense Military Health System."

H1aa: Answer category was simplified for web survey to "Unable to complete or submit application through Connect for Health Colorado"

H3a: Answer category wording updated to "Veteran's Affairs, Military Health, TRICARE, formerly known as the Civilian Health and Medical Program of the Uniformed Services or CHAMPUS, a health care program of the United States Department of Defense Military Health System."

H3aa: Answer category was simplified for web survey to "Unable to complete or submit application through Connect for Health Colorado"

H4: Answer category wording updated to "Veteran's Affairs, Military Health, TRICARE, formerly known as the Civilian Health and Medical Program of the Uniformed Services or CHAMPUS, a health care program of the United States Department of Defense Military Health System."

H5a3: Previous question H5a1 altered to capture insurance coverage status of other members of household.

H5aa: Answer category was simplified for web survey to "Unable to complete or submit application through Connect for Health Colorado"

H5b: Answer category wording updated to "Veteran's Affairs, Military Health, TRICARE, formerly known as the Civilian Health and Medical Program of the Uniformed Services or CHAMPUS, a health care program of the United States Department of Defense Military Health System."

H5c: Added 'or changed?' to the end of the question.

H7a: Answer category wording updated to "Veteran's Affairs, Military Health, TRICARE, formerly known as the Civilian Health and Medical Program of the Uniformed Services or CHAMPUS, a health care program of the United States Department of Defense Military Health System."

H7aa: Answer category was simplified for web survey to "Unable to complete or submit application through Connect for Health Colorado"

A5c: For ease of online response, expanded the answer range to include weeks.

A6b: For ease of online response, expanded the answer range to include weeks.

A9b: Included reference to 'TARGET's parents' in items a

A9b item d: Changed to more generalized wording about getting to the doctor's office or clinic.

D12: Additional answer categories to refine citizenship status.

INCOME series: Questions were updated to reference 2018.

Changes to RDD survey

The RDD comparison survey was initially running longer than budgeted length. In order to reduce the time, CHI dropped several questions from the RDD survey (a full crosswalk can be found in Appendix E).

The following questions were removed from the RDD phone survey:

- Employment - E1, E4, E7, E8, E9, E11,
- Unfair Treatment - A6D, A6E item a-h, A6F
- Dental Health - A7B
- Medical Bills - A12
- Food Shortage - A13
- Health Assessment - HS1, HS2
- Advance Directives - AD1, AD2
- Mental Health - MH1
- Substance Abuse - SU3, SU5
- CO Health Care Rating - HR1, HR2
- Stable Housing - D11

Programming the Survey Instrument

CHI provided SSRS with a revised version of the 2019 instrument. SSRS adapted the instrument for self-administration on the web. As outlined in the previous section, adding a web option necessitated some language updates to reflect a self-administered, rather than interviewer-directed process. Numerous small wording updates were needed throughout the survey. For example, language from CATI administration, such as, "Now I'm going to read a list" or "Now please

tell me” is updated for self-administration to “Next is a list” or “Please indicate.” Changes such as these are indicated by placing the reference of ‘CATI’ or ‘WEB’ prior to the wording shift based on mode of completion.

For both the web and phone modes, English and Spanish language versions of the instrument were available.

SSRS programmed the web instruments using web/CATI software that integrates data from all modes and dispositions sample as completed in the mode used by the respondent to avoid duplicating households. The survey screens were optimized for mobile devices as well as desktop computer and tablets.

Team members reviewed all programs to confirm accuracy of skip patterns and reasonable flow of the instrument. In addition, reviewers scanned the programs with an eye toward respondent usability – to this end the web survey was tested on a variety of devices and platforms; including smart phones, tablets, and lap/desktop computers, as well as Chrome, Safari, Firefox, Internet Explorer, and Microsoft Edge.

Pretesting the Survey Instrument

CATI Pretesting

Prior to going into the field, SSRS programmed the study into the Survox CAWI/CATI software package. Extensive checking of the program was conducted, given the large number of logic patterns that the skip patterns could generate. Household roster surveys with a specific target person require three to four times more project labor to check when compared to a survey design with simply “last birthday” as the target selection criterion because of the complexity of the skip patterns.

The pretest for the 2019 Colorado Access Survey took place from January 17 to 21, 2019 and between the hours of 6:00 p.m. and 9:00 p.m. MDT. SSRS interviewers completed a total of 24 interviews. Participants were recruited using prescreened sample from SSRS’s Omnibus survey. SSRS called back Omnibus respondents who were known to be from Colorado and focused on sample that had an uninsured respondent and/or child(ren) in the household in order to cover as much of the questionnaire content as possible. Sample with a respondent that had completed the Omnibus in Spanish was flagged in order to recruit respondents who could pretest the Spanish instruments. Two CATI interviews were completed in Spanish.

CATI interviewers received formal training with the project team and interviewing supervisors. The written materials were provided prior to the beginning of the field period and included:

- An annotated questionnaire containing information about the goals of the study and detailed explanations of why questions are being asked, the meaning and pronunciation of key terms, potential obstacles to be overcome in valid responses, and respondent problems that could be anticipated ahead of time as well as strategies for addressing them.

- A question by question guide with detailed explanations of the purpose of questions and how to address respondent difficulties with those questions.
- A list of frequently asked questions (FAQs) and the appropriate responses.
- A script to use when leaving messages on answering machines.
- A section that deals with handling sensitive questions.
- A list of strategies for averting refusals.

Throughout the study, strict control procedures are maintained. Field personnel and project directors continually monitor the interviewers. Each time an interview is monitored, a supervisor reviews the responses as they are entered into the CATI system to verify the accuracy of the responses recorded by the interviewer. In addition, evaluation forms are completed to rate interviewers on diction, refusal conversion, verbatim recording of open-ends, probing, etc. Interviewers are counseled on their weaknesses and praised upon improvement.

Interviewer training was conducted both prior to the study pretest and before the production survey was officially launched. Call center supervisors and interviewers carefully reviewed the questionnaire. Interviewers were given instructions to help them maximize response rates and ensure accurate data collection. Interviewers were instructed to encourage participation by emphasizing the importance of the project in understanding the experiences in obtaining health care and health insurance of Coloradoans. In addition, respondents were provided assurance that the information they provided was confidential.

Call center managers monitored the pretest in real time and provided digital recordings for review by SSRS and CHI project team members.

Cognitive and Usability Web Pretesting

With the transition to self-administration, pretesting the online instrument was vital. The focus of these pretests was to assess respondent's comprehension of the survey questions, along with how they physically navigated the programmed instrument.

SSRS reviewed the questionnaire for new questions, any language that could have multiple meanings for respondents, and potential areas where the design or layout of individual questions could be problematic. Questions such as ease of entering answers, points where respondent would consider abandoning the survey, and the look and feel of the survey are critical components to this process. A series of potential probes and questions was developed to ask during the interview session (see Appendix A).

Seven Coloradoans participated in the cognitive interviews. Respondents were recruited by phone from SSRS omnibus sample and provided by CHI. For those recruited from the phone, these were respondents who were previously known to live in Colorado by SSRS omnibus surveys. SSRS asked a few demographic questions, internet usage, and then scheduled a time for a recontact to conduct the cognitive interview. An incentive of \$25 was offered for those who completed the cognitive interview.

A member of the SSRS project team contacted potential participants via email and provided them with copies of the invitations – including letters and postcards, as well as information to connect via a meeting application, Zoom. Zoom allows participants to share their device screen. This feature allowed SSRS to view the participants movements and hesitations as they navigated the online instrument. Additionally, both the screen and audio were recorded.

SSRS project team conducted the cognitive interviews. The scripts were utilized, in addition, the one on one nature of the interview allowed for flexibility in obtaining information where respondents seemed hesitant about answering, asked what was meant by a question or shared information about how others may interpret questions. These recordings were shared with CHI for review.

SSRS detailed findings of both the CATI and Web pretests in a memo (see Appendix B).

Data Collection Procedures

An initial invitation was sent to all sampled addresses. This initial invitation letter was sent in a CHI envelope and letterhead. The letter emphasized the importance of participation and how the results may help Colorado residents. The letter included the survey URL and a secure access code unique to the household, as well as a toll-free number for those who did not wish to participate online. In Waves 1 and 2, a date was indicated to 'Please respond by', this was removed for Wave 3.

A postcard reminder was sent after the initial invitation to all sampled addresses. The postcard reinforced the importance of the household's participation in the survey. It included the survey URL and a secure access code unique to the household, as well as a toll-free number.

A final invitation was sent to any sampled addresses who did not have a confirmed adult survey completion or refusal. This final reminder letter was similar to the first, emphasizing the importance of participation and how the results may help all Coloradoans. The letter also included the survey URL, secure access code unique to the household, and toll-free number.

Table 4: Timing of Mailings

	Mailing #1 Initial Invitation Letter	Mailing #2 Postcard	Mailing #3 Final Reminder Letter
	Sent to All	Sent to All	Sent to Non-Responders
Wave 1	February 19, 2019	February 28, 2019	March 8, 2019
Wave 2			
Batch 1	April 29, 2019	May 8, 2019	May 20, 2019
Batch 2	May 3, 2019	May 8, 2019	May 22, 2019

Wave 3	June 26, 2019	July 2, 2019	n/a
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Three waves of data collection were utilized. For Waves 1 and 2, the sequence of three mailings outlined above was implemented – an invitation letter, a postcard, and a final reminder letter. For Wave 3, two mailings – the initial letter and a postcard follow-up were sent to all selected households.

Included with the initial mailing of Waves 1 and 2, was a \$2 bill as a pre-incentive. This was not included in Wave 3.

Waves 1 and 2 were sent bulk/standard mail, while Wave 3 was sent first class mail. In addition, for Waves 1 and 2, SSRS's return address was used on the envelopes. CHI reported that inquiries had been received questioning the authenticity of the survey due to a Colorado organization utilizing a Pennsylvania return address. To address any concerns, for Wave 3 the CHI address was used as the return address.

CATI Procedures

Inbound

For the ABS sample, a toll-free number was supplied to respondents in the event they wanted to call in to ask questions about the web redesign survey or to complete the survey over the phone. English and Spanish inbound phone calls were fielded by SSRS. Interviewers were available to take call ins from 9 am to 9 pm MST/MDT for the duration of the project. If respondents called outside these hours, they could leave a message and an interviewer would return their call.

Outbound

Outbound dialing for the RDD companion study took place from March 18 through May 19, 2019. Similar CATI system functions were present in both the ABS and RDD calls. This routine performs the following functions:

- Displays the next number for the interviewer to dial on the CRT screen
- Records the disposition of the call (no answer, call back, complete, etc.)
- Automatically retrieves unanswered or busy phone numbers at different times of the day and different days of the week in order to minimize not-at-home bias
- Allows the interviewer to enter a specific call-back time and then retrieves the number at that time
- Generates status reports of each phone number on demand

Additional callback attempts follow a differential callback schedule (AM/PM, alternate days, weekdays-weekends, etc.) to ensure the highest completion rate possible. For the purposes of this study, SSRS worked to achieve a maximized response rate overall for the telephone interviews, using American Association for Public Opinion Research (AAPOR) definitions. SSRS

has developed several techniques to minimize the problem of nonresponse in order to increase response rates. For this study, SSRS performed the following:

- Provided a local caller ID number
- Varied the times of day, and the days of the week that call-backs are placed (differential call rule)
- Explained the purpose of the study and accurately state the expected length of the interview
- Permitted respondents to schedule for a call-back; allowing them to phone back on a toll-free number specific to this study
- Provided a clear and early statement that the call is not a sales call
- Informed respondents about how they will be well served by the survey results
- Left voice mails on the 3rd consecutive answering machines reached
- Made a refusal attempt on each initial refusal, occurring 3 days after the first

Household and Target Selection

Upon entry into either the online or phone surveys, respondents were asked a series of questions to determine their eligibility. These are described below:

- 1) Household-level selection
 - For ABS, screening to determine respondent resided at address matched to letter.
 - Screening to exclude out-of-state home owners and vacation homes.
 - Screening to exclude respondents under 18 years of age.
 - For RDD, screening to exclude households where everyone is age 65 or older. Half of all RDD households were screened to determine if any residents younger than 65 lived in the households. If nobody in the HH fit this criterion, the household was terminated.
- 2) Individual-level (target) selection
 - Screening to include adults who can answer questions about health insurance for every member of the household.
 - Random selection of a "target" person. Throughout the entire field period, children in a household were weighted to provide a 60percent increased likelihood of selection

Data Collection Reports and Final Status

A bi-weekly data collection report reported the status of data collection throughout the field period. It contained detailed response information by mode, region, and key demographic groups. The following tables provide the final status of interviewing. In total for the ABS design, 9,162 Web interviews were conducted, 1,103 Inbound phone interviews were conducted from the ABS design.

Table 5: Total Completed Interviews by Region by Mode

	ABS-Web	ABS-Phone	RDD-Phone	Total
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<i>Total</i>	<i>9,162</i>	<i>1,103</i>	<i>1000</i>	<i>10,265</i>
Region 1	366	65	19	431
Region 2	364	41	64	405
Region 3	400	14	12	414
Region 4	722	72	112	794
Region 5	365	29	5	394
Region 6	304	100	24	404
Region 7	306	80	38	386
Region 8	315	86	16	401
Region 9	369	45	28	414
Region 10	389	44	19	433
Region 11	393	27	16	420
Region 12	396	22	39	418
Region 13	366	50	13	416
Region 14	548	59	35	607
Region 15	696	64	63	760
Region 16	433	15	33	448
Region 17	379	28	9	407
Region 18	375	50	41	425
Region 19	354	61	37	415
Region 20	683	96	329	779
Region 21	639	55	48	694

Table 6: ABS Completed Interviews by Region by Target Gender and Education

	Gender		Education			
	Male	Female	>H.S.	H.S. Diploma	Some College	College Degree+
<i>Total</i>	<i>4,831</i>	<i>5,434</i>	<i>485</i>	<i>1,467</i>	<i>2,723</i>	<i>4,113</i>
Region 1	209	222	31	75	148	101
Region 2	185	220	13	49	94	197
Region 3	196	218	15	32	90	195
Region 4	377	417	31	106	226	302
Region 5	185	209	17	66	126	125
Region 6	186	218	31	79	142	102
Region 7	167	219	25	67	125	112
Region 8	189	212	25	82	104	138
Region 9	202	212	19	51	99	199
Region 10	209	224	21	69	123	161
Region 11	208	212	20	61	118	163
Region 12	187	231	20	43	81	211
Region 13	175	241	28	78	130	140
Region 14	315	292	34	131	156	194
Region 15	357	403	27	98	202	325
Region 16	217	231	19	45	83	225
Region 17	190	217	15	52	113	184
Region 18	198	227	23	67	118	137
Region 19	188	227	23	64	129	147
Region 20	366	413	27	79	145	432
Region 21	325	369	21	73	171	323

Table 7: ABS Completed Interviews by Region by Target Age and Race/Ethnicity

	Target Age				Race/Ethnicity			
	0-17	18-34	35-64	65+	White	African-American	Hispanic	Other
<i>Total</i>	<i>1,613</i>	<i>8,053</i>	<i>8,053</i>	<i>8,053</i>	<i>8,053</i>	<i>217</i>	<i>1,467</i>	<i>528</i>
Region 1	83	357	357	357	357	1	51	22
Region 2	53	354	354	354	354	4	32	15
Region 3	91	356	356	356	356	2	33	23
Region 4	138	603	603	603	603	31	104	56
Region 5	66	347	347	347	347	2	26	19
Region 6	52	270	270	270	270	1	111	22
Region 7	61	213	213	213	213	6	146	21
Region 8	54	234	234	234	234	2	150	15
Region 9	52	353	353	353	353	1	41	19
Region 10	61	381	381	381	381	0	34	18
Region 11	74	385	385	385	385	0	23	12
Region 12	78	365	365	365	365	4	33	16
Region 13	45	360	360	360	360	2	32	22
Region 14	107	419	419	419	419	5	144	39
Region 15	123	559	559	559	559	71	77	53
Region 16	89	388	388	388	388	1	35	24
Region 17	48	369	369	369	369	2	21	15
Region 18	82	316	316	316	316	1	90	18
Region 19	54	357	357	357	357	2	39	17
Region 20	94	500	500	500	500	72	152	55
Region 21	108	567	567	567	567	7	93	27

Table 8: RDD Completed Interviews by Region by Target Gender and Education

	Gender		Education			
	Male	Female	>H.S.	H.S. Diploma	Some College	College Degree+
<i>Total</i>	<i>484</i>	<i>516</i>	<i>46</i>	<i>203</i>	<i>260</i>	<i>363</i>
Region 1	11	8	2	5	5	5
Region 2	21	43	3	5	14	32
Region 3	3	9	0	3	2	7
Region 4	50	62	6	29	32	34
Region 5	3	2	0	2	2	0
Region 6	13	11	1	5	11	5
Region 7	19	19	1	12	10	11
Region 8	6	10	2	3	8	2
Region 9	16	12	0	4	11	10
Region 10	9	10	0	8	2	6
Region 11	6	10	0	3	2	8
Region 12	22	17	0	6	13	14
Region 13	4	9	0	9	3	1
Region 14	18	17	1	10	15	8
Region 15	37	26	1	16	14	25
Region 16	18	15	1	3	3	19
Region 17	3	6	0	1	2	6
Region 18	23	18	1	11	9	12
Region 19	16	21	3	6	9	15
Region 20	165	164	21	54	79	124
Region 21	21	27	3	8	14	19

Table 9: ABS Completed Interviews by Region by Target Age

	Target Age				Race/Ethnicity			
	0-17	18-34	35-64	65+	White	African-American	Hispanic	Other
<i>Total</i>	<i>143</i>	<i>134</i>	<i>474</i>	<i>232</i>	<i>8,053</i>	<i>217</i>	<i>1,467</i>	<i>528</i>
Region 1	3	1	13	1	357	1	51	22
Region 2	11	6	33	13	354	4	32	15
Region 3	0	3	7	2	356	2	33	23
Region 4	13	21	50	26	603	31	104	56
Region 5	1	0	4	0	347	2	26	19
Region 6	2	2	10	10	270	1	111	22
Region 7	5	2	22	8	213	6	146	21
Region 8	2	1	2	11	234	2	150	15
Region 9	3	1	12	12	353	1	41	19
Region 10	2	2	12	3	381	0	34	18
Region 11	3	1	7	5	385	0	23	12
Region 12	6	5	23	5	365	4	33	16
Region 13	0	1	5	6	360	2	32	22
Region 14	1	7	19	6	419	5	144	39
Region 15	7	8	31	15	559	71	77	53
Region 16	6	2	17	8	388	1	35	24
Region 17	0	0	6	3	369	2	21	15
Region 18	8	10	16	7	316	1	90	18
Region 19	5	7	20	5	357	2	39	17
Region 20	60	52	144	69	500	72	152	55
Region 21	5	2	21	17	567	7	93	27

Stratified v. Modeled Design

The modeled sample design was effective in targeting and increasing the number of respondents from demographic groups of interest:

- Households with children in household
- Households with young adults, age 18 to 34
- Household with Hispanic members
- Households with annual income below \$25,000
- Households with uninsured members
- Household with members on Medicaid/CHP+

The yield for the modeled design was 15.5:1³, compared with 12:1 for the stratified design.

Length of Interview

Interviews were administered using SSRS CAWI/CATI platform. Across the two modes in the ABS design, web interviews took 30 percent less time to complete than CATI (17 ½ minutes vs 24 ½ minutes)

Web Break-offs

Break-offs are a concern in web and other self-administered modes. In total, 1,840 suspended the survey at least once, 36 percent returned and completed the survey.

SSRS regularly reported to CHI where in the web survey participants were abandoning the survey. Past the initial screening questions, some frequent questions of abandonment tend to be questions of a sensitive or a personal nature, including:

- Mental Health
- Substance Abuse
- Income (particularly questions asking for specific amount versus responding to provided ranges)
- Sexual Orientation
- Gender Identification

One other area of frequent abandonment was the third question in a series of barriers to medical care items (QNA9 series). This was the final question asking what problems if any had been experienced in seeking medical care.

Upon completion of the data collection, the decision was made to include any interview that completed through the race/ethnicity questions which appear near the end of the survey as partial completes. Including these interviews added 171 respondents.

Weighting Procedures

Survey data were weighted to account for discrepancies between sample and population parameters. The 2019 CHAS survey data were weighted to:

³ This yield rate is based solely on Wave 2, which employed the full 3 mailings.

1. Adjust for the fact that not all survey respondents were selected with the same probability
2. Account for gaps in coverage in the survey frame.

Design weights (base weights) address the differential sampling rates across strata and demographic groups of interest described earlier in this report. Subsequently, the resulting base weights were post-stratified along several dimensions (raked) to reflect the control totals obtained from the 2017 estimates of the U.S. Census Bureau's American Community Survey (ACS). These counts were indexed by region, gender, education, age, home ownership, and race/ethnicity.⁴ Medicaid state-wide insurance status was an additional parameter which was derived via June 2019 state enrollment.⁵ Phone status was obtained from the NHIS Modeled estimates (with standard errors) of the percent distribution of household telephone status for adults aged 18 and over, by state: United States, 2015, and projected for year 2018 for Cellphone Only (CPO) vs. Not-CPO. The state-wide phone status benchmark was a parameter employed in weighting the RDD phone frame only. For the ABS frame weighting, an internet use state-wide variable obtained via the ACS was included. Lastly, an additional weight was developed to include Income as a parameter at the state-wide level.

RDD Design Weight

In the first stage, SSRS developed design weights to compensate for a range of known biases that occur in telephone interviewing in general and the CHAS sample design specifically. These are summarized below:

- Non-response weight = Exchange weight * eligibility rate, where the exchange weight equals the number of telephones called /number of telephones available to call and the eligibility weight equals the number of completes /number eligible to be completed (or response rate). These were adjusted separately for landline and cellphone.
- Post-stratification weight = Rebalancing completes by region to the official population distribution.
- Number of persons weight = Correction for the number of persons in the household (capped at 3 or more).
- Phone use weight = Correction for dual cellphone and landline in the household. These households were given a weight of .5.
- Age weight = 18 years and younger down-weighted by a factor of .6 to rebalance from oversampling via the screener, and age 65+ listed sample up-weighted due to the under sampling at the sampling release level.

⁴ Steven Ruggles, Katie Genadek, Ronald Goeken, Josiah Grover, and Matthew Sobek. Integrated Public Use Microdata Series: Version 7.0 [dataset]. Minneapolis: University of Minnesota, 2017. <https://doi.org/10.18128/D010.V7.0>.

⁵ Enrollment by County.

https://www.colorado.gov/pacific/sites/default/files/Medicaid%20Member%20Caseload%20by%20County%20-%20By%20Age%20Groups%20June%202019_.pdf

- Cell phone-only weight = 41.3 percent of the file is cell phone-only (these were weighted up to the statewide estimate of 67.2 percent).
- Listed Cellphone Weight = The listed cellphone sample was balanced back to the true distribution of listed cell sample in the RDD frame.

The initial design weight is calculated as:

Non-response weight* post-stratification weight* number of persons weight*
phone use weight* age weight* cell phone-only weight* listed cell weight

ABS Design Weight

Design weights for the ABS sample were calculated slightly differently than RDD, based on the elements below:

- Eligibility Weight = equals the number of completes /number eligible to be completed (or response rate). These were adjusted separately per strata.
- Post-stratification weight = Rebalancing completes by region to the official population distribution.
- Number of persons weight = Correction for the number of persons in the household (capped at 3 or more).
- Stratification Weight = A correction was applied to adjust for the oversampling of certain strata.
- Age weight = 18 years and younger down-weighted by a factor of .6 to rebalance from oversampling via the screener, and age 65+ listed sample up-weighted due to the under sampling at the sampling release level.

The initial design weight is calculated as:

Eligibility weight* post-stratification weight* number of persons weight*
stratification weight* age weight

Final Weight Creation

Post-stratification targets were entered for age, home ownership, race/ethnicity, gender, region, education, income, state-wide phone status (for the phone frame), and state-wide internet use (for the ABS frame). based on ACS estimates. Additionally, data were weighted by the June 2019 Medicaid status parameter (insured 22.2 percent vs not insured 77.8 percent).

The ACS reports data according to Public Use Microdata Area (PUMA), which is an area that defines the extent of territory for which the Census Bureau tabulates public use microdata sample data. The raking process⁶ was carried out at the regional level, for which population

⁶ Weighting is accomplished using SPSSINC RAKE, an SPSS extension module that simultaneously balances the distributions of all variables using the GENLOG procedure.

estimates had to be developed, since the ACS only provides super-PUMA and PUMA designations for in-state geography⁷.

A method for overlaying PUMA population estimates over the 21 statistical regions was developed by CHI. Each PUMA represents a proportion of the population for a certain county in Colorado. A map of PUMA-to-county was obtained from the University of Missouri for all counties in Colorado and a map of county to region was developed in order to calculate PUMA weights for each region. The regional PUMA weights were applied to the ACS data to generate regional population estimates of gender, education, race, etc.

Final Weight = With the design weight applied, the post-stratification stage consisted of a three-step raking procedure.

1. The first raking procedure occurred at the region level, where targets were set according to the ACS by age, education, gender, home ownership and race by 21 statistical regions.
2. A second statewide raking procedure was conducted to reapportion a) the distribution of cell phone-only households to 67.2 percent for the phone frame, b) the distribution of households with internet access (93.7 percent have access) for the ABS frame, and c) Medicaid enrolment to 22.2 percent enrolled.
3. Lastly, an additional weight was developed to include Income as a parameter at the state-wide level.

The final total population N-size was projected to the Colorado population of 5,538,455 per the Current Population Survey 2018 (CPS) ⁸.

The ACS benchmarks are outlined below⁹.

Table 10: Gender, Education, and Homeownership Distribution by HSR

	Gender		Education				Homeownership	
HSR	Male	Female	>H.S.	H.S. Diploma	Some College	College degree +	Yes	Rent/ Other
1	51.2%	48.8%	9.8%	25.6%	27.4%	13.8%	63.6%	36.4%
2	50.4%	49.6%	3.1%	16.7%	24.8%	35.1%	67.8%	32.2%
3	49.9%	50.1%	2.4%	9.9%	22.1%	39.3%	82.3%	17.7%
4	49.9%	50.1%	5.1%	16.1%	27.1%	27.1%	66.6%	33.4%
5	50.5%	49.5%	5.4%	17.2%	23.4%	29.0%	75.0%	25.0%

⁷ Due to the reduced N-size of 1,000 interviews for the RDD relative to previous RDD waves, the phone sample, was adjusted to the Colorado-wide marginals.

⁸ Sarah Flood, Miriam King, Renae Rodgers, Steven Ruggles, and J. Robert Warren. Integrated Public Use Microdata Series, Current Population Survey: Version 6.0 [dataset]. Minneapolis, MN: IPUMS, 2018.

<https://doi.org/10.18128/D030.V6.0>

⁹ Phone use was a parameter for the phone frame only. Internet use was a parameter for the ABS frame only.

6	51.7%	48.3%	13.3 %	21.0%	27.6%	15.5%	64.8%	35.2%
7	49.0%	51.0%	7.6%	22.6%	29.9%	17.2%	62.8%	37.2%
8	52.2%	47.8%	15.0 %	19.6%	27.4%	15.1%	63.7%	36.3%
9	49.6%	50.4%	5.1%	16.7%	23.5%	35.2%	72.1%	27.9%
10	48.8%	51.2%	6.9%	22.7%	26.6%	23.8%	69.5%	30.5%
11	51.8%	48.2%	5.3%	22.1%	23.3%	25.3%	71.2%	28.8%
12	52.2%	47.8%	6.6%	16.6%	21.8%	33.8%	65.3%	34.7%
13	49.1%	50.9%	6.4%	23.4%	29.9%	22.0%	76.1%	23.9%
14	50.3%	49.7%	11.2 %	21.9%	23.1%	17.1%	69.7%	30.3%
15	49.7%	50.3%	7.2%	17.8%	21.0%	30.2%	67.7%	32.3%
16	49.8%	50.2%	3.4%	10.8%	22.8%	41.4%	68.8%	31.2%
17	50.0%	50.0%	3.8%	16.5%	26.3%	29.5%	76.6%	23.4%
18	49.9%	50.1%	8.7%	20.1%	24.2%	20.4%	71.2%	28.8%
19	49.3%	50.7%	7.1%	20.7%	31.6%	18.1%	64.8%	35.2%
20	49.8%	50.2%	8.9%	15.0%	18.1%	37.6%	52.1%	47.9%
21	49.9%	50.1%	5.3%	16.7%	23.3%	34.5%	72.2%	27.8%
Total	50.0%	50.0%	6.6%	17.1%	23.6%	29.8%	67.4%	32.6%

Table 11. Age and Race/Ethnicity Distribution by HSR

HSR	Age				Race / Ethnicity			
	0-17	18-34	35-64	65+	White	African American	Hispanic	Other
1	23.4%	20.2 %	38.3 %	18.1%	74.4%	2.0%	21.6%	2.0%
2	20.3%	27.9 %	36.4 %	15.4%	82.9%	0.9%	11.3%	4.9%
3	26.3%	17.7 %	44.3 %	11.7%	83.1%	1.1%	8.7%	7.1%
4	24.5%	25.1 %	37.4 %	13.0%	69.5%	5.7%	16.9%	7.9%
5	25.0%	19.7 %	41.1 %	14.2%	77.6%	2.2%	14.8%	5.4%
6	22.6%	20.2 %	37.4 %	19.9%	58.9%	0.5%	36.8%	3.7%
7	22.7%	22.1 %	37.5 %	17.6%	52.6%	1.5%	42.8%	3.1%

8	22.9%	20.5 %	36.6 %	19.9%	51.9%	0.2%	43.5%	4.4%
9	19.6%	20.5 %	40.5 %	19.4%	78.7%	0.1%	12.8%	8.4%
10	20.0%	16.5 %	42.1 %	21.4%	82.4%	0.2%	14.6%	2.9%
11	24.0%	22.0 %	40.5 %	13.5%	77.9%	0.4%	19.1%	2.6%
12	21.2%	24.6 %	41.2 %	13.0%	77.2%	0.1%	20.2%	2.5%
13	18.3%	17.2 %	41.5 %	23.0%	84.2%	0.1%	13.8%	1.9%
14	26.7%	24.3 %	38.5 %	10.5%	51.3%	3.5%	38.8%	6.5%
15	23.7%	23.0 %	40.4 %	12.9%	60.8%	9.5%	20.0%	9.7%
16	21.6%	25.5 %	39.6 %	13.3%	78.5%	0.7%	13.1%	7.6%
17	23.9%	18.7 %	41.0 %	16.4%	80.4%	3.1%	11.0%	5.5%
18	26.5%	23.4 %	38.2 %	11.9%	64.8%	1.7%	28.9%	4.5%
19	22.5%	21.6 %	36.7 %	19.2%	80.5%	0.3%	15.2%	4.0%
20	20.4%	31.0 %	37.4 %	11.2%	53.6%	8.9%	30.4%	7.1%
21	20.2%	22.1 %	41.7 %	16.1%	76.8%	1.1%	16.4%	5.7%
Total	22.9%	24.1 %	39.2 %	13.8%	68.3%	3.8%	21.6%	6.4%

To handle missing data among some of the demographic variables we employed a technique called hot decking. Hot deck imputation replaces the missing values of a respondent randomly with another similar respondent without missing data. These are further determined by variables predictive of non-response that are present in the entire file. Using an SPSS macro detailed in 'Goodbye, Listwise Deletion: Presenting Hot Deck Imputation as an Easy and Effective Tool for Handling Missing Data' (Myers, 2011), we imputed missing values for age, education, race, and income.

Trimmed and untrimmed weights were provided. Weights were trimmed at the 1st and 100th percentiles to prevent individual interviews from having too much influence on the results.

Complex survey designs and post-data collection statistical adjustments affect variance estimates and resulting tests of significance and confidence intervals. The impact of the survey design on variance estimates is measured by the design effect, which represents the extent of departure from a simple random sample where all sample units respond. The design effect measures the variance inflation of the sample estimate relative to the variance of an estimate based on a hypothetical random sample of the same size.

Design Effects

RDD

The design effect for the RDD weights prior to adjusting for income is 1.75 pre-trimming, and 1.70 post-trimming. Lastly, an additional weight was developed to include income as a parameter. The design effect for the income-adjusted final weight is 1.98 pre-trimming, and 1.84 post-trimming.

ABS

The design effect for the ABS weights prior to adjusting for income is 4.14 pre-trimming, and 3.25 post-trimming. Lastly, an additional weight was developed to include income as a parameter. The design effect for the income-adjusted final weight is 1.98 pre-trimming, and 1.84 post-trimming.

Response Rates

ABS Sample

The response rate for the ABS portion of this study was 10.1 percent. Response rates varied across the 3 waves. Detailed tables by region and wave are in Appendix E.

Table 12: ABS Response Rates

	Wave 1	Wave 2	Wave 3	Total
Total Eligible Interview Category 1	3,484	6,139	642	10,265
Total Eligible, No Interview Category 2	505	872	83	1,460
Total Unknown Eligibility, No Interview Category 3	36,190	84,366	27,517	148,073
Total Not Eligible Category 4	1,735	3,915	1,231	6,881
<i>Response Rate</i>	<i>12.7%</i>	<i>10.4%</i>	<i>5.6%</i>	<i>10.1%</i>

A completed web survey was considered as one that answered through the race-ethnicity question. The overwhelming majority of web respondents completed through the end of the survey, 2 percent of completes in the data were those that answered through race-ethnicity questions and then abandoned the survey.

RDD

The overall response rate for the RDD portion was 8.9 percent. A full disposition of the sample selected for this survey can be found in Appendix E.

Table 13: RDD Response Rates

	Landline	Cell	Total
Total Eligible Interview, Category 1	400	600	100
Total Eligible, No Interview, Category 2	37	127	164
Total Unknown Eligibility, No Interview, Category 3	19,667	37,907	57,574
Total Not Eligible, Category 4	126,934	28,970	155,904
<i>Response Rate</i>	<i>16.2%</i>	<i>5.8%</i>	<i>8.9%</i>

Appendix A – Cognitive Pretest Guide

Colorado Health Access Survey Web Pretest – Cognitive Interviewing and Usability Testing Script January 18, 2019

This document is for the Pretest Web versions for the 2019 Colorado Health access Survey. This is a Cognitive Pretest that will look at one email, and the questionnaire/survey.

Please have respondents start by reviewing the email, and then complete the questionnaire.

We will be probing throughout the questionnaire. If the respondent stops and asks you questions while they are completing the instrument that is fine. Please ask them follow-ups and take notes on the respondent's feedback.

NOTE: DO NOT BEGIN RECORDING UNTIL CONSENT HAS BEEN GIVEN. DO NOT RECORD PERSONAL INFORMATION SUCH AS FULL NAME OR ADDRESS ON THE RECORDING.

To begin the pretest please read the following:

Hello, may I please speak with _____? My name is _____ and I am calling from SSRS to conduct the interview that you agreed to participate in. We really appreciate you taking the time to help us. I am going to ask you to review email and a questionnaire that we are testing, to see if anything is confusing, difficult, or doesn't make sense.

During the interview, I may ask you to share your responses with me so that I can follow along in the survey (IF NEEDED: certain response trigger the next question you will see). At certain points, I will ask you to pause and provide some feedback on the survey.

At any time during the survey if you encounter a problem, something confusing or you don't understand a question, please stop and we can discuss. I want to hear your opinions and thoughts – there are no right or wrong answers here!

I would like to record this interview so that I can pay close attention as you are reviewing the materials and be able to take notes later. May I record this interview?

Do you have any questions before we begin?

First, what type of device are you taking the survey on? Is it a
Laptop or Desktop
I-phone
Another smartphone
I-pad

Another type of tablet (kindle/surface/other android type)

EMAIL:

Did you have opportunity to read this email (allow time)

Is anything unclear about this? Is it clear how to access the survey/what you'll need to do?

SPECIFICS:

- S6B-J Is this clear that we mean, besides you list others in household?
Do we need an introduction (or move the one prior to S6)...“We need some general information...” this just felt abrupt (on cell CATI testing).
After go through...would having all those questions on a single screen for each person make it easier?
Other suggestions?
- S12b-j Same as S6 – clarity, intuitive? Other ideas for set up?
- H2 What type of insurance did you think we meant in this question?
If Answer Health...Did you think it possibly meant any other type of insurance?
- H5a What time period did you have in mind when reading this question...(from what date to what date)?
- H5c How does this list appear to you on the screen? Is it clear, overwhelming, can you see all possible categories?
Do the categories capture everything, not enough?
- H5e How does this list appear to you on the screen? Is it clear, overwhelming, can you see all possible categories?
Do the categories capture everything, not enough?
- H6 What time period were you thinking of (....past 12 months phrase again)?
- H7b How does this list appear to you on the screen? Is it clear, overwhelming, can you see all possible categories?
Do the categories capture everything, not enough?
- H8FA Are there any other reasons not listed you say (you/Target) doesn't need health insurance?
- A2 Some people have told us that there's overlap in answer categories.....Do you think these are distinctive enough? What do you see as the difference?
3 A retail clinic like WalMart
0 An emergency room not part of a hospital
5 An urgent care center
- A5c How did you recall the length of time you waited?
If you got an appointment the same day, what number would you have entered?
- A5c How did you recall the length of time you waited?

If you got an appointment the same day, what number would you have entered?
If you waited a few months, was it difficult to place into weeks? Should we add a category for months?

*A6d What do you think is meant by 'been treated unfairly'?
What's an example of someone being treated unfairly when getting medical care?

*A6e IF ANSWERING FOR ANOTHER ADULT: Can you describe your thought process in answering this question? What difficulties did you encounter when 'putting yourself in someone else's shoes'? about the reasons they think something is happening to them.

IF ANSWERING FOR CHILD: Are you thinking about your child's thoughts or your own when answering this question?

Can you think of any other reasons someone may be treated unfairly

A6f Similar to A6e comment.

A9b item g Unfair treatment que –difficulty for children/parent scenario.

HS2 How did you interpret 'limited in any way because of a physical, mental or emotional health condition?'

*SU3 What people did you include when thinking about 'loved one or close friend'? How far out did that circle include...cousins, family members you don't know well, acquaintances?
Item a...What does the phrase 'without a prescription' mean to you? Did you include a Rx written for someone else, but not you?
Items b and c...Is the phrase 'been addicted' too harsh, judgemental? If it read 'had a problem with Rx painkillers/alcohol' would you have answered differently?

SU4 Did you feel equipped to answer this? What sort of information did you draw on to answer the question?
What area do you think of when you hear the term community?
Are there specific people, groups, organization you were thinking of in dealing with this issue?

*D11 How did you interpret 'stable housing'?

At the end of the cognitive pretest, ask how they felt about taking the survey...if there were any additional questions that they found confusing or did not want to answer. Any questions they think are likely to be confusing or offensive to others.

GENERAL We cover several health care topics, is that confusing? Would it be helpful to have a sentence introducing the next section/topic.

Appendix B– Pretest Memo

DATE: 02/08/19

TO: Jeff Bontrager, Eli Boone, Rebecca Silvernale

FROM: Susan Sherr

COPY: David Dutwin, AJ Jennings, Margie Bauer, Rob Manley, Tom Stoudt

RE: CO Health Access Survey 2019 Pretest Memo - Updated

Pretests for the 2019 Colorado Health Access Survey took place in the last 2 weeks of January. A CATI pretest was conducted January 17 to 22, 2019 and between the hours of 6:00 p.m. and 9:00 p.m. MST. A pretest of the online instrument was conducted January 24 to February 7, 2019.

SSRS interviewers completed a total of 24 interviews during this testing phase. CATI and Web respondents were recruited using prescreened sample from SSRS's Omnibus survey. We called back Omnibus respondents who were known to be from Colorado and focused on sample that had an uninsured respondent and/or children in the household in order to cover as much of the questionnaire content as possible. We also flagged sample with a respondent that had completed the Omnibus in Spanish in order to recruit respondents who could pretest the Spanish instruments. Two CATI interviews and one online interview were completed in Spanish.

The CATI interviews followed the standard telephone pretest protocol of CATI interviewers randomly dialing households in Colorado and conducting interviews as if we were actually fielding the survey. For the web interviews, SSRS conducted cognitive and usability interviews with those who were recruited for the web pretest. This involved members of the SSRS research management team staying in communication with the respondent as he or she went through the interview either on a computer or smart phone and asking probing questions about the experience of taking the survey online. SSRS recorded these interviews, capturing both the images on the screen and the audio of the discussion.

The purpose of this step was to gauge respondents' understanding of any new questions, as well as to assess how respondents were interacting with the web survey. Questions such as ease of entering answers, points where respondent would considering abandoning the survey, and the look and feel of the survey are critical components to this process.

The average length of the CATI interviews was 24.5 minutes. The lengths ranged from 18.4 to 49.0 minutes. Although it is common to see survey lengths that are one or two minutes longer than the targeted length during the pretest phase, we believe that we may need to make a few cuts to the questionnaire to attain the mean overall length that was agreed upon. Of course, the length is less of an issue in a study that will have the majority of the interviews completed online. Nevertheless, if it is possible to consider any cuts, we would appreciate if you could consider doing so.

The basic composition of the pretest interviews is as follows:

Table One

TARGETS	CATI	WEB
Male	11	4
Female	7	2
Child (<18)	2	1
# of People in HH		
1	7	3
2	4	1
3	3	1
4 or more	4	1
Target Insurance Status		
<i>Insured</i>	16	6
Through work or union	7	4
Medicare	2	0
Railroad Retirement Plan	1	0
Veteran's affairs etc.	0	0
Indian Health Service	1	0
Medicaid	3	2
Insurance bought directly by self	4	0
Insurance bought directly by someone else	0	0
<i>Uninsured</i>	2	0

Overall the interviewing progressed smoothly, and the participants seemed responsive and engaged. The majority of the questions were readily answered by respondents without hesitation or request for repeating the question. Of particular interest are new questions added in 2019.

- SU questions seemed to flow smoothly. The introductory language will be shortened per Eli's 1/30 email.
- We suggest some additional wording prior to SU3 for those respondents who are not the TARGET. The purpose of this addition to emphasize that we are now asking about their own experiences, rather than the TARGET's experiences. At HR1, where the survey returns to asking about the TARGET, we suggest some additional wording to refocus the respondent on the TARGET.
- The term, "stable housing" seems well understood by respondents.
- The new A6d-f series requires some consideration of the respondent's ability to answer on behalf of the TARGET should they be another adult in the household. For example, considering what may have happened to a spouse over the course of "their entire lifetime," could be challenging since the respondent is unlikely to have been present for that duration of time. When asked about this during the web pretest, one respondent who was answering on behalf of his fiancé said that he just basically ignored that part of the question. This may happen with regularity, and so it is worth considering whether that framing should just be removed from the question. In addition, we should consider

basing the sexual orientation item off of the TARGET's age, maybe start asking it at 11 or 12?

- The food insecurity item (A13) is likely fine as is (and resembles similar questions we've asked successfully in other surveys), though there was mild confusion during the pretest about whether the issue was "eating less" or "buying less/affordability of groceries".

The following is a list of questions or suggestions for revisions prior to launching the main study, based on feedback from CHI as well as our own pretest experience:

- All question numbers will be removed from the web survey prior to the live launch. The testing screen that allows the tester to select a TARGET will be removed, and the random selection for the TARGET with appropriate weighting for child TARGETs will be activated.
- We are adding an instruction to all questions that require responses in increments of time (days, weeks, months) telling the respondent that they can answer the question in days, weeks, or months. We will also make all answer boxes and labels consistent across questions.
- Phone number format will be standardized.
- Introduction - As in previous waves, we will remind interviewers that they only need to give out contact information if requested, and they do not need to pause the interview and wait for the respondent to confirm that they do not want the numbers at the beginning of the survey.
- We will add an instruction that informs respondents that they can suspend the interview and come back later to finish.
- We will add an instruction telling respondents to code same-day appointments as 0 days.
- All references to emergency rooms will use the term "emergency room" only.
- For questions A5-A6, is it CHI's intention for OB-GYN practitioners to be categorized as *general doctors* or *specialists*? We may want to specifically clarify this for (female) respondents, Web or CATI.
- All pronunciations of insurance types will be reviewed with interviewers prior to telephone interviewing.
- The roster check screen will be cleaned up before launching live. This was an element that we didn't manage to finish properly before pretesting but moved forward in the interest of time.
- We recommend adding the words, "living in this household," at S2. Although what we have currently is standard language, we would like to provide a little more information for web respondents. We will await approval before making this change.
- At S4, we will provide a drop-down menu for the web survey so respondents do not have to type in a number.
- "Foster Sibling" will be added to option five at S8.
- For the web survey, we suggest defining Tricare and CHAMPUS.
- At H5aa, we suggest possibly reducing language for response code #3 to read only "Unable to complete/submit application through Connect for Health Colorado."

- A drop-down menu will be added at H5c for the web survey with a response list of Never, Less than one month, 1 month, 2 months ... 12 months, Not sure.
- Medicaid language suggested by CHI will be added to H8d.
- The language at E4 will be adjusted slightly to be more web-friendly, taking out "By main job, I mean," since that is meant to be read by an interviewer, and replacing it with, "This would be the job at which (you/he/she) ...
- "Would it be..." will be removed at E8 for the web to make it more web-appropriate.
- At question H5c for the web, we will remove "And" from the start of the question text.
- For question AD1, we suggest moving the detailed definition of the Advance Directive to after the actual question, so that those who already know the definition do not have to read it to answer the question.
- For Question D2, Hispanic is now appearing for anyone who said yes to D1 (Hispanic). We just want to confirm that you do not want us to adjust the skip pattern and have Hispanic visible for everyone. The current setup is consistent with the way it was in past waves of the study.
- The phrasing "rented for cash" caused a little confusion for our web respondents. We could consider dropping the "for cash" language.

Two additional pretests were conducted in February, which raised some additional questions and comments from participants.

- Two items in H1 elicited comments expressing uncertainty as to what the item/plan was – 'Railroad retirement plan' and 'Indian Health Service'. We would propose additional explanation for each. 'Railroad retirement plan – a plan available to eligible, retired railroad employees' and 'Indian Health Service – provides medical care and service to federally recognized tribes'
- For question H5c, a respondent was uncertain about the description of 'previous coverage ended.' The lead-in questions ask about coverage ending or changing, we'd suggest repeating this phrase to change to 'previous coverage ended or changed'.

One issue that continues to be of concern is the length of the introduction. In addition to adding time to the total survey length, the length of the introduction is resulting in CATI breakoffs before the interviewer has a chance to persuade the respondent to stay on the phone. Although we have had some success working with the long introduction in past waves, refusals are an ever-increasing obstacle in survey research, and long introductions tend to exacerbate this problem. We need to consider trimming wherever possible.

The primary focus for updating the web survey will be to improve the consistency in formatting and layout. Based on the usability interviews and internal review, programming will be updated to include:

- Transition screens to introduce new topic areas or list questions.
- All items currently reading "Don't know" will be changed to "Not sure."
- Bold font will be added to emphasize any key words within a question.
- We will italicize explanations and instructions.

- The finish later button will be moved to the bottom of the screen.
- Where appropriate, batteries of questions using similar response choices may be converted to grid layouts for the Web version, to consolidate repetitive information.
- Any box labels reading "other/specify" will be changed to "Other (please type in your specific response here)"
- Error messages will be changed to more friendly, specific language where possible.

Responses to other questions:

- When a respondent skips a question, this will be coded as a "web blank" in the data. If you would like us to add these to the refused category on the back end, please just let us know.
- We can add a dollar sign to the left of the text box for IN3 and IN6.
- Changing the age ranges based on household composition sounds complicated and may take significant programming time, but we can consult with our programmer.
- The email address at the bottom of the intro page is for technical assistance. We can add other contact information as well if that is your preference.
- The Spanish introduction was in the testing link. For the main study we will have a separate link for Spanish language provided in the invitation letter that goes directly to a Spanish introduction.
- Generally speaking, we tend to avoid status bars, because the bars can be misleading as skip patterns can impact the percent complete greatly. In addition, as so many people are now taking mobile optimized versions, they take up valuable real estate on the page and can make the survey appear even longer as grid questions are generally shown on their own pages.

We look forward to hearing your thoughts on these and any other issues as we prepare to field the main study.

Appendix C– Letters and Postcards

Initial Invitation

Colorado Resident
<address1> <address2>
<city>, <state> <zip>

DATE

Dear Colorado Resident,

Your household has been randomly selected for this year's **Colorado Health Access Survey**.

This important survey is conducted by the Colorado Health Institute and collects information about the health of people in Colorado and about issues they may have getting health care. The results may help people and families in your community. Your household has been selected to represent many other households like yours.

Who should complete the survey?

Please have an adult in your household, age 18 or older, who can answer questions about health care for everyone in the household complete the survey by going to the website below and typing in the secure access code provided.

Please respond **by DATE!**

www.cohealthsurvey.com

Your secure access code is: <XXXX>

We are not selling anything or asking for money. To thank you in advance for your participation, we are enclosing a \$2 bill. This small gift is for you to keep whether or not you decide to participate.

If you do not have access to the internet or would prefer to complete the survey over the phone, please call **1-844-628-1521**.

Your help is very important to this study's success. For more information on the Colorado Health Institute, please visit our website at www.coloradohealthinstitute.org. Thank you for your cooperation.

Sincerely,
Jeff R. Bontrager
Principal Investigator
Colorado Health Access Survey

Residente del estado de Colorado

DATE

<address1> <address2>

<city>, <state> <zip>

Estimado(a) residente del estado de Colorado:

Su hogar fue seleccionado al azar para participar en la **Encuesta de Colorado sobre el acceso a servicios de salud**.

El Colorado Health Institute lleva a cabo esta importante encuesta con el fin de recopilar información sobre la salud de los residentes en Colorado y los problemas que pueden enfrentar para obtener atención médica. Los resultados pueden ayudar a las personas y a las familias de su comunidad. Su hogar fue seleccionado para representar a muchos otros hogares como el

¿Quién debería completar la encuesta?

Un adulto de su hogar, de 18 años o más, que pueda responder preguntas sobre la atención médica de todas las personas del hogar, debería responder la encuesta en el sitio web a continuación y escribir el código de acceso seguro que se brinda.

Responda **antes DATE**

www.cohealthsurvey.com/espanol

Su código de acceso seguro es: <XXXX>

suyo.

No vendemos nada ni estamos pidiendo dinero. Para agradecerle de antemano por su participación, adjuntamos \$2. Esta pequeña gratificación es para usted, independientemente de que decida participar o no.

Si no tiene acceso a Internet o prefiere contestar la encuesta por teléfono, llame al **1-844-628-1521**.

Su ayuda es muy importante para el éxito de este estudio. Gracias por su cooperación.

Atentamente,



Jeff R. Bontrager

Investigador principal

Encuesta de Colorado sobre el acceso a servicios de salud

Postcard

Dear Colorado Resident,

A few weeks ago, we mailed you a letter asking for your help with this year's **Colorado Health Access Survey**, a study about the health of people in Colorado and issues they may have getting health care.

If you or someone in your household has already completed the questionnaire, please accept our sincere thanks. If you have not already responded, please have the adult age 18 years or older in your household, who can answer questions about health care for everyone in the household, go to the website listed below to complete the survey.

Please respond **by DATE** at www.cohealthsurvey.com

Your secure access code is: <<**XXXX**>>

Your help is very important to this study's success. For more information on the Colorado Health Institute, please visit our website at www.coloradohealthinstitute.org.

If you do not have access to the internet or would prefer to complete the survey over the phone, please call **1-844-628-1521**.

Thank you.

Estimado(a) residente del estado de Colorado:

Hace algunas semanas, le enviamos una carta solicitándole su colaboración en la **Encuesta de Colorado sobre el acceso a servicios de salud** de este año, un estudio acerca de la salud de las personas en Colorado y los problemas que enfrentan para obtener atención médica.

Le agradecemos si usted o alguien de su hogar ya ha completado el cuestionario. Si no lo han respondido, pídale a un adulto de 18 años o más de su hogar, que pueda responder preguntas sobre la atención médica de todas las personas del hogar, visite el sitio web a continuación para completar la encuesta.

Responda **antes del DATE** en www.cohealthsurvey.com/espanol

Su código de acceso seguro es: <<**XXXX**>>

Su ayuda es muy importante para el éxito de este estudio. Para obtener más información sobre el Instituto de Salud de Colorado, visite nuestro sitio web en www.coloradohealthinstitute.org.

Si no tiene acceso a Internet o prefiere completar la encuesta por teléfono, llámenos al **1-844-628-1521**

Muchas gracias.

Final Invitation

Colorado Resident
<address1> <address2>
<city>, <state> <zip>

May 17, 2019

Dear Colorado Resident,

Your household has been randomly selected for this year's **Colorado Health Access Survey**.

This important survey is conducted by the Colorado Health Institute and collects information about the health of people in Colorado and about issues they may have getting health care. The results may help people and families in your community. Your household has been selected to

Who should complete the survey?

Please have an adult in your household, age 18 or older, who can answer questions about health care for everyone in the household complete the survey by going to the website below and typing in the secure access code provided.

DEADLINE EXTENSION! Please respond by June 5th!

www.cohealthsurvey.com

Your secure access code is: <XXXX>

represent many other households like yours.

If you do not have access to the internet or would prefer to complete the survey over the phone, please call **1-844-628-1521**.

Your help is very important to this study's success. For more information on the Colorado Health Institute, please visit our website at www.coloradohealthinstitute.org. Thank you for your cooperation.

Sincerely,



Jeff Bontrager
Principal Investigator
Colorado Health Access Survey

Residente del estado de Colorado

25 de Abril 2019

<address1> <address2>

<city>, <state> <zip>

Estimado(a) residente del estado de Colorado:

Su hogar fue seleccionado al azar para participar en la **Encuesta de Colorado sobre el acceso a servicios de salud**.

Esta importante encuesta es realizada por el Instituto de Salud de Colorado con el apoyo del Departamento de Servicios Humanos de Colorado. Esta encuesta recopila información sobre la salud de los residentes de Colorado y los problemas que pueden tener para obtener atención médica. Los resultados pueden ayudar a las personas y familias en su comunidad. Su hogar fue seleccionada para representar muchas otras hogares como la suya.

¿Quién debería completar la encuesta?

Un adulto de su hogar, de 18 años o más, que pueda responder preguntas sobre la atención médica de todas las personas del hogar, debería responder la encuesta en el sitio web a continuación y escribir el código de acceso seguro que se brinda.

¡SE AMPLIÓ EL PLAZO! Responda antes 19 de Mayo!

www.cohealthsurvey.com/espanol

Su código de acceso seguro es: <XXXX>

Si no tiene acceso a Internet o prefiere contestar la encuesta por teléfono, llame al **1-844-628-1521**.

Su ayuda es muy importante para el éxito de este estudio. Para obtener más información sobre el Instituto de Salud de Colorado, visite nuestro sitio web en www.coloradohealthinstitute.org.

Gracias por su cooperación.

Atentamente,



Jeff Bontrager

Investigador principal

Encuesta de Colorado sobre el acceso a servicios de salud

Appendix E – Questionnaire Crosswalk

Variable	Label	ABS Web	ABS Phone	RDD
ID	Target ID	✓	✓	✓
CAMPAIGN	ABS web, ABS Phone, or RDD	✓	✓	✓
PHONE_TYPE	Sa1a. Before we continue, are you calling from a cell phone or landline?	✓	✓	
DRIVING_IN	Sa1b. Are you driving and unable to complete the survey?	✓	✓	
ADDRESS_VERIFY	WSC1. Are you completing the survey for...?	✓	✓	
LIVE_AT_ADDRESS	WSC2. Do YOU live or stay at this address?	✓	✓	
MAIN_RESIDENCE_WEB	WSC2b. Is this address your main residence, a second home or a vacation home?	✓	✓	
AGE18PL_WEB	WSC3. Are you at least 18 years old?	✓	✓	
RESIDENCE_OCCUPIED	WSC4. Does ANYONE live or stay at...?	✓	✓	
LOCATION_TYPE	WSC5. Is this address a residential address, a business address, or both?	✓	✓	
ADULT_AVAIL	Is there an adult in who lives or stays at this address? Are they currently available to talk with?	✓	✓	
DRIVING_OUT	Sa2a. Before we continue, are you driving and unable to complete the survey?	✓		✓
AGE_CELL	Sa2b. What is your age (as of your last birthday)?	✓	✓	✓
AGE18PL_CELL	Sa3. Could you please tell me if you are...?	✓		✓
MAIN_RESIDENCE	S1. First of all, is this your main residence, a second home or a vacation home?	✓		✓
COUNTY_INITIAL	S1aa. Just to make sure that we speak with people throughout the state, can you please tell me what county you live in?	✓		✓
COUNTY	S1aa. Enter county here:	✓	✓	✓
RESIDENCE_IN_CO	S1a. Is your main residence located in Colorado?			✓
MAIN_PHONE	S1b. Is the telephone number I dialed, xxx-xxx-xxxx, the number I would use to reach you at your main residence?			✓
ANS QUESTIONS	S2. Can you answer questions about health insurance for all people in this household?	✓	✓	✓
OTHER_AVAILABLE	S3. Is another adult available who could answer questions about health insurance for all people in the household?	✓	✓	✓
NUM_HH	S4. How many people currently live or stay here? Please include anyone temporarily away for school or the armed services.	✓	✓	✓
NUM_0TO64	S4a. How many of the people in your household are age 64 or younger?	✓	✓	✓

Variable	Label	ABS Web	ABS Phone	RDD
RESP_AGE	S6. Starting with yourself, what is your age (as of your last birthday)?	✓	✓	✓
RESP_AGE18PL	S6a1. Could you please tell me if you are...?	✓	✓	✓
AVAIL_18PL	S6A. Is there someone available who is 18 or older?	✓	✓	✓
RESP_GENDER	S7a. What is your gender?	✓	✓	✓
P2_AGE	S6b. You mentioned 2-10 people currently live or stay at your household. What's the next person's age?	✓	✓	✓
P2_AGE18PL	S6b1. Could you please tell me if they are...?	✓	✓	✓
P3_AGE	S6c. You mentioned 3-10 people currently live or stay at your household. What's the next person's age?	✓	✓	✓
P3_AGE18PL	S6c1. Could you please tell me if they are...?	✓	✓	✓
P4_AGE	S6d. You mentioned 4-10 people currently live or stay at your household. What's the next person's age?	✓	✓	✓
P4_AGE18PL	S6d1. Could you please tell me if they are...?	✓	✓	✓
P5_AGE	S6e. You mentioned 5-10 people currently live or stay at your household. What's the next person's age?	✓	✓	✓
P5_AGE18PL	S6e1. Could you please tell me if they are...?	✓	✓	✓
P6_AGE	S6f. You mentioned 6-10 people currently live or stay at your household. What's the next person's age?	✓	✓	✓
P6_AGE18PL	S6f1. Could you please tell me if they are...?	✓	✓	✓
P7_AGE	S6g. You mentioned 7-10 people currently live or stay at your household. What's the next person's age?	✓	✓	✓
P7_AGE18PL	S6g1. Could you please tell me if they are...?	✓	✓	✓
P8_AGE	S6h. You mentioned 8-10 people currently live or stay at your household. What's the next person's age?	✓	✓	✓
P8_AGE18PL	S6h1. Could you please tell me if they are...?	✓	✓	✓
P9_AGE	S6i. You mentioned 9-10 people currently live or stay at your household. What's the next person's age?	✓	✓	✓
P9_AGE18PL	S6i1. Could you please tell me if they are...?	✓	✓	✓
P10_AGE	S6j. You mentioned 10 people currently live or stay at your household. What's the next person's age?	✓	✓	✓
P10_AGE18PL	S6j1. Could you please tell me if they are...?	✓	✓	✓
P2_GENDER	S7b. What is this (child's/person's) gender?	✓	✓	✓
P3_GENDER	S7c. What is this (child's/person's) gender?	✓	✓	✓

Variable	Label	ABS Web	ABS Phone	RDD
P4_GENDER	S7d. What is this (child's/person's) gender?	✓	✓	✓
P5_GENDER	S7e. What is this (child's/person's) gender?	✓	✓	✓
P6_GENDER	S7f. What is this (child's/person's) gender?	✓	✓	✓
P7_GENDER	S7g. What is this (child's/person's) gender?	✓	✓	✓
P8_GENDER	S7h. What is this (child's/person's) gender?	✓	✓	✓
P9_GENDER	S7i. What is this (child's/person's) gender?	✓	✓	✓
P10_GENDER	S7j. What is this (child's/person's) gender?	✓	✓	✓
P2_RELATIONSHIP	S8b. What is this person's relationship to you?	✓	✓	✓
P3_RELATIONSHIP	S8c. What is this person's relationship to you?	✓	✓	✓
P4_RELATIONSHIP	S8d. What is this person's relationship to you?	✓	✓	✓
P5_RELATIONSHIP	S8e. What is this person's relationship to you?	✓	✓	✓
P6_RELATIONSHIP	S8f. What is this person's relationship to you?	✓	✓	✓
P7_RELATIONSHIP	S8g. What is this person's relationship to you?	✓	✓	✓
P8_RELATIONSHIP	S8h. What is this person's relationship to you?	✓	✓	✓
P9_RELATIONSHIP	S8i. What is this person's relationship to you?	✓	✓	✓
P10_RELATIONSHIP	S8j. What is this person's relationship to you?	✓	✓	✓
PNUM_OF_TARGET		✓	✓	✓
GAVE_NAME	S10a. What is the first name or initials of the person selected?	✓	✓	✓
RESP_REL_TO_TARGET	S12b. It would be helpful to know the relationship between the other members of your household and Target? What is the relationship of HH member #2 to the TARGET?	✓	✓	✓
P2_REL_TO_TARGET	S12c. It would be helpful to know the relationship between the other members of your household and Target? What is the relationship of HH member #3 to the TARGET?	✓	✓	✓
P3_REL_TO_TARGET	S12d. It would be helpful to know the relationship between the other members of your household and Target? What is the relationship of HH member #4 to the TARGET?	✓	✓	✓
P4_REL_TO_TARGET	S12e. It would be helpful to know the relationship between the other members of your household and Target? What is the relationship of HH member #5 to the TARGET?	✓	✓	✓
P5_REL_TO_TARGET	S12f. It would be helpful to know the relationship between the other members of your household and Target? What is the relationship of HH member #6 to the TARGET?	✓	✓	✓
P6_REL_TO_TARGET	S12g. It would be helpful to know the relationship between the other members of your household and Target? What is the relationship of HH member #7 to the TARGET?	✓	✓	✓

Variable	Label	ABS Web	ABS Phone	RDD
P7_REL_TO_TARGET	S12h. It would be helpful to know the relationship between the other members of your household and Target? What is the relationship of HH member #8 to the TARGET?	✓	✓	✓
P8_REL_TO_TARGET	S12i. It would be helpful to know the relationship between the other members of your household and Target? What is the relationship of HH member #9 to the TARGET?	✓	✓	✓
P9_REL_TO_TARGET	S12j. It would be helpful to know the relationship between the other members of your household and Target? What is the relationship of HH member #10 to the TARGET?	✓	✓	✓
TARGET_GUARDIAN	GUARDa. Are any members of your household the legal guardian or caretaker of (TARGET)?	✓	✓	✓
GUARDIAN_HH1	GUARDb. Which household member (or members) is (TARGET's) legal guardian or caretaker?	✓	✓	✓
GUARDIAN_HH2	GUARDb. Which household member (or members) is (TARGET's) legal guardian or caretaker?	✓	✓	✓
MARITAL_STATUS		✓	✓	✓
PARENT		✓	✓	✓
AGE		✓	✓	✓
AGE_LT18		✓	✓	✓
GENDER		✓	✓	✓
NUM_FAM		✓	✓	✓
INS_MEDICAID	H1h. Do you / Does TARGET currently have Medicaid, also known as Health First Colorado	✓	✓	✓
INS_WORK	H1b. Do you / Does TARGET currently have Health insurance through (your/TARGET's) work or union	✓	✓	✓
INS_WORK_OTH	H1c. Do you / Does TARGET currently have Health insurance through someone else's work or union	✓	✓	✓
INS_MEDICARE	H1d. Do you / Does TARGET currently have Medicare	✓	✓	✓
INS_MILITARY	H1f. Do you / Does TARGET currently have Veteran's Affairs, Military Health, TRICARE or CHAMPUS	✓	✓	✓
INS_CHP	H1i. Do you / Does TARGET currently have Child Health Plan Plus (CHP+ [Chip Plus]).	✓	✓	✓
ins_chp_verify	H1ia. Again, CHP+ is a CO program for low and moderate income children under age 19 and pregnant women who live in families that earn more than is allowed under Medicaid, also known as Health First Colorado. Do (you/TARGET) fall into one of these two group	✓	✓	✓

Variable	Label	ABS Web	ABS Phone	RDD
INS_PRIVATE	H1l. Do you / Does TARGET currently have Health insurance bought directly by (you / TARGET)	✓	✓	✓
INS_PRIV_OTH	H1m. Do you / Does TARGET currently have Health insurance bought directly by someone else	✓	✓	✓
INS_ESI_EMPSIZE	H1caa. How many employees work for the employer that (you get/ TARGET gets) (your/his/her/their) insurance through?	✓	✓	✓
INS_PRIV_REL	H1mb. Which person (do you/ does TARGET) get (your/his/her) insurance through?	✓	✓	✓
INS_PRIV_OTH_REL2	H1ab. Is this through (your/TARGET's) parent or guardian?	✓	✓	✓
INS_PRIV_EMP	H1mba. (Is this person/Are you) employed?	✓	✓	✓
INS_PRIV_EMPSIZE	H1mbb. How many employees work for (your/this person's) employer?	✓	✓	✓
C4HC	H1aa. Was (your/TARGET's) health insurance coverage selected through Connect for Health Colorado, Colorado's health insurance marketplace or exchange?	✓	✓	✓
INS_OTH_RESP1	H2. (Do you/Does TARGET) currently have any other type of insurance?	✓	✓	✓
INS_OTH_RESP2	H2. (Do you/Does TARGET) currently have any other type of insurance?	✓	✓	✓
INS_OTH_RESP3	H2. (Do you/Does TARGET) currently have any other type of insurance?	✓	✓	✓
INS_OTH_RESP4	H2. (Do you/Does TARGET) currently have any other type of insurance?	✓	✓	✓
INS_OTH_RESP5	H2. (Do you/Does TARGET) currently have any other type of insurance?	✓	✓	✓
INS_OTH_RESP6	H2. (Do you/Does TARGET) currently have any other type of insurance?	✓	✓	✓
INS_OTH_RESP7	H2. (Do you/Does TARGET) currently have any other type of insurance?	✓	✓	✓
INS_OTH_RESP8	H2. (Do you/Does TARGET) currently have any other type of insurance?	✓	✓	✓
INS_OTH_RESP9	H2. (Do you/Does TARGET) currently have any other type of insurance?	✓	✓	✓
INS_VERIFY	H3. Just to be sure I have this right, (you do/TARGET does) not have health insurance coverage. Is that correct?	✓	✓	✓
INS_VER_TYPE	H3a. What insurance do (you/they) have?	✓	✓	✓

Variable	Label	ABS Web	ABS Phone	RDD
INS_CHP_VERIFY_H3	H3a09a. CHP+ is a CO program for low and moderate income children under age 19 and pregnant women who live in families that earn more than is allowed under Medicaid, also known as Health First Colorado. Do (you/TARGET) fall into one of these two groups?	✓	✓	✓
INS_VER_ESI_EMPSIZE	H3ac. How many employees work for the employer that (you get/ TARGET gets) (your/his/her/their) insurance through?	✓	✓	✓
INS_VER_PRIV_REL	H3mb. Which person (do you/ does TARGET) get (your/his/her/their) insurance through?	✓	✓	✓
INS_VER_PRIV_PAR	H3ab. Is this through (your/TARGET's) parent or guardian?	✓	✓	✓
INS_VER_PRIV_EMP	H3mba. Is (Is this person/Are you) employed?	✓	✓	✓
INS_VER_PRIV_EMPSIZE	H3mbb. How many employees work for (this person's/your) employer?	✓	✓	✓
INS_VER_C4HC	H3aa. Was (your/TARGET's) health insurance coverage selected through Connect for Health Colorado, Colorado's health insurance marketplace or exchange?	✓	✓	✓
NOINS_OOP	H3b. When (you/they) go to a doctor, health clinic, or hospital, does anyone else pay for some or all of (your / their) medical bills?	✓	✓	✓
IHS_OOP	H3c. I understand that (you receive / TARGET receives) services through the Indian Health Service. In addition to this, does anyone else pay for (your / TARGET's) bills when (you/they) go to a doctor or hospital?	✓	✓	✓
INS_VER2_TYPE	H4. And who is that?	✓	✓	✓
INS_VER2_CHP_VERIFY	H409a. CHP+ is a CO program for low and moderate income children under age 19 and pregnant women who live in families that earn more than is allowed under Medicaid, also known as Health First Colorado. Do (you/TARGET) fall into one of these two groups?	✓	✓	✓
IHS_OTH_ESI_EMPSIZE	H4ab. How many employees work for the employer that (you get/ TARGET gets) (your/his/her/their) insurance through?	✓	✓	✓
IHS_OTH_PRIV_REL	H4mb. Which person (do you/ does TARGET) get (your/his/her/their) insurance through?	✓	✓	✓
IHS_OTH_PAR	H4b. Is this through (your/TARGET's) parent or guardian?	✓	✓	✓
IHS_OTH_PRIV_EMP	H4mba. (Is this person/Are you) employed?	✓	✓	✓

Variable	Label	ABS Web	ABS Phone	RDD
IHS_OTH_PRIV_EMPSIZE	H4mbb. How many employees work for (this person's/your) employer?	✓	✓	✓
INS_VER2_C4HC	H4aa. Was (your/TARGET's) health insurance coverage selected through Connect for Health Colorado, Colorado's health insurance marketplace or exchange?	✓	✓	✓
INSURED_PIT	Target is currently insured	✓	✓	✓
TESI	Target has employer sponsored insurance coverage	✓	✓	✓
HH_ALL_INSURED	H5a3. Thinking about the other members of your household, are they all covered by some type of health insurance, just some are covered, or are none of them covered by health insurance?	✓	✓	✓
LOST_COVERAGE	H5a. Some people start the year without health insurance and then gain coverage through an employer, a public insurance program or they buy it themselves. Other people start the year with one insurance plan and decide to change plans during the course of t	✓	✓	✓
PREVIOUS_INS	H5b. What type of coverage did (you/TARGET) have before?	✓	✓	✓
INS_CHP_VERIFY_H5	H5b09a. CHP+ is a CO program for low and moderate income children under age 19 and pregnant women who live in families that earn more than is allowed under Medicaid, also known as Health First Colorado. (Do you/Does TARGET) fall into one of these two group	✓	✓	✓
TGAP_PREVINS	Target had previous insurance type in the past year	✓	✓	✓
TGAP_NOINS	Target was previously uninsured in the past year	✓	✓	✓
PREVIOUS_INS_C4HC	H5aa. Was (your/TARGET's) health insurance coverage selected through Connect for Health Colorado, Colorado's health insurance marketplace or exchange?	✓	✓	✓
RSN_PREV_ENDED	H5c. And what is the main reason (your/TARGET's) previous coverage ended? (CATI: DO NOT READ LIST. ENTER ONE ONLY.)	✓	✓	✓
RSN_CURR_INS_UNINS	H5e. Thinking back to the time (you/TARGET) got this current form of insurance, what was the main reason (you/TARGET) got coverage at this time?	✓	✓	✓
NOINS_NUM	H6. How many months during the past 12 months (were you/was TARGET) without health insurance coverage?	✓	✓	✓
NOINS_TIME	H7. How long has it been since (you/TARGET) had any health insurance?	✓	✓	✓

Variable	Label	ABS Web	ABS Phone	RDD
NOINS_YRS	H7. How long has it been since (you/TARGET) had any health insurance?	✓	✓	✓
NOINS_MON	H7. How long has it been since (you/TARGET) had any health insurance?	✓	✓	✓
NOINS_PRIOR	H7a. What type of insurance (were you/was TARGET) covered by most recently?	✓	✓	✓
INS_CHP_VERIFY_H7	H7a09a. CHP+ is a CO program for low and moderate income children under age 19 and pregnant women who live in families that earn more than is allowed under Medicaid, also known as Health First Colorado. (Do you/Does TARGET) fall into one of these two group	✓	✓	✓
PRIOR_C4HC	H7aa. Was (your/TARGET's) health insurance coverage selected through Connect for Health Colorado, Colorado's health insurance marketplace or exchange?	✓	✓	✓
RSN_PREV_ENDED_UNINS	H7b. And what is the main reason (your/TARGET's) coverage ended?	✓	✓	✓
NOINS_RES1	H8a. Please tell me if any of these are also reasons that (you/TARGET) (do/does) not have health insurance. How about...? The person in family who had health insurance lost job or changed employers	✓	✓	✓
NOINS_RES2	H8b. Please tell me if any of these are also reasons that (you/TARGET) (do/does) not have health insurance. How about...? The person in family who had health insurance is no longer part of the family because of divorce, separation or death	✓	✓	✓
NOINS_RES3	H8c. Please tell me if any of these are also reasons that (you/TARGET) (do/does) not have health insurance. How about...? Family member's employer does not offer coverage or not eligible for employer's coverage	✓	✓	✓
NOINS_RES4	H8d. Please tell me if any of these are also reasons that (you/TARGET) (do/does) not have health insurance. How about...? Lost eligibility for Medicaid, also known as Health First Colorado or the Child Health Plan Plus (CHP+)	✓	✓	✓
NOINS_RES5	H8e. Please tell me if any of these are also reasons that (you/TARGET) (do/does) not have health insurance. How about...? Cost is too high	✓	✓	✓
NOINS_RES6	H8f. Please tell me if any of these are also reasons that (you/TARGET) (do/does) not have health insurance. How about...? Don't need insurance	✓	✓	✓

Variable	Label	ABS Web	ABS Phone	RDD
NOINS_RES7	H8g. Please tell me if any of these are also reasons that (you/TARGET) (do/does) not have health insurance. How about...? Don't know how to get insurance	✓	✓	✓
NOINS_RES8	H8h. Please tell me if any of these are also reasons that (you/TARGET) (do/does) not have health insurance. How about...? Traded health insurance for another benefit or higher pay	✓	✓	✓
NOINS_RES9	H8i. Please tell me if any of these are also reasons that (you/TARGET) (do/does) not have health insurance. How about...? Can't get health insurance, have pre-existing condition	✓	✓	✓
NOINS_RES10	H8j. Please tell me if any of these are also reasons that (you/TARGET) (do/does) not have health insurance. How about...? Some other reason	✓	✓	✓
NOINS_RES6A	H8faa. When you say (you don't/TARGET doesn't) need health insurance, is this because (you/he/she)...? Disagree(s) with Obamacare	✓	✓	to 4/1
NOINS_RES6B	H8fab. When you say (you don't/TARGET doesn't) need health insurance, is this because (you/he/she)...? (Are/is) in good health and do not expect that to change	✓	✓	to 4/1
EMP_CATEGORY	E1. (Are you /Is TARGET) currently...?	✓	✓	to 4/1
EMP_HRS	E4. How many hours per week (do you /does TARGET usually work at (your/their) main job?	✓	✓	to 4/1
FIRM_GT50	E7. Counting all locations where this employer operates, are there more than 50 people working for (your/TARGET's) employer? Including (yourself/TARGET) are there more than 50 people working for this business?	✓	✓	to 4/1
FIRM_SIZE_SM	E8. Which category best represents the total number of persons who work for (your/TARGET's) employer/business? Would it be...?	✓	✓	to 4/1
FIRM_SIZE_LG	E9. Which category best represents the total number of persons who work for (your/TARGET's) employer/business? Would it be...?	✓	✓	to 4/1
ESI_OFFERED	E11. (Are you /Is TARGET) offered health insurance through (your/their) work?	✓	✓	to 4/1
USOC	A1. Is there a place where (you/ TARGET's) usually (go/goes) when (you/he/she/they) (are/is) sick or when (you/he/she/they) (need/needs) advice about (your/(his/her)/their) health?	✓	✓	✓
USOC_TYPE	A2. What kind of place is it? Is it....?	✓	✓	✓

Variable	Label	ABS Web	ABS Phone	RDD
WHY_NOUSOC	A2b. What is the main reason (you/TARGET) (do/does) not have a regular place that (you/they) go for health care?	✓	✓	✓
VISIT_12M	A2d. Have (you/TARGET) visited a health care professional or health care facility in the past 12 months?	✓	✓	✓
ER_12M	A3. In the past 12 months, how many times did (you/ TARGET) receive care in a hospital emergency room?	✓	✓	✓
ER_NOEMER	A3a. The last time (you/TARGET) went to a hospital emergency room, was it for a condition that (you/TARGET/TARGET'S parent) thought could have been treated by a regular doctor if he or she had been available?	✓	✓	✓
ER_RES1	A3ba. Important reasons for (your/TARGET's) last visit to an emergency. (You were/TARGET was/TARGET'S parent/guardian was) unable to get an appointment at the doctor's office or clinic as soon as (you/TARGET/TARGET'S parent/guardian) thought one was needed	✓	✓	✓
ER_RES2	A3bb. Important reasons for (your/TARGET's) last visit to an emergency room. (You/TARGET) needed care after normal operating hours at the doctor's office or clinic	✓	✓	✓
ER_RES3	A3bc. Important reasons for (your/TARGET's) last visit to an emergency room. (You/TARGET/ TARGET'S parent/guardian) called the doctor's office or clinic and they told (you/TARGET/ TARGET'S parent/guardian) to go the emergency room	✓	✓	✓
ER_RES4	A3bd. Important reasons for (your/TARGET's) last visit to an emergency room. It was more convenient to go to an emergency room	✓	✓	✓
DOC_12M	A5. In the past 12 months, how many times did (you/ TARGET) visit a general doctor who treats a variety of illnesses? For example, a doctor (or pediatrician) in general practice, family medicine or internal medicine.	✓	✓	✓
DOC_PREV	A5a. (Was this visit/Were any of those visits) for a check-up, physical examination or for other preventive care?	✓	✓	✓
TRIED_DOC	A5b. In the past 12 months, was there a time (you/TARGET) tried to get general doctor care?	✓	✓	✓

Variable	Label	ABS Web	ABS Phone	RDD
APPT_DOC	A5c. Thinking back to the last time (you/TARGET) tried to get general doctor care, about how long did (you/he/she/they) have to wait until the first available appointment?	✓	✓	✓
DAYS_APPT_DOC	A5c. Enter number of days (0-50)	✓	✓	✓
WEEKS_APPT_DOC	A5c. Enter number of weeks (0-52)	✓	✓	✓
SPEC_12M	A6. In the past 12 months, did (you/TARGET) visit a specialist? Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors and others who specialize in one area of health care.	✓	✓	✓
TRIED_SPEC	A6a. In the past 12 months, was there a time (you/TARGET) tried to get specialist care?	✓	✓	✓
APPT_SPEC	A6b. Thinking back to the last time (you/TARGET) tried to get specialist care, about how long did (you/he/she/they) have to wait until the first available appointment?	✓	✓	✓
DAYS_APPT_SPEC	A6b. Enter number of days	✓	✓	✓
WEEKS_APPT_SPEC	A6b. Enter number of weeks	✓	✓	✓
TREATED_UNFAIRLY	A6d. Over (your/TARGET's) entire lifetime, how often (have you/has TARGET) been treated unfairly when getting medical care? Would you say...?	✓	✓	to 4/1
UNFAIR_ANCESTRY	A6ea. Please tell me which of the following (do/does) (you/he/she) think are reasons why (you/he/she) (have/has) been treated unfairly, over (your/his/her) entire lifetime? Was it because of Ancestry or National origin	✓	✓	to 4/1
UNFAIR_GENDER	A6eb. Please tell me which of the following (do/does) (you/he/she) think are reasons why (you/he/she) (have/has) been treated unfairly, over (your/his/her) entire lifetime? Was it because of Gender or sex	✓	✓	to 4/1
UNFAIR_RACE	A6ec. Please tell me which of the following (do/does) (you/he/she) think are reasons why (you/he/she) (have/has) been treated unfairly, over (your/his/her) entire lifetime? Was it because of Race or skin color	✓	✓	to 4/1
UNFAIR_AGE	A6ed. Please tell me which of the following (do/does) (you/he/she) think are reasons why (you/he/she) (have/has) been treated unfairly, over (your/his/her) entire lifetime? Was it because of Age	✓	✓	to 4/1

Variable	Label	ABS Web	ABS Phone	RDD
UNFAIR_ENGLISH	A6ee. Please tell me which of the following (do/does) (you/he/she) think are reasons why (you/he/she) (have/has) been treated unfairly, over (your/his/her) entire lifetime? Was it because of The way (you/he/she) speak(s) English	✓	✓	to 4/1
UNFAIR_SO	A6ef. Please tell me which of the following (do/does) (you/he/she) think are reasons why (you/he/she) (have/has) been treated unfairly, over (your/his/her) entire lifetime? Was it because of Sexual Orientation	✓	✓	to 4/1
UNFAIR_DISABILITY	A6eg. Please tell me which of the following (do/does) (you/he/she) think are reasons why (you/he/she) (have/has) been treated unfairly, over (your/his/her) entire lifetime? Was it because of A disability	✓	✓	to 4/1
UNFAIR_OTHER	A6eh. Please tell me which of the following (do/does) (you/he/she) think are reasons why (you/he/she) (have/has) been treated unfairly, over (your/his/her) entire lifetime? Was it because of Other reason	✓	✓	to 4/1
UNFAIR_OTHER_DESC1	A6eh. Please tell me which of the following (do/does) (you/he/she) think are reasons why (you/he/she) (have/has) been treated unfairly, over (your/his/her) entire lifetime? Was it because of Other reason- coded responses	✓	✓	to 4/1
UNFAIR_OTHER_DESC2	A6eh. Please tell me which of the following (do/does) (you/he/she) think are reasons why (you/he/she) (have/has) been treated unfairly, over (your/his/her) entire lifetime? Was it because of Other reason- coded responses	✓	✓	to 4/1
UNFAIR_STRESS	A6f. Over (your/his/her) entire lifetime, how stressful have these experiences of unfair treatment usually been for (you/him/her)?	✓	✓	to 4/1
DENTIST_12M	A7. In the past 12 months, did (you/TARGET) see a dentist or a dental hygienist?	✓	✓	✓
DENTAL_INS	A7a. (Do you/Does TARGET) have any kind of insurance coverage that pays for some or all of (your/his/her/their) routine dental care, including dental insurance, prepaid plans such as Delta Dental or government plans such as Medicaid, also known as Health F	✓	✓	✓
ORAL_HEALTH_STATUS	A7b. Overall, how would you rate the health of (your/TARGET's) teeth and gums? Would you say - excellent, very good, good, fair, or poor?	✓	✓	to 4/1

Variable	Label	ABS Web	ABS Phone	RDD
COST_NORX	A9. Still thinking about the past 12 months, was there any time that did (INSERT) because of cost? a. Not fill a prescription for medicine (for TARGET)	✓	✓	✓
COST_NODOC	A9. Still thinking about the past 12 months, was there any time that did (INSERT) because of cost? b. Not get doctor care that (you/TARGET) needed	✓	✓	✓
COST_NOSPEC	A9. Still thinking about the past 12 months, was there any time that did (INSERT) because of cost? c. Not get specialist care that (you/TARGET) needed	✓	✓	✓
COST_NODENT	A9. Still thinking about the past 12 months, was there any time that did (INSERT) because of cost? d. Not get dental care that (you/TARGET) needed	✓	✓	✓
NOTCOST_NORX	A9a. Still thinking about the past 12 months, was there any time that did (INSERT) for a reason other than cost? a. Not fill a prescription for medicine (for TARGET)	✓	✓	✓
NOTCOST_NODOC	A9a. Still thinking about the past 12 months, was there any time that did (INSERT) for a reason other than cost? b. Not get doctor care that (you/TARGET) needed	✓	✓	✓
NOTCOST_NOSPEC	A9a. Still thinking about the past 12 months, was there any time that did (INSERT) for a reason other than cost? c. Not get specialist care that (you/TARGET) needed	✓	✓	✓
NOTCOST_NODENT	A9a. Still thinking about the past 12 months, was there any time that did (INSERT) for a reason other than cost? d. Not get dental care that (you/TARGET) needed	✓	✓	✓
NOCARE_APP	A9ba. Have you/Has TARGET had this problem in past 12 months. (You were/TARGET was/TARGET's parent/guardian was) unable to get an appointment at the doctor's office or clinic as soon as (you/TARGET/TARGET's parent/guardian) thought one was needed	✓	✓	✓
NOCARE_APP_TYPE	A9baa. Was that for general doctor care, specialty care, both or some other type of care?	✓	✓	✓
NOCARE_INS	A9bb. Have you/Has TARGET had this problem in past 12 months. (You were/TARGET was/TARGET's parent/guardian was) told by a doctor's office or clinic that they weren't accepting patients with (your/TARGET's) type of health insurance	✓	✓	✓
NOCARE_INS_TYPE	A9bba. Was that for general doctor care, specialty care, both or some other type of care?	✓	✓	✓

Variable	Label	ABS Web	ABS Phone	RDD
NOCARE_NEWPT	A9bc. Have you/Has TARGET had this problem in past 12 months. (You were/TARGET was/TARGET's parent/guardian was) told by a doctor's office or clinic that they weren't accepting new patients	✓	✓	✓
NOCARE_NEWPT_TYPE	A9bca.. Was that for general doctor care, specialty care, both or some other type of care?	✓	✓	✓
NOCARE_TRANS	A9bd. Have you/Has TARGET had this problem in past 12 months. (Have you/has TARGET) had to go without health care because (you/TARGET) didn't have a way to get doctor's office or clinic?	✓	✓	✓
NOCARE_TRANS_TYPE	A9bda. . Was that for general doctor care, specialty care, both or some other type of care?	✓	✓	✓
NOCARE_WORK	A9be. Have you/Has TARGET had this problem in past 12 months. (You were/TARGET's parent/guardian was) unable to make an appointment because (you/he/she/they) could not take off from work	✓	✓	✓
NOCARE_WORK_PAR	A9be1. I'm going to read you a list of problems some people experience when they need to get health care. TARGET's parent/guardian was unable to make an appointment because (he/she/they) could not take off work to take TARGET	✓	✓	✓
NOCARE_CHILDCARE	A9bf. Have you/Has TARGET had this problem in past 12 months. (You were/TARGET was) unable to schedule an appointment because (you/he/she/they) could not find child care	✓	✓	✓
NOCARE_UNFAIR	A9bg. Have you/Has TARGET had this problem in past 12 months. (Have you/has TARGET) ever skipped getting care because (you were/he was/she was) concerned about unfair treatment or consequences?	✓	✓	✓
PROB_PAYING	A11. In the past 12 months, did (you/your family/TARGET/TARGET's family) have any problems paying or (were you/was he/was she/were they) unable to pay any of (your/his/her/their) medical bills?	✓	✓	✓
PROB_ADDHOURS	A11aa. Situations that might result from having expensive medical bills. Did anyone in (your/his/her) immediate family add hours at a current job or take another job to help cover the cost of health care	✓	✓	✓

Variable	Label	ABS Web	ABS Phone	RDD
PROB_NECESSITY	A11ab. Situations that might result from having expensive medical bills. (Were you/Was TARGET/Was TARGET's parent/guardian) unable to pay for basic necessities like food, heat, or rent	✓	✓	✓
PROB_DEBT	A11ac. Situations that might result from having expensive medical bills. Did (you/TARGET/TARGET's parent/guardian) take on credit card debt	✓	✓	✓
PROB_LOAN	A11ad. Situations that might result from having expensive medical bills. Did (you/TARGET/TARGET's parent/guardian) take out a loan	✓	✓	✓
PROB_SAVINGS	A11ae. Situations that might result from having expensive medical bills. Did (you/TARGET/TARGET's parent/guardian) cut back on savings or take money out of savings	✓	✓	✓
PROB_BANKRUPTCY	A11af. Situations that might result from having expensive medical bills. Did (you/TARGET/TARGET's parent/guardian) declare bankruptcy	✓	✓	✓
SURPRISE_BILL	A12. In the last 12 months, (have you/has TARGET/has TARGET's parent/guardian) been surprised by a medical bill (you/TARGET) had to pay that (you/he/she) thought would be covered by (your/his/her) health insurance ?	✓	✓	to 4/1
FOOD_LTNEEDED	A13. In the last 12 months, did you/target ever eat less than you/he/she/TARGET's parent/guardian felt you/he/she should because there wasn't enough money for food?	✓	✓	to 4/1
HEALTH_STATUS	HS1. Would you say (your/TARGET's) health, in general, is excellent, very good, good, fair, or poor?	✓	✓	to 4/1
LIMIT_ACTIVITY	HS2. (Are you/ Is TARGET) limited in any way because of a physical, mental, or emotional health condition?	✓	✓	to 4/1
ADVANCE_DIRECTIVE	AD1. (Have you/Has TARGET) completed an Advance Directive, Living Will or Medical Durable Power of Attorney?	✓	✓	to 4/1
AD_PROVIDER	AD2a. (Have you/Has TARGET) ever had a serious discussion regarding your Advance Directive, Living Will or Medical Durable Power of Attorney with...? a health care provider	✓	✓	to 4/1
AD_FAMILY	AD2b. (Have you/Has TARGET) ever had a serious discussion regarding your Advance Directive, Living Will or Medical Durable Power of Attorney with...? family, friends, or other people you trust	✓	✓	to 4/1

Variable	Label	ABS Web	ABS Phone	RDD
DAYS_POOR_MH	MH1. How many days during the past 30 days was (your/TARGET'S) mental health not good?	✓	✓	to 4/1
MH_VISIT_DOCTOR	MH1aa. During the past 12 months, did (you/TARGET) see or talk to any of the following health care providers about (your/his/her/their) own mental health? A general doctor or primary care provider	✓	✓	✓
MH_VISIT_MH	MH1ab. During the past 12 months, did (you/TARGET) see or talk to any of the following health care providers about (your/his/her/their) own mental health? A psychiatrist, psychologist, psychiatric nurse, clinical social worker, or other provider who special	✓	✓	✓
NEEDED_MH	MH2. During the past 12 months, was there a time when (you/TARGET) needed mental health care or counseling services but did not get it at that time?	✓	✓	✓
MH_COST	MH3a. I'm going to read you some reasons people have for not getting mental health care even when they think they might need it. (You were/TARGET was/TARGET's parents/guardian was) concerned about the cost of treatment	✓	✓	✓
MH_COMFORTABLE	MH3b. Why (you/TARGET) did not see a professional during the past 12 months. (You/TARGET/TARGET's parents/guardian) did not feel comfortable talking with a health professional about (your/his/her/TARGET's) personal problems	✓	✓	✓
MH_FOUDOUT	MH3c. Why (you/TARGET) did not see a professional during the past 12 months. (You were/TARGET was/TARGET's parents/guardian was) concerned about what would happen if someone found out (you/he/she/they/TARGET) had a problem	✓	✓	✓
MH_APP	MH3d. Why (you/TARGET) did not see a professional during the past 12 months (You/TARGET/TARGET's parents/guardian) had a hard time getting an appointment	✓	✓	✓
MH_INS	MH3e. Why (you/TARGET) did not see a professional during the past 12 months (You/TARGET/TARGET's parents/guardian) did not think (your/his/her/TARGET's) health insurance would cover it	✓	✓	✓

Variable	Label	ABS Web	ABS Phone	RDD
MH_UNINS	MH3f. Why (you/TARGET) did not see a professional during the past 12 months(You/TARGET/TARGET's parents/guardian) did not seek an appointment because (you were/TARGET was) uninsured	✓	✓	✓
NEEDED_SU	SU1. During the past 12 months, was there a time when (you/TARGET) needed treatment or counseling for alcohol or drug use but did not get it at that time?	✓	✓	✓
SU_COST	SU2a. Reasons for not getting treatment or counseling for alcohol or drug use. (You were/TARGET was/TARGET's parents/guardian was) concerned about the cost of treatment	✓	✓	✓
SU_COMFORTABLE	SU2b. Reasons for not getting treatment or counseling for alcohol or drug use. (You/TARGET/TARGET's parents/guardian) did not feel comfortable talking with a health professional about (your/his/her/their/TARGET's) personal problems	✓	✓	✓
SU_FOUDOUT	SU2c. Reasons for not getting treatment or counseling for alcohol or drug use. (You were/TARGET was/TARGET's parents/guardian was) concerned about what would happen if someone found out (you/he/she/they/TARGET) had a problem	✓	✓	✓
SU_APP	SU2d. Reasons for not getting treatment or counseling for alcohol or drug use even when they think they might need it. (You/TARGET/TARGET's parents/guardian) had a hard time getting an appointment	✓	✓	✓
SU_INS	SU2e. Reasons for not getting treatment or counseling for alcohol or drug use. (You/TARGET/TARGET's parents/guardian) did not think (your/his/her/their/TARGET's) health insurance would cover it	✓	✓	✓
EVER_TAKENRX	SU3a. Have you, a loved one, or a close friend ever... Taken a prescription painkiller without a prescription	✓	✓	to 4/1
EVER_ADDICTEDRX	SU3b. Have you, a loved one, or a close friend ever... Been addicted to prescription painkillers or heroin	✓	✓	to 4/1
EVER_ADDICTEDALCOHOL	SU3c. Have you, a loved one, or a close friend ever... Been addicted to alcohol or drugs other than prescription painkillers or heroin	✓	✓	to 4/1

Variable	Label	ABS Web	ABS Phone	RDD
EVER_INJECTION	SU3d. Have you, a loved one, or a close friend ever... Even once taken any drugs by injection with a needle like heroin, cocaine, amphetamines, or steroids. Do not include anything taken under a doctor's orders.	✓	✓	to 4/1
EVER_EMERCARE	SU3e. Have you, a loved one, or a close friend ever... Received emergency medical treatment due to drug use	✓	✓	to 4/1
EVER_DIED_OVERDOSE	SU3f. Have you, a loved one, or a close friend ever... Died from a prescription painkiller or heroin overdose	✓	✓	to 4/1
OPIOID_COMMUNITY	SU5. How much of a problem, if at all, is opioid addiction in your local community?	✓	✓	to 4/1
HC_NEEDS_FAM	HR1. Generally speaking, (do you/does TARGET/do TARGET's parents) AGREE or DISAGREE that the current Colorado health care system is meeting the needs of (your/her/his/their) family?	✓	✓	to 4/1
HC_NEEDS_CO	HR2. Generally speaking, (do you/does TARGET/do TARGET's parents) AGREE or DISAGREE that the current health care system is meeting the needs of most Coloradans?	✓	✓	to 4/1
ETHNICITY	D1. (Are you/is TARGET) Hispanic or Latino?	✓	✓	✓
RACE1	D2. Which one or more of the following would you say is (your/TARGET's) race?	✓	✓	✓
RACE2	D2. Which one or more of the following would you say is (your/TARGET's) race?	✓	✓	✓
RACE3	D2. Which one or more of the following would you say is (your/TARGET's) race?	✓	✓	✓
RACE4	D2. Which one or more of the following would you say is (your/TARGET's) race?	✓	✓	✓
RACE5	D2. Which one or more of the following would you say is (your/TARGET's) race?	✓	✓	✓
RACE6	D2. Which one or more of the following would you say is (your/TARGET's) race?	✓	✓	✓
RACE7	D2. Which one or more of the following would you say is (your/TARGET's) race?	✓	✓	✓
SPEAK_ADD	D6. (Do you /does TARGET) speak a language other than English at home?	✓	✓	✓
SPANISH	D7. What language is this?	✓	✓	✓
RUSSIAN	D7. What language is this?	✓	✓	✓
VIETNAMESE	D7. What language is this?	✓	✓	✓
JAPANESE	D7. What language is this?	✓	✓	✓

Variable	Label	ABS Web	ABS Phone	RDD
CHINESE	D7. What language is this?	✓	✓	✓
FRENCH	D7. What language is this?	✓	✓	✓
OTHER_LANG	D7. What language is this?	✓	✓	✓
HH_HAS_CELL	L1. Now thinking about your telephone use...Does anyone in your household, including yourself, have a working cell phone?	✓	✓	✓
HH_HAS_LL	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?	✓	✓	✓
USE_INTERNET	INT1. Do you use the internet, at least occasionally?	✓	✓	✓
INTERNET_CELL	INT3. Do you access the internet on a cell phone, tablet or other mobile handheld device, at least occasionally?	✓	✓	✓
HOME_OWNER	D10. Is this residence...?	✓	✓	✓
STABLE_HOUSING	D11. (Are you/is TARGET/is TARGET's parent/guardian) worried that in the next 2 months, (you/TARGET) may not have stable housing?	✓	✓	to 4/1
CITIZEN_DETAIL	D12. (Are you/is TARGET) a citizen of the United States?	✓	✓	✓
EDUCATION	S9. What is the highest level of school (you have/TARGET has) completed or the highest degree (you have/TARGET has) received?	✓	✓	✓
INC_SALARY	IN1. For these questions, I'd like you to think back to 2018. During 2018, did (you/ TARGET) receive any income from wages or salary?	✓	✓	✓
INCOME_2018	IN3. Thinking about all the different sources of income (you/ TARGET) (and [your/ TARGET's) immediate family) received in 2018, what was the combined total income from all sources before taxes and other deductions?	✓	✓	✓
INC_18_CAT1	IN3a. Was it under (INSERT AMT5 FOR FAMILY SIZE) or was it (INSERT AMT5 FOR FAMILY SIZE) or more?	✓	✓	✓
INC_18_CAT2	IN4. Was (your/ TARGET'S) total (family) income...?	✓	✓	✓
INC_18_CAT3	IN5. Was (your/TARGET'S) total (family) income ...?	✓	✓	✓
INCOME_MON	IN6. Thinking about all the different sources of income (you/ TARGET) (and [your/ TARGET's) immediate family) received last month, what was the combined total income from all sources before taxes and other deductions?	✓	✓	✓

Variable	Label	ABS Web	ABS Phone	RDD
INC_MON_CAT1	IN6a. Was it under (INSERT AMT5a FOR FAMILY SIZE) or was it (INSERT AMT5a FOR FAMILY SIZE) or more?	✓	✓	✓
INC_MON_CAT2	IN7. Now, just stop me when I get to the right category. Was (your/ TARGET'S) total (family) income...?	✓	✓	✓
INC_MON_CAT3	IN8. Now, just stop me when I get to the right category.} Was (your/ TARGET'S) total (family) income ...?	✓	✓	✓
ZIP_CODE	ZIP. What is your zip code?	✓	✓	✓
COUNTY1	COUNTY. What is your county?	✓	✓	✓
SEX_ORIENT	SO1. How do you identify your sexual orientation?	✓	✓	✓
TRANSGENDER	SO2. Do you consider yourself to be transgender?	✓	✓	✓
SAMPLE010	SSRS MATCH CODE	✓	✓	✓
SAMPLE012	CENSUS FIPS	✓	✓	✓
SAMPLE030	IDENT1	✓	✓	✓
SAMPLE031	IDENT2	✓	✓	✓
SAMPLE032	IDENT3	✓	✓	✓
SAMPLE033	IDENT4	✓	✓	✓
REGION	Health Statistics Region (HSR)	✓	✓	✓
TWGT	untrimmed to population	✓	✓	✓
TWGTBALTRIM	untrimmed to sample	✓	✓	✓
TWGTPOPTRIM	trimmed to pop	✓	✓	✓
TWGTBALTRIM	trimmed to sample	✓	✓	✓
SPWTGBAL	age 18+ sample that got asked LGBTQ question to CPS benchmarks balanced to sample	✓	✓	✓
SPWGTBALTRIM	age 18+ sample that got asked LGBTQ question to CPS benchmarks balanced to sample AND TRIMMED	✓	✓	✓
SPWGTPOP	age 18+ sample that got asked LGBTQ question to CPS benchmarks balanced to population	✓	✓	✓
WGT_SO	age 18+ sample that got asked LGBTQ question to CPS benchmarks balanced to population AND TRIMMED	✓	✓	✓

Appendix F – Detailed Response Rates by HSR

Overall ABS

HSR	Total Eligible, Interview (Category 1)	Total Eligible, No Interview (Category 2)	Total Unknown Eligibility (Category 3)	Total Not Eligible (Category 4)	Response Rate
1	431	51	5,778	259	10.6%
2	405	51	3,891	189	13.5%
3	414	72	6,080	287	9.9%
4	794	124	11,830	573	9.9%
5	394	63	7,503	372	8.6%
6	404	40	5,664	289	10.7%
7	386	65	7,120	314	8.4%
8	401	42	6,650	303	9.3%
9	414	42	4,956	234	11.7%
10	433	42	4,452	213	13.0%
11	420	71	5,097	218	11.0%
12	418	51	6,043	306	10.4%
13	416	51	5,499	255	10.8%
14	607	94	13,651	607	7.6%
15	760	122	13,088	566	8.8%
16	448	51	4,475	216	13.2%
17	407	64	4,575	221	12.0%
18	425	68	5,934	256	10.0%
19	415	63	4,870	220	11.5%
20	779	143	13,231	605	8.9%
21	694	90	7,686	378	12.3%
<i>Total</i>	<i>10,265</i>	<i>1,460</i>	<i>148,073</i>	<i>6,881</i>	<i>10.1%</i>

ABS Wave 1

HSR	Total Eligible, Interview (Category 1)	Total Eligible, No Interview (Category 2)	Total Unknown Eligibility (Category 3)	Total Not Eligible (Category 4)	Response Rate
1	68	6	813	45	12.2%
2	245	31	1,978	87	15.1%
3	169	28	1,966	85	11.4%
4	288	60	3,624	189	11.1%
5	69	9	762	43	12.7%
6	113	17	1,123	64	13.6%
7	116	18	1,093	49	13.4%
8	79	8	721	37	14.3%
9	149	12	1,394	64	13.9%
10	142	20	1,352	58	13.2%
11	89	11	935	38	12.2%
12	83	9	1,026	67	12.4%
13	89	9	942	43	12.6%
14	256	41	3,367	155	10.6%
15	303	48	3,467	163	11.8%
16	217	28	1,740	84	15.4%
17	97	8	800	45	15.8%
18	137	19	1,697	79	11.2%
19	132	21	1,254	55	13.2%
20	299	56	3,367	149	11.6%
21	344	46	2,769	136	15.4%
<i>Total</i>	<i>3,484</i>	<i>505</i>	<i>36,190</i>	<i>1,735</i>	<i>12.7%</i>

ABS Wave 2

HSR	Total Eligible, Interview (Category 1)	Total Eligible, No Interview (Category 2)	Total Unknown Eligibility (Category 3)	Total Not Eligible (Category 4)	Response Rate
1	363	45	4,965	214	10.3%
2	143	19	1,551	87	12.8%
3	225	38	3,059	146	10.5%
4	486	62	6,862	315	10.3%
5	272	39	4,058	208	10.2%
6	246	19	3,144	167	11.6%
7	223	35	3,698	174	9.2%
8	248	27	3,601	160	10.1%
9	237	30	2,870	137	11.5%
10	291	22	3,100	155	12.9%
11	325	59	3,913	175	11.1%
12	335	42	5,017	239	10.0%
13	299	39	3,675	174	11.3%
14	267	43	5,139	230	8.3%
15	385	63	5,945	254	9.4%
16	216	21	2,289	107	12.7%
17	299	56	3,372	156	11.7%
18	288	49	4,237	177	9.6%
19	283	42	3,616	165	10.9%
20	404	81	6,797	311	8.9%
21	304	41	3,458	164	11.9%
<i>Total</i>	<i>6,139</i>	<i>872</i>	<i>84,366</i>	<i>3,915</i>	<i>10.4%</i>

ABS Wave 3

HSR	Total Eligible, Interview (Category 1)	Total Eligible, No Interview (Category 2)	Total Unknown Eligibility (Category 3)	Total Not Eligible (Category 4)	Response Rate
1	-	-	-	-	
2	17	1	362	15	8.0%
3	20	6	1,055	56	5.0%
4	20	2	1,344	69	5.1%
5	53	15	2,683	121	4.8%
6	45	4	1,397	58	6.4%
7	47	12	2,329	91	4.6%
8	74	7	2,328	106	6.6%
9	28	-	692	33	8.0%
10	-	-	-	-	
11	6	1	249	5	4.0%
12	-	-	-	-	
13	28	3	882	38	6.4%
14	84	10	5,145	222	4.8%
15	72	11	3,676	149	4.9%
16	15	2	446	25	7.2%
17	11	-	403	20	6.7%
18	-	-	-	-	
19	-	-	-	-	
20	76	6	3,067	145	6.0%
21	46	3	1,459	78	7.1%
<i>Total</i>	<i>642</i>	<i>83</i>	<i>27,517</i>	<i>1,231</i>	<i>5.6%</i>

RDD Design

	Landline	Cell	Total
Eligible, Interview (Category 1)			
Completes	400	600	1,000
Eligible, non-interview (Category 2)			
Refusal	22	52	74
Break off (callback)	10	56	66
Answering machine household	3	18	21
Physically or mentally unable/incompetent	2	0	2
Language problem	0	1	1
Unknown Eligibility, non-interview (Category 3)			
Always busy	0	0	0
No answer	9,451	9,976	19,427
Answering machine-don't know if household	5,528	19,697	25,225
Call blocking	2,133	1,161	3,294
No screener completed	123	744	867
Refusal, unknown eligibility	2,432	6,329	8,761
Not eligible (Category 4)			
Fax/data line	2,012	134	2,146
Non-working number	120,202	27,753	147,955
Business, government office, other organizations	4,549	853	5,420
No eligible respondent	171	230	401
Quota filled	0	0	0
Response Rate	16.2%	5.8%	8.9%