COLORADO HEALTH ACCESS SURVEY

2013

Colorado Health Access Survey

Public Use File Data Dictionary and Methodology Report

Colorado Health Institute

1. Introduction

CHAS Target Public Use Files

The 2013 CHAS Target Public Use Files (PUF) are data files consisting of individual records from the 2013 Colorado Health Access Survey (CHAS). It is a free product provided by the CHAS project to researchers and data analysts for use in health-related research.

Users of the PUF must register before the file can be downloaded or delivered by mail. The PUF can only be used for statewide and urban-rural estimates and not for local-level (sub-state) estimates. HSR, county, and ZIP Code information has been intentionally excluded to reduce the risk of respondents being identified. Additional confidential survey information that is not accessible in the PUF is available through the Research File. To access these data, please contact Rebecca Crepin at crepinr@coloradohealthinstitute.org.

CHAS sample weights (based on the 2013 Colorado Demography Office population projections) are included in the files. A complete data dictionary with a description of survey methods and a description of how to use the sample weights accompanies these files. Limited technical assistance is also available from CHAS – please send email to crepinr@coloradohealthinstitute.org.

2. Methods Report

Colorado Health Institute contracted with Social Science Research Solutions (SSRS), to conduct the 2013 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 Colorado Health Institute via a random digit dialing (RDD), computer-assisted telephone interview (CATI) by SSRS, an independent research company. Interviews were conducted from April 15, 2013 through July 29, 2013 among a representative sample of 10,224 households containing at least one person age 18 and older. Interviews were stratified by 21 HSRs to ensure adequate representation within each of these important population aggregations within the state of Colorado. Both landline and cell phone sample were included in the overall study design. 5,967 interviews were completed from the landline sample, and 4,257 interviews were completed from the cell phone sample. For the 2009 and 2011 studies, cell phone interviews were conducted only with respondents who did not have a landline telephone (cell-phone-only respondents). For the 2013 study, any cell phone respondent who lives in Colorado and was 18 or older was screened into the study.

This methods section is organized into subsections: sample design; field preparation, fielding and data processing; weighting procedures; survey response rates; and the data dictionary.

Study Design

The study employed a dual-frame sampling design that includes a 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). The Centers for Disease Control and Prevention (CDC) has released state-level data of wireless substitution estimates and reported that approximately 41.9 percent of all Colorado households owned only a cell phone by the end of 2011.[1]

Of the 10,224 interviews, 2,356 were conducted with respondents who owned only a cell phone. This represents 23 percent of completed interviews. This, of course, is still an underrepresentation of cell-phone-only households compared with CDC estimates. However, the higher cost of cell phone interviews (about 1.5 times as expensive as landline) place a constraint on the number of cell-phone-only interviews that can be completed. Determining the number of such interviews that will be included in a sample design generally requires creating a balance between cost concerns and keeping the design effect of the weights at an acceptable level. Weighting procedures described later in this report adjust for this underrepresentation.

The cell phone sample was screened to determine that the owner of the cell phone is at least 18 years old and lives in the state of Colorado. The cell phone sample yielded the terminations and completed interviews noted in Table 1.

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[1] http://www.cdc.gov/nchs/data/nhsr/nhsr061.pdf

Table 1. Final disposition of cell phone sample

Disposition	Sample Records	Percent
Completed interview	4,257	54%
Under 18 Years of age	873	11%
Does not live in CO	2,071	26%
Can't answer health insurance questions for HH	600	8%
Not a cell phone	43	1%
Total completions and terminations	*7,844*	*100%*

The overall sampling design contained several features across a number of dimensions that can be described in terms of sample stratification, household selection criteria, and within household selection criteria.

Landline sample stratification
- Set interview targets per Colorado Health Statistics region
- Set interview targets within selected regions by telephone exchange based on incidence of African American households

Cell phone sample stratification
- Set interview targets per Colorado Health Statistics region
- Set interview targets within selected regions by cell phone rate center

Household-level selection
- Screening to exclude out-of-state home owners and vacation homes in both frames
- Within the cell phone frame, screening excluded landline owners and respondents under 18 years of age
- Half of all landline 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.

Individual-level (target) selection
- Screening to include adults who can answer questions about health insurance for every member of the household.
- A random selection of a "target" person. Throughout the entire field period, children in a household were weighted to provide a 60% increased likelihood of selection
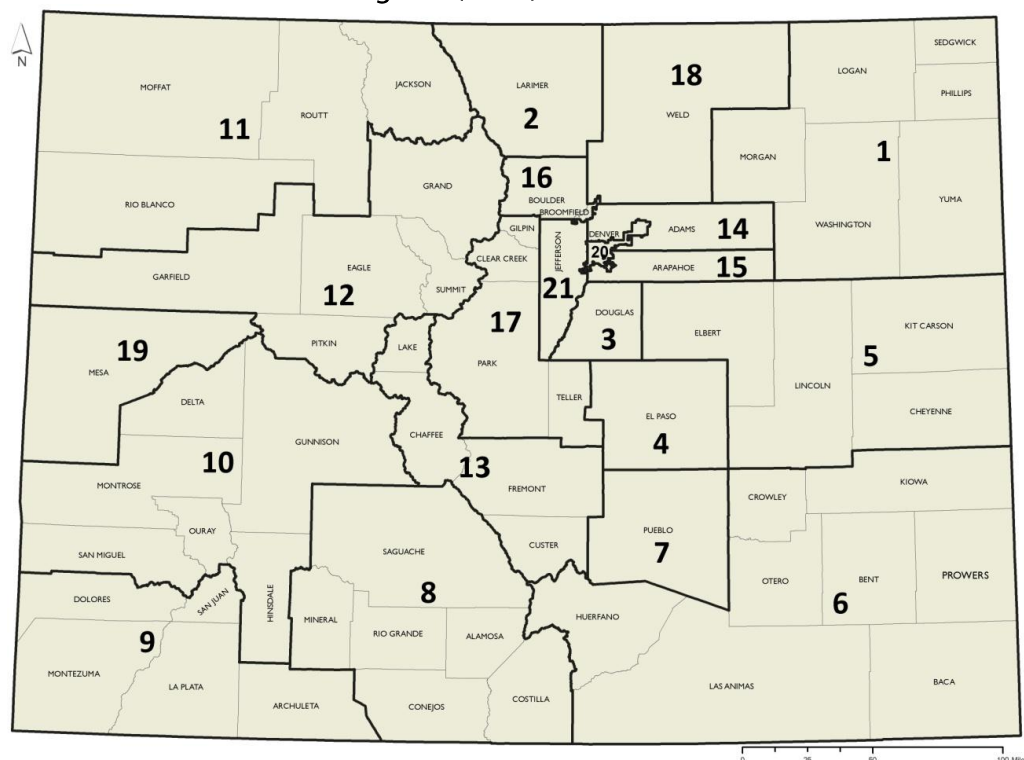
Sample stratification
The number of regional interviews was set by CHI to ensure adequate statistical power within each region. As we will describe later, each region was weighted individually to ensure within-region representation (see Table 2 for interviews completed by HSR).

Additionally, regions 4, 15 and 20 were further stratified by telephone exchange in the landline frame to maximize the number of African American interviews obtained. These three regions were selected because they are the only regions in Colorado with sufficient numbers of African American households to warrant an attempt at disproportionate stratification of telephone exchanges. Each of these three regions

was disproportionately sampled with exchanges with higher incidences of African American households oversampled at the expense of exchanges with low incidence rates (see Table 3 below).

Map 1. Colorado Health Statistics Regions (HSRs)

The Colorado HSRs 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.

The landline sample for the project was stratified by these 21 HSRs. Since landline sample includes the telephone exchange that is specific to where the owner of the landline phone actually lives, it is possible to stratify telephone numbers into small areas with relatively high levels of accuracy. However, since cell phone numbers do not necessarily correspond to the where the owners reside, a different procedure is used to stratify cell phone sample.

The cell phone sample was stratified into the same 21 strata. However, cell phones cannot be stratified by exchange since there is no geographic linkage between exchange and geography. Rather we stratified by rate center, a billing geography that is utilized by telephone companies for pricing purposes.

Table 2 shows the number of completes per Colorado HSR (or stratum) for the combined samples. Completed interviews were assigned to region based on the respondent's ZIP Code as reported during the survey interview.

Table 2. Completed Interviews by HSR

HSR	Landline Sample	Cell Phone Sample	Total Completes
1	253	147	400
2	224	178	402
3	238	173	411
4	490	295	785
5	262	138	400
6	255	155	410
7	260	145	405
8	258	144	402
9	232	173	405
10	246	159	405
11	264	136	400
12	235	169	404
13	229	172	401
14	311	256	567
15	396	354	750
16	212	274	486
17	288	112	400
18	203	198	401
19	274	133	407
20	425	428	853
21	412	318	730
TOTAL	5,967	4,257	10,224

The stratification scheme illustrated in Table 4 was implemented to compensate for the expected bias created by telephone interviewing, that is, the distribution of most sampled populations tends to skew more heavily towards whites than the general population. As such, the goal was to ensure an adequate sample of African Americans comparable to their proportion in the Colorado population, and if possible, to obtain additional African American survey completes. The total number of African American completes in each of the three target regions is shown in Table 3.

Table 3. Incidence of African Americans in three regions relative to completed interviews

	Completed African American interviews
Region 20	111
Region 15	50
Region 4	30
Total	191

Table 4. Sample stratification scheme for African American sample

Strata	Overall Population	African American Population	African American interviews	African American Weight/ *(deff)*	Non-African American population	Non-African American interviews	Non-African American Weight/ *(deff)*
Region 20							
Low	406,614	13,979	6	5.87	392,635	62	3.04
Medium	214,949	21,330	11	4.89	193,619	109	0.85
High	43,464	11,129	100	0.28	32,335	126	0.12
Total	665,027	46,438	117		618,589	297	
Region 15							
Low	210,960	4,371	2	1.95	206,589	57	2.68
Medium	236,268	28,807	18	1.43	207,461	123	1.25
High	134,919	26,293	33	0.71	108,626	207	0.39
Total	582,147	59,471	53		522,676	387	
Region 4							
Low	228,016	6,195	2	2.78	221,821	73	2.32
Medium	338,420	21,897	5	3.94	316,523	129	1.88
High	67,271	6,401	24	0.24	60,870	256	0.18
Total	633,707	34,493	31		599,214	458	

The initial targets were exceeded to ensure that sufficient numbers of African American interviews were completed across the state. In the end, SRSS completed 386 African-American interviews statewide.

Household-level selection
Screening questions included excluding anyone living out of state or at a place that was not their main residence. Overall, 1.1 percent of all working landline numbers were terminated for either reaching a household with residents who do not live in Colorado or respondents for whom the number was not their main residence. Results of cell phone screening were presented earlier in this report. 1.7 percent of working landline numbers were terminated because nobody in the household was younger than 65.

Individual-level target person selection
The survey was designed to collect data at the household level as well as the individual level, therefore it was important not only for the respondent to be able to answer questions about each person's health insurance status in the household, it was also necessary to randomly select one person as the "target" to serve as the household member for whom the entire battery of questions was asked, including health insurance status.

Because CHI had a goal of oversampling children in households for analytical purposes, a disproportionate number of targets under the age of 18 were randomly selected by the computer (60 percent) once the household roster had been established.

In addition, CHI expressed concern that the CHAS could have a greater proportion of completes from persons age 65 and older because, in general, RDD telephone surveys have a higher complete rate for individuals age 65 and older than in the general population. Therefore, one-half of all households with only residents aged 65 and older were terminated. The target selection process was also adjusted so that 65+ residents were never selected in mixed households. By the end of the time in the field, 13 percent of targets were ages 65 and older, this compares to 11.5 percent of Colorado's population in this age cohort.

All of the sampling steps were taken into account during the weighting procedure to correct for the disproportionality in the selection of these subsamples each step created, as will be described in later sections.

Field Preparation, Fielding and Data Processing
The questionnaire was originally developed by CHI, 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. Substantial changes were made to the questionnaire for the 2013 study. Changes from the 2011 to the 2013 version of the CHAS instrument are as follows:
1) In 2011, all respondents from the cell phone frame who had a landline were terminated. In 2013, any cell phone respondent was included in the study. This required a change to the screener portion of the study for cell phone respondents.

2) The introduction was shortened and an offer of entry into a drawing was removed from the survey.

3) Educational attainment is now measured only for the Target instead of for all household members.

4) A question was added after H1ca and H1mb to determine which household member the Target gets his or her insurance through.

5) Question H5 asking if the Target had insurance for all of the past 12 months was removed and replaced with a question asking if the Target had lost coverage or switched from one type of insurance to another at any point in the past 12 months.

6) Questions were added for respondents who did switch coverage, to determine what type of coverage they had previously, why previous coverage ended, and what was the main reason they got the coverage they did.

7) Respondents who were not insured prior to having their current insurance are asked why they became insured at the time they did.

8) Uninsured respondents who had insurance at one time are now asked to provide the main reason their previous insurance ended.

9) The process for asking insurance type for non-Target household members was changed from previous waves of the study. Instead of going through each insurance type individually for each household member and recording a yes or no response for each, respondents are now read the list of insurance types in sequence, and they can indicate which insurance types they have. The program allows up to five insurance types to be recorded. If the respondent does not indicate that he or she has any type of insurance, a follow-up question asks, "Does anyone else pay for this person's medical bills?"

10) Question A2a, clarifying what type of clinic the Target goes to for health care, was deleted.

11) Question A2e, asking for the most important reason the target chose their most recent health care provider, was deleted.

12) Question A2f, asking whether the Target had been provided with choices of different treatments the last time they received health care, was deleted.

13) Question A2g, asking whether the Target was asked by their health care provider which choice of treatment they, themselves, thought was best, was deleted.

14) Questions A3 and A5 was changed to a verbatim response instead of a scale.

15) In question A3b asking about why Targets went to the emergency room, the questions for Targets under age 18 were changed to ask why parents/guardians took their children to the emergency room.

16) Question A7b asking the respondent to rate the health of the Target's teeth and gums was added to the instrument.

17) Question A9 changed the referent to the Target's parent or guardian for those under age 18.

18) Items d, e, f, and g were added to question A9a asking if the Targets could not make an appointment with a doctor when they needed care because they could not find transportation, because of an inability to take off from work, because they could not find child care, or because they were uninsured.

19) Question A11a was added asking whether the Target encountered any of a series of situations due to having expensive medical bills.

20) Question AF1, asking if the Target would be willing to pay anything at all for low-cost health insurance, was deleted.

21) Three questions (MH1, MH2, and MH3) were added to the instrument to ask about Targets' mental health and access to mental health care. These questions were asked about Targets age five and older.

22) Race and ethnicity information is now collected only for the Target and not other household members.

23) Respondents who are also Targets are now asked about their sexual orientation.

Table 5 presents a summary of the questionnaire domains in the survey. As illustrated in the table, the majority of questions were administered to the target household member, with some demographics, socio-economic questions, and health insurance questions asked of all household members. In addition, employment questions and employer-based health insurance questions were asked of parents of targets under the age of 26 since with this younger group there is a higher prevalence of dependency on parents for health insurance. Spouses of targets are also included in these questions.

Prior to going into the field, SSRS programmed the study into a Computer Assisted Telephone Interviewing (CATI) program. 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 3-4 times more manual 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 field period for this study was April 15, 2013 through July 29, 2013. The interviewing was conducted by SSRS/Social Science Research Solutions in Media, PA. All telephone interviews were conducted using the CATI system which ensures that questions follow the logical skip patterns and that listed attributes are automatically rotated to eliminate "question position" bias.

CATI interviewers received both written materials on the survey and formal training. The written materials were provided prior to the beginning of the field period and included:

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

Interviewer training was conducted both prior to the study pretest (described below) and immediately before the survey was officially launched. Call center supervisors and interviewers were walked through each question in the questionnaire. Interviewers were given instructions to help them maximize response rates and ensure accurate data collection. Interviewers were instructed to encourage participation by emphasizing the social importance of the project and to reassure respondents that the information they provided was confidential.

Table 5. Summary of questionnaire domains by respondent type

Topics	Survey Respondent	All Household Members	Target Household Member	Target's Spouse and/or Parents (Target age<26)
Demographic characteristics (age, gender, marital status, etc.)	X	X	X	X
Race/Education			X	
Employment Status			X	X
Length of residency in Colorado			X	
Health insurance coverage	X	X	X	X
Detailed employment questions			X	X
Availability of employer sponsored insurance			X	X
Health status			X	
Access to and use of health care			X	
Family income			X	
Home ownership	X			
Household telephone status	X			

The pretest for the 2013 CHAS took place on April 4, 2013 between the hours of 6:00 p.m. and 9:00 p.m. MDT. SSRS interviewers completed a total of 12 interviews. All interviews were conducted with listed landline sample that had a flag indicating it was likely to be a household with an annual income of less than $30,000. The purpose of this was to increase the likelihood of securing interviews with uninsured targets. Two of the pretest interviews had uninsured targets.

Project managers monitored the pretest in real time and provided digital recordings for review by CHI project team members. Overall, the flow of the survey was good and the respondents remained interested throughout. New questions worked well. The following suggestions were made for changes to the instrument prior to fielding based on the results of the pretest:

- SSRS recommended eliminating the drawing as an incentive for completing the study based on impressions during the pretest that respondents were interpreting this as a commercial enterprise as a result of the $250 prize. This recommendation was implemented in the final instrument.
- We recommend changing the word "contribution" to the research in the introduction as this seems to have had the unanticipated effect of making more than one respondent think we were

fundraising. This suggestion was implemented along with generally shortening the introduction to the extent possible to reduce hang-ups.

- SSRS said that interviewers would be reminded to only 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.
- The research team decided to change the way questions HR1 and HR2 are read to: "Generally speaking do you AGREE or DISAGREE that the current Colorado health care system is meeting the needs of your family … is that strongly or somewhat? The team agreed that this would improve the flow of the questions for interviewers and respondents.
- The answer option in question H8 that was previously, "Job that provided coverage ended," was split into two options: 1) My job that provided coverage ended and 2) A family member's job that provided coverage ended.
- Question MH3e was split into two questions, one for the insured and one for the uninsured. This question asked why they did not seek mental health treatment.

SSRS maintained a staff of Spanish-speaking interviewers who, when contacting a household, were able to offer respondents the option of completing the survey in Spanish or in English. A total of 158 interviews were conducted in Spanish.

SSRS treated this study as a "best practices" study given certain budgetary and methodological directives from the Colorado Health Institute. The survey fielding enacted the following best practice procedures:

- As part of our goal of maximizing response rate on every study, SSRS has made power dialing (using a computer to dial the number, but not allowing the computer to "predict" the availability of interviewers as is done by all telemarketers and most survey researchers) the "standard operating procedure" on all of our studies.
- SSRS instituted a call rule of original plus up to 20 callbacks before considering a sampling unit "dead."
- Varied the time of day and the day of the week when call-backs were placed using a programmed differential call rule.
- Explained the purpose of the study and stated as accurately as possible the expected length of the interview
- Permitted respondents to set the schedule for a call-back and encouraged them to phone-back on our 800 number.
- Privacy managers were immediately called back on an open line (CRT systems do not transmit "caller ID" information, so any record dispositioned to have a privacy manager are called back manually on phones that do relay caller ID information).
- Initial refused interviews were "put to bed" for a period of two weeks, when a refusal conversion attempt took place. Second refusals were put to bed for an additional 4 weeks, when a second conversion was attempted.

Two analytical data files were created from the raw survey data: (1) a person-level file that includes all data elements collected for all persons in the household as well as characteristics of the household; and (2) a target-level file that includes all data elements collected for the target person in the household along with data on the characteristics of the target's family and household. CATI range and logic checks were used to check the data during the data collection process. Additional data checks were implemented as part of the data file development work, checking for consistency across

variables and family members, and developing composite measures of family and household characteristics.

Weighting Procedures

Survey data were weighted to: 1) adjust for the fact that not all survey respondents were selected with the same probability and 2) account for gaps in coverage in the survey frame. Base weights (survey design weights) address the differential sampling rates 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 2011 estimates of the U.S. Census Bureau's American Community Survey (ACS). These counts were indexed by HSR, gender, education, age, race/ethnicity and home ownership.

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 CHS 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.
- SUB-SAMPLING WEIGHT = Corrections for regions 4, 15, and 20 * race and strata.
- POST-STRATIFICATION WEIGHT = Rebalancing completes * region to population counts.
- NUMBER OF PERSONS WEIGHT = Correction for the number of persons in the household (capped at 3+).
- PHONE USE WEIGHT = Correction for the number of landline telephones used in the household, capped at 3 (3 phones = weight of .33) or more.
- AGE WEIGHT = 18 years and younger down-weighted by a factor of .9 to rebalance from oversampling. However, this probability changed to .6 during the field and thus any interviews after that change were given a corrective factor of .6.
- CELL PHONE-ONLY WEIGHT = 12.9 percent of the file is cell phone-only (these were weighted up to the statewide estimate of 35 percent).
- DESIGN WEIGHT = Non-response * sub-stratification * stratification * persons * phones * age * cell phone-only

Each step was normalized to the sum of weights = un-weighted number of completes. The final post-stratification procedures that followed included:

- FINAL WEIGHT = Design weight with a two-step raking procedure. The first raking occurs at the region level, where targets were set by age, education, gender, race and home ownership by 22 statistical regions. However, because the number of children (0-17 years) was given disproportionately large weights, the cell phone-only population became inflated to 23.3 percent; therefore, a final statewide rake was conducted to reapportion cell phone-only households to 35 percent.

The final weights were developed using a procedure known as *Iterative Proportional Fitting* (IPF) or "raking" using the statistical software, QBAL. Post-stratification targets were entered for age, race/ethnicity, gender, region, tenure of homeownership and education based on U.S. Census Bureau's American Community Survey (ACS) estimates. 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 process was carried out at the regional level, for which population estimates had to be developed, since the ACS only provides super-PUMA and PUMA designations for in-state geography.

A method for overlaying PUMA population estimates over the 21 HSRs 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 counts are provided below.

Table 6. Demographic characteristics by 21 HSRs in Colorado

| Region | Gender | | Home Ownership | | Education | | | |
	Male	Female	Rent	Own	>H.S.	H.S. Diploma	Some College	College degree +
1	50.9%	49.1%	28.5%	71.5%	11.7%	23.7%	28.2%	12.1%
2	50.1%	49.9%	34.0%	66.0%	5.2%	13.4%	30.0%	29.6%
3	49.6%	50.4%	17.0%	83.0%	3.0%	11.3%	21.4%	35.3%
4	49.4%	50.6%	35.5%	64.5%	5.5%	17.8%	27.3%	23.2%
5	50.9%	49.1%	28.5%	71.5%	11.7%	23.7%	28.2%	12.1%
6	49.9%	50.1%	28.8%	71.2%	11.6%	23.2%	27.7%	13.4%
7	48.7%	51.3%	36.1%	63.9%	10.0%	19.9%	29.1%	16.2%
8	49.4%	50.6%	29.1%	70.9%	11.4%	22.7%	27.2%	14.6%
9	50.2%	49.8%	28.8%	71.2%	7.0%	22.5%	24.7%	23.8%
10	50.8%	49.2%	30.3%	69.7%	7.0%	20.7%	24.1%	26.2%
11	52.5%	47.5%	34.0%	66.0%	9.4%	18.4%	24.3%	24.2%
12	53.0%	47.0%	35.3%	64.7%	7.6%	14.9%	22.7%	32.2%
13	51.2%	48.8%	25.0%	75.0%	7.0%	22.5%	29.3%	22.2%
14	49.8%	50.2%	32.7%	67.3%	11.8%	21.4%	23.7%	15.5%
15	49.2%	50.8%	34.7%	65.3%	7.3%	16.7%	24.4%	25.5%
16	49.3%	50.7%	32.9%	67.1%	5.5%	11.9%	22.0%	38.9%
17	50.6%	49.4%	22.9%	77.1%	5.8%	21.1%	27.5%	26.3%
18	49.9%	50.1%	33.1%	66.9%	9.7%	19.4%	26.6%	15.9%
19	50.2%	49.8%	26.5%	73.5%	8.4%	23.1%	25.7%	18.8%
20	50.3%	49.7%	49.1%	50.9%	10.9%	14.4%	20.4%	32.2%
21	49.6%	50.4%	30.8%	69.2%	6.3%	17.5%	25.1%	28.7%
Total	49.9%	50.1%	33.8%	66.2%	7.7%	17.2%	24.8%	25.9%

Table 7. Age and race/ethnicity distribution by 21 HSRs in Colorado

Region	Age (years)				Race / Ethnicity			
	0 – 17	18 – 34	35 – 64	65+	White	African American	Hispanic	Other
1	24.3%	19.5%	41.0%	15.3%	77.1%	0.9%	19.6%	2.4%
2	21.8%	27.2%	39.7%	11.2%	83.4%	0.3%	11.5%	4.8%
3	29.1%	16.8%	46.2%	7.8%	84.8%	0.9%	8.1%	6.3%
4	26.2%	23.8%	39.8%	10.2%	71.6%	5.7%	15.5%	7.1%
5	24.3%	19.5%	41.0%	15.3%	77.1%	0.9%	19.6%	2.4%
6	24.2%	18.3%	40.4%	17.0%	63.7%	0.7%	33.4%	2.2%
7	24.8%	21.3%	39.2%	14.7%	52.4%	1.2%	43.7%	2.7%
8	24.2%	17.7%	40.2%	17.9%	55.9%	0.5%	41.5%	2.0%
9	22.0%	18.5%	43.1%	16.5%	79.7%	0.2%	14.4%	5.7%
10	22.0%	19.9%	43.2%	14.9%	79.5%	0.2%	15.3%	5.0%
11	23.8%	20.1%	43.6%	12.6%	79.3%	0.0%	17.8%	2.9%
12	22.6%	23.9%	43.7%	9.8%	78.8%	0.3%	18.5%	2.4%
13	19.0%	16.9%	46.7%	17.4%	87.4%	0.3%	9.4%	2.9%
14	27.6%	25.7%	38.1%	8.6%	54.8%	3.4%	35.7%	6.1%
15	26.1%	22.2%	41.3%	10.3%	62.8%	9.7%	19.6%	7.9%
16	21.7%	25.8%	42.3%	10.3%	78.9%	0.9%	13.9%	6.3%
17	19.4%	15.4%	48.3%	16.9%	89.0%	0.3%	7.5%	3.2%
18	28.3%	23.2%	38.5%	10.0%	67.3%	0.9%	28.9%	2.8%
19	24.0%	21.7%	39.3%	14.9%	82.6%	0.6%	13.6%	3.3%
20	22.0%	30.8%	37.2%	9.9%	52.2%	9.4%	31.9%	6.5%
21	22.4%	20.7%	43.9%	13.0%	79.0%	0.9%	15.0%	5.0%
Total	24.5%	23.5%	40.9%	11.2%	69.8%	3.7%	20.9%	5.6%

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. The design effect for the final full sample weight is 2.8.

The weighting procedures detailed above were conducted for both the *target file*, using the target's demographic data for post-stratification and the *person file*, using each individual's demographics as their own target. There were, however, some differences in the procedure used in the person file. First, the adjustments for sub-stratification and stratification were made based on number of persons rather than completed interviews. Secondly, the 'number of persons' adjustment was not made to the person file since each case in the person file represents a person and not a randomly selected household member. Further the age correction in the household file adjusts for the fact that targets under the age of 18 years were 10 and then 60 percent more likely to be randomly selected by the computer as the target; this selection procedure did not apply to the person file.

Finally, because education and race were not collected for family members other than the target person, these variables could not be used in the raking process. Therefore, the target weight was divided by the number of people in the household in order to create a household-level version of the target weight. This weight was then merged into the person file and served as the base weight for the person weighting. Utilizing this base weight, the person file was then raked to the variables that were available, namely, age, gender, and homeownership, and then to cell phone use, as it has been In prior years.

Table 8. Design Effects

	Estimate	Standard Error	95% Confidence Interval		Design Effect	Unweighted Count
			Lower	Upper		
Gender						
Male	50.1%	0.9%	48.4%	51.8%	3.1	5,358
Female	49.9%	0.9%	48.2%	51.6%	3.1	4,866
Race/Ethnicity						
White	69.7%	0.9%	68.0%	71.4%	3.6	8,090
Black	3.6%	0.3%	3.0%	4.2%	2.9	404
Hispanic	19.5%	0.8%	18.0%	21.1%	4.2	989
Other	5.6%	0.4%	4.8%	6.4%	3.5	506
Home Ownership						
Rent	66.0%	0.8%	64.3%	67.6%	3.3	7,716
Own	32.8%	0.8%	31.1%	34.4%	3.3	2,326
Age						
0-17	24.9%	0.7%	23.5%	26.4%	3.1	2,370
18-34	20.9%	0.8%	19.4%	22.5%	3.8	1,261
35-64	41.4%	0.8%	39.8%	43.1%	3.0	5,086
65+	11.2%	0.5%	10.3%	12.2%	2.5	1,351
Education						
Under 18	22.2%	0.7%	20.9%	23.7%	3.1	2,023
No H.S. Diploma	8.5%	0.6%	7.4%	9.6%	4.1	648
H.S. Diploma	17.4%	0.6%	16.1%	18.7%	3.0	2,021
Some College	24.4%	0.8%	23.0%	26.0%	3.3	2,344
College Degree	26.5%	0.7%	25.1%	28.0%	2.7	3,056
Phone Ownership						
Landline	24.5%	0.6%	23.3%	25.6%	1.9	5,967
Cell Phone Only	75.5%	0.6%	74.4%	76.7%	1.9	4,257

Survey Response Rate

The response rate for this study was 30.8 percent for the landline sample and 22.0 percent for the cell phone sample using AAPOR's RR3 formula. This translates into an overall response rate of 26.8 percent. Following is a full disposition of the sample selected for this survey.

Table 9. Response Rates by 21 HSRs - Landline

	HSR 1	HSR 2	HSR 3	HSR 4	HSR 5	HSR 6	HSR 7	HSR 8	HSR 9	HSR 10	HSR 11	HSR 12
Eligible, Interview (Category 1)												
Complete	250	220	237	488	262	255	257	255	232	243	260	238
Eligible, non-interview (Category 2)												
Refusal	8	9	9	22	9	10	12	5	5	16	14	8
Break off (callback)	78	102	64	204	111	83	195	106	39	89	135	193
Answering machine household	188	453	451	932	294	234	390	222	215	451	300	418
Physically/mentally unable/incompetent	6	10	6	16	14	13	14	11	10	6	9	19
Language problem	18	11	10	41	7	11	13	18	7	15	9	32
Unknown eligibility, non-interview (Category 3)												
Always busy	42	59	47	147	95	103	42	47	36	136	39	92
No answer	122	156	101	372	233	242	289	101	63	244	233	410
Call blocking	0	6	6	8	2	1	2	6	1	3	2	2
No screener completed	2	1	0	3	5	6	5	0	3	5	5	5
Refusal Unknown eligibility	622	587	481	1,167	499	675	429	481	303	647	782	416
Not eligible (Category 4)												
Fax/data line	170	259	400	430	294	154	219	400	216	236	271	549
Non-working number	1,200	1,300	1,019	3,083	1,721	1,503	2,862	1,019	1,170	1,494	1,657	1,857
Business, gov't office, other organizations	109	180	187	277	183	129	172	187	123	195	231	258
No eligible respondent	59	83	52	121	58	89	80	52	100	106	98	197
Quota filled	0	0	0	0	0	0	0	0	0	0	0	0
Response Rate (RR3)	25.7%	23.4%	26.5%	23.2%	27.6%	24.6%	28.2%	31.3%	41.1%	25.5%	23.1%	31.0%

Table 9. Response Rates by 21 HSRs -Landline

	HSR 13	HSR 14	HSR 15	HSR 16	HSR 17	HSR 18	HSR 19	HSR 20	HSR 21
Eligible, Interview (Category 1)									
Complete	224	314	439	236	331	175	274	411	366
Eligible, non-interview (Category 2)									
Refusal	10	11	9	3	12	4	16	15	18
Break off (callback)	88	47	194	152	137	122	112	285	45
Answering machine household	251	456	780	406	555	240	204	800	656
Physically or mentally unable/incompetent	12	7	9	7	11	7	7	22	14
Language problem	5	34	72	13	4	14	12	74	26
Unknown eligibility, non-interview (Category 3)									
Always busy	51	39	53	64	53	104	65	139	57
No answer	164	182	202	174	243	114	245	538	111
Call blocking	1	6	12	4	3	1	1	19	10
No screener completed	2	4	9	0	1	5	5	21	1
Refusal Unknown eligibility	450	594	737	332	666	308	395	789	635
Not eligible (Category 4)									
Fax/data line	146	340	545	635	261	187	269	843	432
Non-working number	1,056	1,244	2,534	1,043	2,347	1,249	1,798	2,870	1,911
Business, gov't office, other organizations	153	170	250	166	239	129	162	415	204
No eligible respondent	108	87	125	58	122	53	87	97	115
Quota filled	0	0	0	0	0	0	0	0	0
Response Rate (RR3)	41.1%	29.2%	29.2%	21.8%	28.9%	27.2%	32.9%	23.7%	31.9%

Table 9. Response Rates by 21 HSRs – Cell Phone

	HSR 1	HSR 2	HSR 3	HSR 4	HSR 5	HSR 6	HSR 7	HSR 8	HSR 9	HSR 10	HSR 11	HSR 12
Eligible, Interview (Category 1)												
Complete	135	171	-	299	154	143	162	143	178	115	137	155
Eligible, non-interview (Category 2)												
Refusal	5	14	-	23	11	12	10	9	9	1	4	4
Break off (callback)	65	61	-	112	49	41	74	27	61	30	45	91
Answering machine household	149	252	-	472	84	70	233	63	475	0	74	439
Physically/mentally unable/incompetent	13	14	-	29	7	7	8	6	15	8	15	16
Language problem	25	20	-	24	10	14	13	15	10	9	21	44
Unknown eligibility, non-interview (Category 3)												
Always busy	6	7	-	11	2	1	3	1	11	3	2	9
No answer	105	302	-	327	48	49	138	32	292	163	56	328
Call blocking	0	0	-	0	1	1	2	3	3	0	2	0
No screener completed	0	3	-	0	0	0	1	1	0	0	1	1
Refusal Unknown eligibility	364	469	-	824	354	341	477	366	494	237	282	454
Not eligible (Category 4)												
Fax/data line	39	121	-	167	36	47	60	75	108	39	25	103
Non-working number	89	97	-	199	126	114	150	130	169	71	180	115
Business, gov't office, other organizations	60	103	-	189	53	38	82	67	129	76	84	153
No eligible respondent	69	147	-	316	101	77	117	89	178	60	82	132
Quota filled	0	0	-	0	0	0	0	0	0	0	0	0
Response Rate (RR3)	22.6%	23.1%	-	26.3%	30.6%	29.6%	23.3%	31.1%	22.3%	23.4%	30.3%	19.4%

Table 9. Response Rates by 21 HSRs – Cell Phone

	HSR 13	HSR 14	HSR 15	HSR 16	HSR 17	HSR 18	HSR 19	HSR 20	HSR 21
Eligible, Interview (Category 1)									
Complete	155	-	503	250	128	186	173	1,080	-
Eligible, non-interview (Category 2)									
Refusal	4	-	17	16	7	7	16	16	-
Break off (callback)	91	-	860	144	60	78	74	874	-
Answering machine household	439	-	2,672	1,168	90	575	209	4,223	-
Physically or mentally unable/incompetent	16	-	63	19	15	29	12	77	-
Language problem	44	-	378	35	16	51	12	312	-
Unknown eligibility, non-interview (Category 3)									
Always busy	9	-	201	28	3	30	7	118	-
No answer	328	-	3,125	1,067	84	472	120	5,135	-
Call blocking	0	-	18	4	2	2	3	12	-
No screener completed	1	-	0	2	0	0	0	4	-
Refusal Unknown eligibility	454	-	2,508	1,118	309	702	509	4,191	-
Not eligible (Category 4)									
Fax/data line	103	-	209	120	40	141	68	502	-
Non-working number	115	-	511	213	191	121	120	800	-
Business, gov't office, other organizations	153	-	287	213	90	152	136	836	-
No eligible respondent	132	-	549	255	111	148	127	915	-
Quota filled	0	-	0	0	0	0	0	0	-
Response Rate (RR3)	24.2%	-	9.57%	13.11%	30.7%	15.3%	24.1%	13.1%	-

Table 9. Response Rate for Landline and Cell Phone Samples

	Landline	Cell Phone	Total
Eligible, Interview (Category 1)			
Complete	5,967	4,257	10,224
Eligible, non-interview (Category 2)			
Refusal	228	228	456
Break off (callback)	2,581	2,795	5,376
Answering machine household	3,979	4,253	8,232
Physically/mentally unable/incompetent	229	364	593
Language problem	446	1,018	1,464
Unknown eligibility, non-interview (Category 3)			
Always busy	1,554	445	1,999
No answer	4,667	12,068	16,735
Call blocking	92	54	146
No screener completed	5,017	7,408	12,425
Refusal Unknown eligibility	12,022	14,445	26,467
Not eligible (Category 4)			
Fax/data line	6,719	2,024	8,743
Non-working number	127,281	53,370	180,651
Business, gov't office, other organizations	4,133	2,816	6,949
No eligible respondent	2,015	3,587	5,602
Quota filled	5,967	4,257	10,224
Response Rate (RR3)	30.8%	22.0%	26.8%

Alphabetical Listing of Variables in Data File

Variable Name	Variable Label	Section
AGE_GRP	Age	Background
CO_LIVED	Number of years target has lived in Colorado	Background
COST_NODENT	In past 12 months, did NOT see a dentist because of cost	Affordability
COST_NODOC	In past 12 months, did NOT see a doctor because of cost	Affordability
COST_NORX	In past 12 months, did NOT fill a prescription because of cost	Affordability
COST_NOSPEC	In past 12 months, did NOT see a specialist because of	Affordability
DENTAL_INS	Has insurance coverage for dental care	Health Insurance
DENTIST_12M	In past 12 months, visit a dentist/hygienist	Access, Use and Cost
DOC_12M	Number of general doctor visits in past 12 months	Access, Use and Cost
DOC_PREV	Were any visits to general doctor for preventive care	Access, Use and Cost
EDUCATION	Highest level of school completed	Background
EMP_ADDJOB	Does target have more than one job (y/n)	Employment
EMP_CATEGORY	Type of employment (target >15 yrs old)	Employment
EMP_HRS_WK	Total number of hours worked/week (all jobs)	Employment
EMP_TIME	Total years at current (main) employer	Employment
EMPLOYED	Employed for pay (age>15; Y/N)	Employment
ER_12M	Number of ER visits in past 12 months	Access, Use and Cost
ER_NOEMER	Was the last ER visit for a non-emergency	Access, Use and Cost
ER_RES1	Reason used ER: Unable to get an appointment soon enough	Access, Use and Cost
ER_RES2	Reason used ER: Needed are after normal office hours	Access, Use and Cost
ER_RES3	Reason used ER: Doctor's office told you to go to the ER	Access, Use and Cost
ER_RES4	Reason used ER: More convenient that going to regular doctor	Access, Use and Cost
ESI_DEP	ESI includes coverage for dependents	Employment
ESI_OFFERED	Employer offered health insurance to target	Employment
FIRM_ESI	Employer offers health insurance to employees	Employment
FIRM_SIZE	Number of employees at current (main) employer	Employment
GENDER	Gender	Background
HC_NEEDS_CO	Current health care system meeting the needs of	Health System
HC_NEEDS_FAM	Current health care system meeting the needs of your	Health System
HEALTH_STATUS	Self-reported current health status	Health Status
HOME_OWNER	Is targets residence owned or rented	Background
HOSP_12M	In past 12 months, stay over night in hospital	Access, Use and Cost
ID	Target ID	Background
INC_2012_GRP	Grouped 2012 income from imputed income (created)	Background
INC_DIVIDEND	In 2012, target/family received inc from dividends (y/n)	Background
INC_MON_GRP	Grouped monthly income from imputed income (created)	Background
INC_OTH	In 2012, target/family received inc from other sources	Background
INC_SALARY	In 2012, target/family received income from wages (y/n)	Background
INSURANCE	Type of health insurance (created)	Health Insurance
INSURANCE2	Health insurance status (created)	Health Insurance

Alphabetical Listing of Variables in Data File (continued)

Variable Name	Variable Label	Section
INSURED_PIT	Currently has health insurance (at time of survey)	Health Insurance
LIMIT_ACTIVITY	Limited in ability to work because of health, emotional or mental issues	Health Status
LOST_COVERAGE	In past 12 months, lost coverage or switched from one type of insurance to another	Health Insurance
LTC_INSURANCE	Have long-term care insurance from a private company	Health Insurance
MARRIED	Target is married	Background
NEEDED_MH	In past 12 months, was there a time when needed mental health care but did not get it	Access, Use and Cost
NOCARE_APP	In past 12 months, did not see a doctor as soon as needed	Access, Use and Cost
NOCARE_CHILDCARE	In past 12 months, unable to find childcare	Access, Use and Cost
NOCARE_INS	In past 12 months, could not see doc because of type of	Access, Use and Cost
NOCARE_NEWPT	In past 12 months, was told by doc no appt avail for new patients	Access, Use and Cost
NOCARE_TRANS	In past 12 months, unable to find transportation to doctor's office	Access, Use and Cost
NOCARE_UNINS	In past 12 months, did not seek an appointment because he/she was uninsured	Access, Use and Cost
NOCARE_WORK	In past 12 months, unable to take time off work	Access, Use and Cost
NOCARE_WORK_PAR	In past 12 months, parent/guardian unable to take time off work	Access, Use and Cost
NOINS_12M	Uninsured at some time in past 12 mons (created)	Health Insurance
NOINS_NUM	Number of months (in the past 12) without health	Health Insurance
NOINS_REASON	Reason target has not had health insurance	Health Insurance
NUM_FAM	Number of people in family	Background
NUM_HH	Number of people in household	Background
OOP_DENTAL_GRP	In past 12 months, out-of-pocket expense for dental	Affordability
OOP_OTH_GRP	In past 12 months, out-of-pocket expense for other med	Affordability
OOP_RX_GRP	In past 12 months, out-of-pocket expense for Rx meds	Affordability
OOP_VISION_GRP	In past 12 months, out-of-pocket expense for vision	Affordability
ORAL_HEALTH_STATUS	Self-reported current oral health status	Health Status
POOR_MH	8 or more days with poor mental health (in past 30 days)	Health Status
PROB_PAYING	In past 12 months, had problem paying medical bills	Affordability
RXDRUGS_12M	In past 12 months, take any prescription drugs	Access, Use and Cost
SPEAK_ADD	Speak a language other than English at home	Background
SPEC_12M	In past 12 months, visit a specialist	Access, Use and Cost
SPK_OTHER	Speaks language other than Spanish	Background
SPK_SPANISH	Speaks Spanish	Background
STUDENT	Is currently a full-time student (>3/4 time)	Background
TIME_LASTCVRD	Time (months) since target last had health insurance	Health Insurance
UNDERINS	Target is underinsured	Health Insurance
URBAN	Target lives in urban or rural area	Background
USOC	Has a usual source of care	Access, Use and Cost

Alphabetical Listing of Variables in Data File (continued)

Variable Name	Variable Label	Section
USOC_TYPE	Type of place target goes for health care issues	Access, Use and Cost
VETERAN	Is a veteran of the US military	Background
VISIT_12M	In past 12 months, visited a health care professional	Access, Use and Cost
WGT_POP	Final trimmed population weight for complete sample	Background
WHITE	Race of target white(=1) or non-white(=2)	Background
WILLING2PAY	Amount willing to pay for health insurance per month	Affordability

SECTION 1: BACKGROUND

Variable: ID

Label: Target ID

Values: Continuous

Universe: All respondents

Variable: AGE_GRP

Question: Sa2. What is your age (of as your last birthday)?

Label: Age

Values:
1	0-18 years
2	19-34 years
3	35-54 years
4	55-64 years
5	65+ years
-9	Don't Know/Refused

Universe: All respondents

Variable: NUM_HH

Question: S4. How many people currently live or stay here? Please include anyone temporarily away for school or the armed services.

Label: Number of people in household

Values:
1	1 person
2	2 people
3	3 people
4	4 people
5	5+ people

Universe: All respondents

Variable: NUM_FAM

Label: Number of people in family

Values:
1	1 person
2	2 people
3	3 people
4	4 people
5	5+ people

Universe: All respondents

Variable:	GENDER

Question: S7(b-j). Is this (child/person) (a boy or a girl/male or female)?

Label: Gender

Values:
1 Male
2 Female
-9 Don't Know/Refused

Universe: All respondents

Variable:	MARRIED

Label: Target is married

Values:
0 Not married
1 Married

Universe: All respondents

Variable:	STUDENT

Question: E14. (Are you/Is TARGET) currently a full-time student?

Label: Is currently a full-time student (>3/4 time)

Values:
1 Yes
2 No
-9 Don't Know/Refused

Universe: All respondents

Variable:	VETERAN

Question: E13. (Are you/Is TARGET) a veteran of the United States military?

Label: Is a veteran of the US military

Values:
1 Yes
2 No
-9 Don't Know/Refused

Universe: Respondents age 17 and older

Variable:	WHITE

Question: D2. Which one or more of the following would you say is (your/TARGET's) race?

Label: Race of target white(=1) or non-white(=2)

Values:
1 White
2 Non-White
-9 Don't Know/Refused

Universe: All respondents

Variable:	SPEAK_ADD

Question: D6. (Do you /does TARGET) speak a language other than English at home?

Label: Speak a language other than English at home

Values:
1 No
2 Yes
-9 Don't Know/Refused

Universe: All respondents

Variable:	SPK_SPANISH

Question: D7. What language is this?

Label: Speaks Spanish

Values:
0 Does not speak Spanish
1 Speaks Spanish
-9 Don't Know/Refused

Universe: All respondents

Variable:	SPK_OTHER

Question: D7. What language is this?

Label: Speaks language other than Spanish

Values:
0 Does not speak Spanish
1 Speaks Spanish
-9 Don't Know/Refused

Universe: All respondents

Variable:	HOME_OWNER

Question: D10. Is this residence…?

Label: Is targets residence owned or rented

Values:
- 1   Owned
- 2   Rented
- -9   Don't Know/Refused

Universe: All respondents

Variable:	CO_LIVED

Question: D11. How long have you lived in Colorado?

Label: Number of years target has lived in Colorado

Values:
- 1   0-10 years
- 2   11-20 years
- 3   More than 20 years
- -9   Don't Know/Refused

Universe: All respondents

Variable:	EDUCATION

Question: S9. What is the highest level of school you have completed or the highest degree you have received?

Label: Highest level of school completed

Values:
- 1   Less than high school
- 2   High school graduate or equivalent
- 3   Some college but no degree
- 4   Associates Degree
- 5   College graduate
- 6   Postgraduate
- -9   Don't Know/Refused

Universe: Respondents ages 16 and older

Variable:	INC_SALARY

Question: IN1. During 2012, did you receive any income from wages or salary?

Label: In 2012, target/family received income from wages (y/n)

Values:
- 1   Yes
- 2   No
- -9   Don't Know/Refused

Universe: All respondents

Variable:	INC_DIVIDEND

Question: IN2a. During 2012, did you (or any of your family members) receive any dividend income or any interest income from bonds, money market accounts, CDs or other investments?

Label: In 2012, target/family received inc from dividends (y/n)

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: All respondents

Variable:	INC_OTH

Question: IN2c. During 2012, did you (or any of your family members) receive income from any other sources, such as self-employment, alimony, child support, contributions from family or others, unemployment compensation, worker's compensation or veteran's payments, disability benefits, pensions, or anything else?

Label: In 2012, target/family received inc from other sources (y/n)

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: All respondents

Variable:	INC_2012_GRP

Question: IN3. Thinking about all the different sources of income you (and your immediate family) received in 2012, what was the combined total income from all sources before taxes and other deductions?

Label: Grouped 2012 income from imputed income (created)

Values:
1    $0 to $29,999
2    $30,000 to $59,999
3    $60,000 to $89,999
4    $90,000 or more

Universe: All respondents

Variable:	INC_MON_GRP

Question: IN6. Thinking about all the different sources of income you (and your immediate family) received last month, what was the combined total income from all sources before taxes and other deductions?

Label: Grouped monthly income from imputed income (created)

Values: 1 $0 to $1,999
           2    $2,000 to $3,999
           3    $4,000 to $5,999
           4    $6,000 or more

Universe: All respondents

Variable:	URBAN

Label: Target lives in urban or rural area

Values: 0   Rural
           1   Urban
           -9   Don't Know/Refused

Universe: All respondents

Variable:	WGT_POP

Label: Final trimmed population weight for complete sample

Values: Continuous

Universe: All respondents

SECTION 2: HEALTH INSURANCE

Variable: INSURANCE

Question: H1B-H1M. Please tell me if you currently have any of the following types of insurance.

Label: Type of health insurance (created)

Values:
1	Employer-sponsored insurance
2	Medicare
3	Medicaid/Child Health Plan Plus (CHP+)
4	Individually purchased insurance/other insurance
5	Uninsured

Universe: All respondents

Variable: INSURED_PIT

Question: CREATED VARIABLE FOR INSURANCE STATUS AT TIME OF SURVEY

Label: Insurance type: Through own employer

Values:
1	Currently has insurance
2	Does not have insurance

Universe: All respondents

Variable: INSURANCE2

Question: CREATED CATEGORICAL VARIABLE FOR UNDERINSURANCE STATUS AT TIME OF SURVEY

Label: Health insurance status (created)

Values:
1	Underinsured
2	Adequately insured
3	Insured but uninsured at some point in past 12 months
4	Uninsured at time of survey
5	Insured but with uninsured family member

Universe: All respondents

Variable:	UNDERINS

Question: CREATED VARIABLE FOR UNDERINSURANCE STATUS AT TIME OF SURVEY

Label: Target is underinsured

Values:
0 NOT Underinsured
1 Underinsured

Universe: All respondents

Variable:	LOST_COVERAGE

Question: H5a. Some people start the year with insurance through a public program and then are offered coverage through their employer. Others lose coverage through their employer and then purchase health insurance themselves. At any time -- in the past 12 months -- (have you/has TARGET) lost coverage or swiotched from one type of insurance coverage to another?

Label: In past 12 months, lost coverage or switched from one type of insurance to another

Values:
1 Yes
2 No
-9 Don't Know/Refused

Universe: Respondents who currently have health insurance

Variable:	NOINS_12M

Question: H6. How many months during the past 12 months (were you/was TARGET) without health insurance

Label: Uninsured at some time in past 12 mons (created)

Values:
1 Yes
2 No
-9 Don't Know/Refused

Universe: Respondents who are currently without health insurance and respondents who lost or switched coverage in the past 12 months

Variable: NOINS_NUM

Question: H6. How many months during the past 12 months (were you/was TARGET) without health insurance

Label: Number of months (in the past 12) without health insurance

Values: 1   0-11 months
            2   12 months
            -9   Don't Know/Refused

Universe: Respondents who are currently without health insurance and respondents who lost or switched coverage in the past 12 months

Variable: TIME_LASTCVRD

Question: H7. How long has it been since (you/TARGET) has any health insurance?

Label: Time (months) since target last had health insurance

Values: 1   0-24 months
            2   More than 24 months
            -9   Don't Know/Refused

Universe: Respondents who are currently without health insurance

Variable: NOINS_REASON

Question: H8e. I'm going to read a list of some other reasons that people sometimes give for why they don't have health insurance. Please tell me if any of these are also reasons that (you do/TARGET does) not have health insurance. How about cost is too high?

Label: Reason target has not had health insurance

Values: 1   Cost is too high
            2   Other
            -9   Don't Know/Refused

Universe: Respondents who are currently without health insurance

Variable: DENTAL_INS

Question: A7a.(Do you/Does TARGET) have any kind of insurance coverage that pays for some or all of (your/his/her) routine dental care, including dental insurance, prepaid plans such as Delta Dental or

Label: Has insurance coverage for dental care

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: All respondents

Variable: LTC_INSURANCE

Question: LT1. (Do you/Does TARGET) have long-term care insurance from a private company? This does not include Medicare or Medicaid.

Label: Have long-term care insurance from a private company

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: Respondents ages 50 and older

SECTION 3: EMPLOYMENT

Variable:	EMP_CATEGORY

Question: E1. (Are you/Is TARGET) currently self-employed, employed by military, employed by someone else, an unpaid worker for a family business or family farm, unemployed and looking for work, not employed and not looking for work, retired or unable tow ork because of a disability?

Label: Type of employment (target >15 yrs old)

Values:
- 1 Self-employed
- 2 Employed by someone else (inc military)
- 3 Retired
- 4 Unemployed and looking for work
- 5 Not employed/unpaid worker
- 6 Unable to work because of a disability
- -9 Don't Know/Refused

Universe: Respondents ages 16 and older

Variable:	EMP_ADDJOB

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

Label: Does target have more than one job (y/n)

Values:
- 1 Yes
- 2 No
- -9 Don't Know/Refused

Universe: Respondents ages 16 and older who are self-employed or employed by someone else (including military)

Variable:	EMP_HRS_WK

Question: E4. How many hours per week (do you/does TARGET) usually work at (your/their) job?
E5. How many hours per week (do you/does TARGET) usually work at (your/their) other jobs?

Label: Total number of hours worked/week (all jobs)

Values:
- 1 Less than 40 hours/week
- 2 40 hours/week
- 3 More than 40 hours/week
- -9 Don't Know/Refused

Universe: Respondents ages 16 and older who are self-employed or employed by someone else (including military)

Variable:	EMP_TIME

Question: E6. How long (have you/has TARGET) worked for (your/their) job?

Label: Total years at current (main) employer

Values:
1   Less than 1 year
2   1 to 5 years
3   6 to 10 years
4   11 to 20 years
5   More than 20 years
-9   Don't Know/Refused

Universe: Respondents ages 16 and older who are self-employed or employed by someone else (including military)

Variable:	EMPLOYED

Question: S9a. Are you currently working for pay?

Label: Employed for pay (age>15; Y/N)

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: Respondents ages 16 and older

Variable:	FIRM_ESI

Question: E10. Does the place where (you work/TARGET works) offer health insurance as a benefit to any of its employees.

Label: Employer offers health insurance to employees

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: Respondents ages 16 and older who are self-employed or employed by someone else (including military)

Variable:	ESI_OFFERED

Question: E11. (Are you/Is TARGET) offered health insurnce through (your/their) work?

Label: Employer offered health insurance to target

Values:
1	Yes
2	No
-9	Don't Know/Refused

Universe: Respondents ages 16 and older who are self-employed or employed by someone else (including military)

Variable:	ESI_DEP

Question: E12. Earlier you mentioned that (you are offered/TARGET is offered) health insurance coverage through (your/their) employer. Could dependents be covered under that health insurance?

Label: ESI includes coverage for dependents

Values:
1	Yes
2	No
-9	Don't Know/Refused

Universe: Respondents ages 16 and older who are self-employed or employed by someone else (including military)

Variable:	FIRM_SIZE

Question: E 7-9. Which category best represents the total number of persons who work for (your/TARGET's) employer/business?

Label: Number of employees at current (main) employer

Values:
1	1 to 10 employees
2	11 to 50 employees
3	51 to 100 employees
4	More than 100 employees
-9	Don't Know/Refused

Universe: Respondents ages 16 and older who are self-employed or employed by someone else (including military)

SECTION 4: ACCESS, USE AND COST

Variable: USOC

Question: A1. My next questions ask about (your/ TARGET's) recent health care experiences. Is there a place where (you/ TARGET's) usually (go/goes) when (you/he/she) (are/is) sick or when (you/(he/she)) need advice about (your/his/her) health?

Label: Has a usual source of care

Values:
1 Yes
2 No
-9 Don't Know/Refused

Universe: All respondents

Variable: USOC_TYPE

Question: A2. If (you/TARGET) were to get sick or need a medical professional, where would (you/TARGET) go? OR What kind of place is it?

Label: Type of place target goes for health care issues

Values:
1 A doctor's office or private clinic
2 A community health center or other public clinic
3 Emergency department or urgent care center
4 Other place
-9 Don't Know/Refused

Universe: All respondents

Variable: VISIT_12M

Question: A2d. Have (you/TARGET) visited a health care professional or health care facility in the past 12 months?

Label: In past 12 months, visited a health care professional

Values:
1 Yes
2 No
-9 Don't Know/Refused

Universe: All respondents

Variable: ER_12M

Question: A3. In the past 12 months, how many times did (you/ TARGET) receive care in a hospital emergency room?

Label: Number of ER visits in past 12 months

Values:
1   0 visits
2   1 visit
3   2 or more visits
-9   Don't Know/Refused

Universe: All respondents

Variable: ER_NOEMER

Question: 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?

Label: Was the last ER visit for a non-emergency

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: Respondents who had at least one emergency room visit in the past 12 months

Variable: ER_RES1

Question: A3ba. (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.

Label: Reason used ER: Unable to get an appointment soon enough

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: Respondents who had at least one emergency room visit in the past 12 months and whose last visit was for a non-emergency

| Variable: | ER_RES2 |

Question: A3bb. (You/TARGET) needed care after normal operating hours at the doctor's office or clinic

Label: Reason used ER: Needed are after normal office hours

Values: 1   Yes
2   No
-9   Don't Know/Refused

Universe: Respondents who had at least one emergency room visit in the past 12 months and whose last visit was for a non-emergency

| Variable: | ER_RES3 |

Question: A3bc. (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

Label: Reason used ER: Doctor's office told you to go to the ER

Values: 1   Yes
2   No
-9   Don't Know/Refused

Universe: Respondents who had at least one emergency room visit in the past 12 months and whose last visit was for a non-emergency

| Variable: | ER_RES4 |

Question: A3bd. It was more convenient to go to the hospital emergency room

Label: Reason used ER: More convenient that going to regular doctor

Values: 1   Yes
2   No
-9   Don't Know/Refused

Universe: Respondents who had at least one emergency room visit in the past 12 months and whose last visit was for a non-emergency

Question: A4. In the past 12 months, (were you/ was TARGET) a patient in a hospital overnight (other than to have a baby)?

Label: In past 12 months, stay over night in hospital

Values: 1   Yes
            2   No
            -9   Don't Know/Refused

Universe: All respondents

Question: 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. [Please do not include care (you/he/she) received when (you were/he was/she was) hospitalized overnight or in hospital emergency rooms.]

Label: Number of general doctor visits in past 12 months

Values: 1   0 visits
            2   1 visit
            3   2 or more visits
            -9   Don't Know/Refused

Universe: All respondents

Question: A5a. (Was this visit/Were any of those visits) for a check-up, physical examination or for other preventive care?

Label: Were any visits to general doctor for preventive care

Values: 1   Yes
            2   No
            -9   Don't Know/Refused

Universe: Respondents who had at least one visit to the general doctor in the past 12 months

Variable:	SPEC_12M

Question: 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. Please do not include care (you/ TARGET) received when (you/ TARGET) were hospitalized overnight or in hospital emergency rooms.

Label: In past 12 months, visit a specialist

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: All respondents

Variable:	DENTIST_12M

Question: A7. In the past 12 months, did (you/TARGET) see a dentist or a dental hygienist?

Label: In past 12 months, visit a dentist/hygienist

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: All respondents

Variable:	RXDRUGS_12M

Question: A8. In the past 12 months, did (you/TARGET) take any prescription drugs?

Label: In past 12 months, take any prescription drugs

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: All respondents

Variable:	NOCARE_APP

Question: A9ba. (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) thought one was needed

Label: In past 12 months, did not see a doctor as soon as needed

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: All respondents

Variable:	NOCARE_INS

Question: A9bb. (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

Label: In past 12 months, could not see doc because of type of ins

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: All respondents

Variable:	NOCARE_NEWPT

Question: A9bc. (You were/TARGET was/TARGET's parent/guardian was) told by a doctor's office or clinic that they weren't accepting new patients

Label: In past 12 months, was told by doc no appt avail for new patients

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: All respondents

Question: A9bd. (You were/TARGET was/TARGET's parent/guardian was) unable to find transportation to the doctor's office or the doctor's office was too far away

Label: In past 12 months, unable to find transportation to doctor's office

Values: 1   Yes
2   No
-9   Don't Know/Refused

Universe: All respondents

Question: A9be. (You were/TARGET's parent/guardian was) unable to make an appointment because (you/he/she) could not take off from work

Label: In past 12 months, unable to take time off work

Values: 1   Yes
2   No
-9   Don't Know/Refused

Universe: Respondents age 16 and older who are self employed or employed by someone else

Question: A9be1. TARGET's parent/guardian was unable to make an appointment because (he/she) could not take off work to take TARGET

Label: In past 12 months, parent/guardian unable to take time off work

Values: 1   Yes
2   No
-9   Don't Know/Refused

Universe: Respondents age 15 and younger

Variable:	NOCARE_CHILDCARE

Question: A9bf. (You were/TARGET was) unable to schedule an appointment because (you/he/she) could not find child care

Label: In past 12 months, unable to find childcare

Values: 1 Yes
2 No
-9 Don't Know/Refused

Universe: Respondents who have at least one child age 14 and younger

Variable:	NOCARE_UNINS

Question: A9bg. (You/TARGET/TARGET's parent/guardian) did not seek an appointment because (you were/TARGET was) uninsured

Label: In past 12 months, did not seek an appointment because he/she was uninsured

Values: 1 Yes
2 No
-9 Don't Know/Refused

Universe: Respondents who are without health insurance

Variable:	NEEDED_MH

Question: 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?

Label: In past 12 months, was there a time when needed mental health care but did not get it

Values: 1 Yes
2 No
-9 Don't Know/Refused

Universe: Respondents age 5 and older

SECTION 5: AFFORDABILITY

<table>
<tr><td colspan="2" style="background-color:#a9cf8f;">Variable: COST_NODENT</td></tr>
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Variable: COST_NODENT

Question: A9a. Still thinking about the past 12 months, was there any time that (you/TARGET) did not get dental care that (you/TARGET) needed because of cost?

Label: In past 12 months, did NOT see a dentist because of cost

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: All respondents

Variable: COST_NODOC

Question: A9a. Still thinking about the past 12 months, was there any time that (you/TARGET) did not get doctor care that (you/TARGET) needed because of cost?

Label: In past 12 months, did NOT see a doctor because of cost

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: All respondents

Variable: COST_NORX

Question: A9a. Still thinking about the past 12 months, was there any time that (you/TARGET) did not fill a prescription that (you/TARGET) needed because of cost?

Label: In past 12 months, did NOT fill a prescription because of cost

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: All respondents

Variable: COST_NOSPEC

Question: A9a. Still thinking about the past 12 months, was there any time that (you/TARGET) did not get specialist care that (you/TARGET) needed because of cost?

Label: In past 12 months, did NOT see a specialist because of cost

Values:
1 Yes
2 No
-9 Don't Know/Refused

Universe: All respondents

Variable: OOP_DENTAL_GRP

Question: A10ab. How much was spent "out-of-pocket" for dental care in the past 12 months for (you/TARGET) and (your/his/her) immediate family?

Label: In past 12 months, out-of-pocket expense for dental

Values:
1 $0
2 $1 to <$200
3 $200 to <$500
4 $500 to <$1,000
5 $1,000 or more
-9 Don't Know/Refused

Universe: All respondents

Variable: OOP_OTH_GRP

Question: A10ac. How much was spent "out-of-pocket" for other medical expenses, including for doctors, hospitals, tests and equipment in the past 12 months for (you/TARGET) and (your/his/her) immediate

Label: In past 12 months, out-of-pocket expense for other med

Values:
1 $0
2 $1 to <$200
3 $200 to <$500
4 $500 to <$1,000
5 $1,000 or more
-9 Don't Know/Refused

Universe: All respondents

Variable: OOP_RX_GRP

Question: A10aa. How much was spent "out-of-pocket" for prescription medications in the past 12 months for (you/TARGET) and (your/his/her) immediate family?

Label: In past 12 months, out-of-pocket expense for Rx meds

Values:
1	$0
2	$1 to <$200
3	$200 to <$500
4	$500 to <$1,000
5	$1,000 or more
-9	Don't Know/Refused

Universe: All respondents

Variable: OOP_VISION_GRP

Question: A10ab1. How much was spent "out-of-pocket" for vision care in the past 12 months for (you/TARGET) and (your/his/her) immediate family?

Label: In past 12 months, out-of-pocket expense for vision

Values:
1	$0
2	$1 to <$200
3	$200 to <$500
4	$500 to <$1,000
5	$1,000 or more
-9	Don't Know/Refused

Universe: All respondents

Variable: PROB_PAYING

Question: 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? This would include doctor or hospital bills, dentist bills, bills for prescription drugs, nursing home bills, or

Label: In past 12 months, had problem paying medical bills

Values:
-9	Don't Know/Refused
1	Yes
2	No

Universe: All respondents

Question: AF2. If low cost health insurance were made available, how much would (you/TARGET/TARGET's parent/guardian) be WILLING to pay for (your/TARGET'S) health care coverage?

Label: Amount willing to pay for health insurance per month

Values: 1 $0 to $49
        2    $50 to $99
        3    $100 to $149
        4    $150 to $199
        5    $200 or more

Universe: Respondents who do not currently have health insurance coverage

SECTION 6: HEALTH STATUS

Variable: ORAL_HEALTH_STATUS

Question: 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?

Label: Self-reported current oral health status

Values:
1	Excellent
2	Very Good
3	Good
4	Fair
5	Poor
-9	Don't Know/Refused

Universe: All respondents

Variable: HEALTH_STATUS

Question: HS1. Would you say (your/TARGET's) health, in general, is excellent, very good, good, fair, or poor?

Label: Self-reported current health status

Values:
1	Excellent
2	Very Good
3	Good
4	Fair
5	Poor
-9	Don't Know/Refused

Universe: All respondents

Variable: POOR_MH

Question: MH1. How many days during the past 30 days was (your/TARGET'S) mental health not good?

Label: 8 or more days with poor mental health (in past 30 days)

Values:
0	Less than 8 days of poor mental health
1	8 or more days of poor mental health
-9	Don't Know/Refused

Universe: Respondents ages 5 and older

Question: HS2. (Are you/ Is TARGET) limited in any way in (your/his/her) your ability to work because of a physical, mental, or emotional health problem?

Label: Limited in ability to work because of health, emotional or mental issues

Values:
1   Yes
2   No
-9   Don't Know/Refused

Universe: Respondents ages 18 and older

SECTION 7: HEALTH SYSTEM

Variable:	HC_NEEDS_FAM

Question: HR1. Generally speaking, (do you/does TARGET) AGREE or DISAGREE that the current Colorado health care system is meeting the needs of your family? Is that strongly or somewhat?

Label: Current health care system meeting the needs of their family

Values:
1   Strongly agree
2   Somewhat agree
3   Somewhat disagree
4   Strongly disagree
-9   Don't Know/Refused

Universe: All respondents

Variable:	HC_NEEDS_CO

Question: HR2. Generally speaking, (do you/does TARGET) AGREE or DISAGREE that the current health care system is meeting the needs of most Coloradans? Is that strongly or somewhat?

Label: Current health care system meeting the needs of Colorado

Values:
1   Strongly agree
2   Somewhat agree
3   Somewhat disagree
4   Strongly disagree
-9   Don't Know/Refused

Universe: All respondents