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**Understanding the New Current Population Survey
Health Insurance Questions**

Joanne Pascale
Michel Boudreaux¹
Ryan King

¹State Health Access Data Assistance Center,
University of Minnesota

Center for Survey Measurement
Research and Methodology Directorate
U.S. Census Bureau
Washington, D.C. 20233

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Joanne Pascale, US Census Bureau
Michel Boudreaux, State Health Access Data Assistance Center, University of Minnesota
Ryan King, US Census Bureau

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Research and Methodology Directorate
US Census Bureau

joanne.pascale@census.gov

301-763-4920

ABSTRACT

Objective: To compare estimates of health coverage from the redesign of the Current Population Survey Annual Social and Economic Supplement to estimates from the status quo method to inform the 2012/2013 break in series.

Data sources/study setting. The CPS 2013 Content Test

Study design. A quasi-split ballot test of the old and new CPS in which the control panel was a subset of the CPS production cases interviewed by phone, and the test panel was conducted in parallel (also by phone) with sample that had already completed the final rotation of the CPS. Outcome variables tested include uninsured and coverage type by subgroup, and calendar year versus point-in-time estimates.

Data collection/extraction methods. Census Bureau telephone interviewers.

Principal findings. Odds of having coverage in the past calendar year were higher under the redesigned CPS than the status quo. Within the redesigned CPS, calendar year estimates of coverage were higher than and distinct from point-in-time estimates. There were few statistically significant differences in coverage across demographic subgroups.

Conclusions. The new method reduced presumed under-reporting of past year coverage and the integrated point-in-time/calendar year series effectively generated distinct measures of each within the same questionnaire.

Key words: insurance, redesign, experiment, measurement error

INTRODUCTION

The US Census Bureau's Current Population Survey Annual Social and Economic Supplement (CPS) is the most widely cited and used source of estimates on health insurance coverage (Blewett and Davern, 2006). Well before health reform posed additional measurement challenges, many researchers were critical of the CPS because its estimate of the number of uninsured appeared too high. The chief evidence for this conclusion was that the CPS estimate, which defined the uninsured as those without coverage throughout the calendar year, was on par with other surveys' estimate of the number of uninsured at a point in time. By definition, the CPS, which defines a person as uninsured if they lacked coverage for every day in a calendar year, should estimate a smaller number of uninsured compared to a survey that defines uninsurance as lacking coverage on the date of interview (or any other specific point in time). The fact that these estimates are close led researchers to assume the CPS was missing out on reports of past coverage. Indeed, another persistent criticism of the CPS is that its calendar year estimate of the uninsured is higher than most other surveys that measure calendar year coverage. For example, in a comparison of major national surveys, estimates of the uninsured throughout calendar year 2012 were 15.4 percent in the CPS and 11.1 percent in the National Health Interview Survey (NHIS) (SHADAC, 2013).

Given these divergent estimates, a comprehensive research agenda has been underway at the Census Bureau since 1999 to examine and reduce measurement error associated with health insurance estimates from the CPS questionnaire. Research activities included an extensive and ongoing literature review, multiple rounds of cognitive testing and behavior coding, interviewer and respondent debriefings, split-ballot field tests and record-check studies. This research

demonstrated there were three key features of the CPS questionnaire that were associated with measurement error. First was the calendar year reference period, combined with the three-month lag time between the end of the reference period (December) and the interview date (April-February of the subsequent year). Second was the household-level design, in which household members were asked about in general terms (“was anyone in the household covered by...”) rather than specific terms (“was [NAME] covered by...”). Third was the structure of the questionnaire regarding coverage types. The CPS asks a series of yes/no questions, one on each of eight sources of coverage (employment, Medicare, Medicaid, etc.). This “laundry list” approach was problematic for a number of reasons. Respondents often did not know the status of other household members’ coverage at that level of detail, they confused one plan type for another, and they reported the same plan more than once. Indeed, the list of sources itself was not mutually exclusive.

After more than a decade of research on the character of measurement error in the CPS, a fundamental redesign of the health insurance module was developed which addressed each problematic feature of the questionnaire. With regard to the reference period, questions ask first about coverage on the day of the interview. Follow-up questions determine when the coverage started, and probe for any gaps in coverage from January of the prior year up to and including the present (in total, a 15-month continuous time period). The result is an integrated set of questions on both calendar year and point-in-time coverage that renders the same data as the old CPS, as well as person-plan type-month level variables. Regarding the household-level design, the new CPS employs a hybrid person-household approach in which each person is asked about by name, but once a particular plan or plan type is identified, questions are asked to determine which other

household members are also covered by that same plan. This information is harnessed so that the question series on subsequent household members is much abbreviated for any member already mentioned as covered. On coverage type, the redesign starts with a single yes/no question on coverage status, and then determines general source of coverage (job, government/state, other) and follow-up questions tailored to each general source capture the necessary detail (policyholder/dependents, type of government plan, etc.)

While the CPS redesign focused on measurement error, during its development the Affordable Care Act was implemented and adaptations to the redesign were incorporated into the testing (Pascale et al, 2013). In March 2013 the Census Bureau conducted the CPS ASEC 2013 Content Test – a large-scale field test (n=29,646 people) comparing the redesign to the status quo in a production setting, and results were favorable both from an operations standpoint and in terms of the estimates. Thus the redesigned CPS was launched into full-scale production in early spring of 2014 and was used to produce estimates for calendar year 2013. The adoption of the CPS redesign in 2014 signifies a break in series; estimates for calendar year 2013 (based on the new instrument) will not be directly comparable to estimates for calendar year 2012 (based on the old instrument). However, estimates of 2013 and 2014 coverage (and beyond) will be produced using the same new method.

This paper focuses on the 2013 test results and has two main objectives. First is to examine whether the redesign met its objectives by generating more reports of past coverage than the traditional CPS, and by generating estimates of both point-in-time and calendar year coverage from the same cross-sectional questionnaire that are distinct from each other. Second is to show a

comparison of estimates from the new and old CPS design, by detailed plan type and by subgroup, to equip the research community with an understanding of how these coverage types and subgroups were differentially affected by the new method. The hope is that this will enable researchers to interpret the break in series between 2012 and 2013 CPS production estimates, so that when calendar year 2014 estimates are released analysts can have a better understanding of the CPS redesign as a baseline for measuring effects of health reform between 2013 and 2014.

Results from the research and development of the redesign over the past decade, and the recent testing on health reform, have been reported elsewhere (Pascale et al, 2013; Boudreaux et al, 2013; Pascale, Roemer and Resnick, 2009; Pascale, 2009a; Pascale, 2009b, Pascale 2008; Pascale, 2004; Hess et al, 2001; Pascale, 2001a; Pascale, 2001b). Section 2 describes the methods used in the 2013 test, Section 3 presents results, and Section 4 provides a discussion of the results, limitations and next steps.

METHODS

The CPS is a monthly labor survey of the civilian-non institutional population. Interviews are conducted in-person or through telephone interviewing. The survey is based on a rotating panel design in which households are interviewed once a month for four consecutive months, are dormant for eight months, and then in-sample for another four consecutive months, for a total time span of 16 months in-sample. In February through April of each year, the basic monthly questionnaire is supplemented with additional questions on income, mobility and health insurance (the ASEC).

The 2013 test was a quasi-split ballot test that compared the old (“control”) and new (“test”) CPS health insurance modules. For the test panel (n=16,401 individuals), the new questions on health insurance were embedded within the full production CPS ASEC instrument and administered to “retired” CPS sample -- households that had been in-sample through the end of the 16-month CPS series and had never previously participated in the ASEC. All test panel interviews were conducted in March 2013 by experienced CPS Census Bureau interviewers. For cost reasons the mode was limited to computer-assisted telephone interviewing (CATI). The control panel (n=13,228 individuals) consisted of the subset of production CPS ASEC interviews that were also conducted via CATI in March 2013.

The household response rate for the CPS basic monthly interview was 90.7 percent in the full CPS production instrument and 43.1 percent among the test panel (Hornick, 2013). The divergent response rates are concerning if they signal that test and control panels differ in systematic ways that also influence health insurance. Indeed, a non-response analysis found that age, education, and household size all appeared to drive differential response (Brault, 2014). One possible explanation for the relatively high non-response on the test side is that test households had participated in eight rounds of the CPS over the course of 16 months, and were told at the end of the last interview that they were finished with the CPS. Although training prepared interviewers with talking points to explain why they were calling back, interviewers in the test panel were at a distinct disadvantage in terms of gaining cooperation relative to their control panel counterparts. The control panel was fairly evenly distributed across the eight months in sample and none had been told their CPS panel was concluded.

In an effort to achieve covariate balance between test and control panels, both samples were separately weighted to a common set of control totals. Post-stratification adjustments for age, sex, and race/ethnicity were conducted to reduce coverage and non-response bias (Hornick, 2013). However, these weights were created using the full set of cases that completed the CPS basic interview. Not all of these test cases went on to complete the entire health insurance module, and those cases were dropped from this particular analysis. For this reason, the weights in this analysis do not sum to the total U.S. population. After dropping test cases that did not complete the health insurance module we conducted a second round of post-stratification adjustments on the control panel using a raking algorithm. These final adjustments controlled the control panel weights to the sum of weights from the analytical sample in the test panel. All analyses we report are weighted and standard errors account for the complexity of the sample design using successive difference replication (Fay and Train, 1995).

Table 1 compares weighted demographic and economic characteristics between the test and control panels. Also included in Table 1 are indicators of household size and self/proxy status, as these characteristics are directly tied to the kinds of changes made to the new CPS questionnaire, but are not directly captured in the weighting scheme. The table demonstrates that, after weighting, there were very little observable differences between the two panels. Education was the only variable that showed a statistically significant association (at the $p=0.05$ level) with the treatment condition. The similarity of the two samples along observable dimensions, after weighting, gives us confidence that the unconditional treatment effects we observe will reflect the impact of the new health insurance module relative to the old instrument, and not a third

confounding variable. However, in addition to unadjusted differences, we also report results from multivariate regression models that control for all variables listed in Table 1.

[Table 1 about here]

Even after controlling for all observed differences, our comparisons of interest could be biased by unobserved characteristics that were associated with membership in the test condition and the outcomes of interest. In the test panel, respondents conducted their final CPS production interview one to two years prior to the content test, and for the household to be eligible, respondents needed to be reachable at the same phone number, and to live at the same address, as their final CPS production interview. Thus, the retired test sample could be biased toward less mobile households relative to the control sample, or it could be subject to a larger degree of panel conditioning. All else equal, if the test sample did include less mobile households, we would expect that it would also have more health insurance coverage at a point-in-time and over the course of a year.

Though there is no perfect way to control for this difference, we take advantage of unique properties of the CPS ASEC sample design to gauge the likelihood that our results are influenced by the “retired-ness” of the test panel. The CPS ASEC production sample consists of several different components, including a section of retired sample that would not otherwise be included in the basic CPS, but is included in the ASEC in order to produce more precise estimates of uninsurance among children (Davern, 2003). The retired sample segment of the production sample (the “retired-control” hereafter) is composed of households where the head is White, non-Hispanic and the household contained at least one child under 19 years old OR the race/ethnicity of the householder is non-White non-Hispanic. The inclusion of a retired sample segment in

production provides a chance to create a comparison group from among CATI cases that received the old CPS and were also retired. We examine test/retired-control differences among the specific subgroups that compose the retired-control sample. There were 10,296 such cases on the production side, and among the 16,401 test cases, 5,818 cases met the retired-control criteria based on race of householder and presence of children described above.

Our analysis proceeds as follows. We use chi-squared tests of association to test the statistical significance of bivariate comparisons of health insurance plan type across the test and control panels, overall and for selected subgroups. We present results from the full data set and for the retired-control subset described above. We also compare the point-in-time and calendar year coverage measures within the test panel. Our expectation was that the redesign should yield a higher calendar year estimate of insurance than the point-in-time measure. After examining bivariate comparisons, we then examine adjusted comparisons using logistic regression and we report the results using odds ratios. We use a significance threshold of 0.05 for all analyses. We conduct a large number of hypothesis tests and provide the full set of associated p-values so that readers can apply a multiple comparisons adjustment.

RESULTS

Calendar Year Estimates: Old versus New CPS

To begin, Table 2 displays the test/control differences for the detailed plan type categories typically found in health insurance measurement research. However, in this case not all the individual categories are directly comparable across test and control. The old CPS series begins

with three questions on private coverage: ESI, direct-purchase and coverage from “someone outside the household.” For this latter category, there are no data in the old CPS to enable analysts to allocate this coverage across ESI and direct-purchase, but the new CPS does contain these data. Thus, for the test/control categories to be directly comparable, ESI, direct-purchase and coverage from someone outside the household need to be aggregated up to an overall private coverage category. The two questionnaires also differ in their method of asking about military coverage. The old CPS asks about ESI coverage (which could prompt reports of military coverage) and a later question asks specifically about military coverage. Respondents could, understandably, report the same coverage at both questions. In cases such as this, the respondent may or may not give any indication to the interviewer that there is some ambiguity about how they “should” report the coverage. Even if the respondent does voice concerns, the interviewer may or may not be able to negotiate the complexities of the respondents’ situation and the computerized instrument to record the coverage correctly. In the new CPS, by contrast, once ESI coverage is established, a question is asked to determine if the coverage is related to military service in any way. This avoids much of the ambiguity and potential for double-reporting of the same plan. Finally, in Table 2, various permutations of aggregated coverage are shown, since different surveys use different schemes. For example, some include military coverage with public and some with private coverage.

Given this context, Table 2 shows the test resulted in much higher reporting of ESI than the control (5.46 percentage points, $p < 0.0001$), the control resulted in higher estimates of coverage from someone outside the household (by 3.22 percentage points, $p < 0.0001$), and when all private coverage was aggregated the test estimate was higher than the control by 2.93 percentage points

($p=0.012$). On the public side, the control estimate of military coverage was higher than the test by 1.67 percentage points ($p=0.0002$), and the aggregated public coverage estimate (including Medicaid, CHIP, other government coverage, Medicare and military coverage) was higher in the control than the test by 2.58 percentage points ($p=0.0144$). Results for just the non-elderly test/control comparisons, described in the appendix, show similar differences.

[Table 2 about here]

New CPS Calendar Year versus Point-in-Time Estimates

Within the test panel, estimates of coverage at a point-in-time (in this case, the day of the interview at some point in March 2013) were compared to estimates of coverage at any point in the calendar year 2012. As noted earlier, a measure of whether the integrated point-in-time/calendar year questions in the new CPS is effective is whether the calendar year estimate is higher than the point-in-time estimate. Table 3 shows this to be the case for all plan types except Medicare, and for ESI, private and insured the difference is somewhat pronounced (2.16, 1.65 and 1.41 percentage points, respectively). For Medicare the point-in-time estimate was higher than the calendar year estimate but the difference is expected to be in this direction for this particular coverage type. Once enrolled in Medicare, with very few exceptions, enrollment is for life. So among the test cases, there is some fixed number of people who began their Medicare coverage at some point in 2012 and remained covered in March 2013. There is an additional group of people who began their coverage on or after January 2013 but were not covered at any point in 2012, which is why the point-in-time estimate should be higher than the calendar year estimate. Test results do show a gap of 0.43 percentage points, in this expected direction.

[Table 3 about here]

Calendar Year Estimates: Old versus New CPS Across Domains and Subgroups

In Table 4, we present comparisons of aggregated coverage type by subgroup. Private coverage includes ESI, direct purchase and coverage from someone outside the household in order for the test and control to be directly comparable. Public coverage includes Medicaid and other government assistance programs, and leaves out Medicare and military, in order to focus on primarily means-tested coverage. For the most part, there were few statistically significant test/control differences by subgroup. The test estimates of private coverage were higher than the control for White non-Hispanics (by 3.54 percentage points), those working less than full time/full year (by 3.42 percentage points) and for US citizens (by 3.07 percentage points), and all were significant at the 5 percent confidence interval. For public coverage, the only statistically significant difference was for White non-Hispanics, where the control estimate was 1.54 percentage points higher than the test estimate. For insured overall, results show some of the same patterns as for private. The test estimate of insured was higher for non-Hispanic Whites by 1.46 percentage points, for those with some college up to an associates' degree by 2.82 percentage points, and for US citizens by 1.49 percentage points.

[Table 4 about here]

Logistic Regression Models

Table 5 reports results from logistic regression models predicting private coverage (alone or in combination with public coverage), public coverage (alone or in combination with private coverage) and any coverage (“Insured”). We report only the odds ratios on the treatment indicator, but a full set of model results is in Appendix Tables 2-4.

Model 1 predicts these outcomes using only the treatment variable as a predictor. Model 2 includes the treatment variable and controls for demographic characteristics typically correlated with insurance coverage: age, race/ethnicity, sex, household tenure (status of owning/renting), and the marital, education and work status of the head of household. Note we do not include income in the model because the 2013 content test also contained an experimental set of questions on income, so the test and control panels were not comparable on that measure. Model 3 includes all the variables from Model 2 as well as household size and relationship to the household respondent, since these are characteristics directly tied to the features that differ between the old and new questionnaires.

The top panel of Table 5 shows that in Model 1 the odds of private coverage were 1.152 times higher in the test than the control ($p=0.012$), and for the insured overall, the odds ratio was similar in magnitude and in the same direction, but did not reach statistical significance ($p=0.0778$). For Model 2 the results were similar to Model 1, but the coefficient of interest in the private coverage regression was estimated with less precision. Model 3 results show the same patterns. The odds of insurance were 1.171 times higher in the test panel than in the control panel ($p=0.0495$), controlling for demographics, household size, and relationship to household respondent. For private coverage the odds were 1.128 times higher in the test than the control, but the difference did not reach statistical significance ($p=0.0604$). For public coverage, no test/control differences were significant. The lack of significant movement of the coefficient of interest between Model 1 and Model 3 suggests that sample weights adequately adjust for covariate imbalance between the treatment and control panels.

[Table 5 about here]

Test Versus Retired-Control Estimates

Demographics

The demographic and economic characteristics of the retired-control sample compared to a similarly selected subset of the test panel (only households where the head is White, non-Hispanic and there are children under 19 present or the household head is non-White, non-Hispanic) are shown in Appendix Table 5. The covariates were largely balanced across panels, but there were some differences within the retired subsample (race and age) that were not observed in Table 1.

Coverage Estimates

The bivariate test/retired-control differences for insurance coverage were very similar to the test/control differences reported in Table 4 (see Appendix Table 6). As in Table 4, there were few significant differences within subgroups. For private coverage, estimates from the test panel were higher than the control by 2.93 percentage points (significant at the 5% level), and within the retired subsample the difference was similar in magnitude (2.87 percentage points) and borderline significant ($p=0.0519$).

The bottom panel of Table 5 shows logistic model results for retired-control subsample comparisons. The magnitude of the odds ratios and the direction are similar to the full sample comparisons shown in the top panel of Table 5. In the most saturated model (Model 3), the odds of private coverage were 1.31 times higher in the test versus the retired-control panel ($p=0.0091$), and the odds of any coverage were 1.36 times higher in the test compared to the retired-control panel ($p=0.0103$). The similarity of findings in the full sample (top panel) and the retired

subsamples (bottom panel) provide suggestive evidence that the potential bias introduced by the unequal sample designs between the test and control panels is adequately addressed by the sample weights.

DISCUSSION

This analysis set out to determine whether the CPS redesign achieved its objectives in terms of reducing measurement error associated with the calendar year reference period, and to identify methods effects of the new versus old CPS on estimates of health insurance coverage. On the former, evidence indicates the objectives were met. The odds of being insured at some point during the previous calendar year were higher in the new versus the old CPS, and the integrated calendar year/point-in-time question series in the new CPS generated estimates of coverage at any time throughout the past calendar year that were higher than and distinct from estimates of coverage at a point-in-time. Regarding methods effects, bivariate analysis showed few statistically significant test/control differences, but the differences that were significant were consistent across subgroups: estimates of private coverage and any coverage were higher in the test, and public coverage estimates were higher in the control but for only one subgroup. Most of the non-significant test/control differences were in the same direction as the significant differences, or the difference was trivial in magnitude.

The lack of evidence that the test generated higher estimates of public coverage than the control is, at first glance, disappointing given evidence of persistent under-reporting of Medicaid in surveys (Klerman et al, 2009; Call et al, 2008; Eberly, Pohl and Davis, 2008; Lewis, Ellwood,

and Czajka 1998). There is, however, some evidence of over-reporting of coverage in the old CPS, perhaps due to double-reporting of the same plan as both public and private. The laundry list style of questions encourages this kind of double-reporting and, as noted in a report on the current study's predecessor from 2010 (the Survey of Health Insurance and Program Participation or SHIPP), "Past experience with the production CPS suggests that it picks up more double coverage than we expect exists in the population." Indeed, that report found that "the percent of respondents that had both private and public coverage in combination" was lower in the CPS redesign than the old CPS by 1.8 percentage points ($p \leq 0.049$) (Boudreaux et al, 2013). The current analysis corroborates these results. Among the non-elderly who reported at least one type of coverage, the rate of double-reporting of both public and private coverage was 2.11 percentage point higher in the control than the test ($p < 0.001$). There is also evidence from a Medicare record-check analysis of a previous test on the CPS redesign that over-reporting of Medicare is higher in the old CPS than the redesign. According to Resnick (2013), "The false positive error rate in the [old] CPS was almost five percentage points higher than the CPS Redesign...results suggest that the [old] CPS questionnaire design engenders more over-reporting of Medicare compared to the CPS Redesign." Finally, in spite of the chronic under-reporting of Medicaid, there is also evidence of Medicaid over-reporting. For example, a CPS-Medicaid record-check study found that among those Medicaid enrollees who, according to the records, had coverage at the time of the survey (March) but not at any time in the previous calendar year, 25.8 percent were incorrectly reported as having Medicaid in the past year (Klerman, Davern et al, 2009). In sum, it is possible that over-reporting of public coverage in the old CPS offsets under-reporting of Medicaid to some degree, and that the CPS redesign lacks that over-reporting. The result would be a net test/control difference that appears to favor the old

CPS but overall measurement error – including both under- and over-reporting – is higher in the old CPS.

This study was not without limitations. First was that the test and control panel were based on different samples. The test panel was drawn from retired sample and may have been biased towards less mobile households and towards more panel conditioning. We used three strategies to address that concern: post-stratification weighting, multivariate regression, and test-control comparisons within subsets that were the most directly comparable in terms of sample design. We came to similar conclusions in each analysis that gives us confidence in the validity of our weighting approach.

Another limitation is that we conducted several hypothesis tests and when a set of tests is considered as a whole, they are subject to increased Type 1 error. However, in many instances our inferences are robust to more stringent tests. For example, considering the six independent plan types in Table 2 as a single set, the associated Bonferroni p-value of .008 (that is, an alpha of 0.05 divided by six tests) is still larger than the p-value on the test-control difference for the three plan types that were noted above as significantly different.

A final limitation of the 2013 Content Test (and all such studies that seek to measure the uninsured) is that it lacked a gold standard – a single, comprehensive, accurate source of data on those with and without coverage. Years of experience with the old CPS instrument suggests that it produces too few reports of coverage and an upwardly biased estimate of the uninsured. Therefore, in this analysis we interpreted more reports of coverage from the test panel as

suggesting less biased measurement. However, without a gold standard it is impossible to objectively gauge the relative level of measurement error in the redesign compared to the old CPS. Surveys generate their estimate of the uninsured as the residual of those who do not report coverage from any given source. Therefore reporting accuracy across *all* sources of coverage must be taken into account when gauging overall measurement error of an uninsured estimate. The Medicaid undercount literature notwithstanding, there is sparse evidence from validation surveys on the accuracy of reporting source of health coverage in surveys. To address this major gap in the literature, in March 2015 the Census Bureau, in collaboration with a number of other agencies, is planning to conduct a study comparing data from enrollment records from multiple markets (ESI, Medicaid and non-group within and outside the marketplace) with survey data. The objective is to evaluate absolute reporting accuracy (survey reports compared to records) and relative reporting accuracy (differences in absolute reporting accuracy across surveys) in order to guide future improvements to survey instruments, and interpretations of estimates from existing surveys.

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Table 1. Weighted Demographic Characteristics by Panel, 2013 CPS ASEC Content Test

	New CPS Design		Old CPS Design		New - Old	p
	%	SE of %	%	SE of %		
Population Size	243,474,924		243,474,924		n/a	
Age					0.9158	
0-18	25.19	0.381	24.65	0.5599	0.53	
19-34	19.68	1.2126	20.21	0.5194	-0.53	
35-64	40.40	0.658	40.40	0.5782	0.00	
65+	14.73	0.39	14.73	0.427	0.00	
Sex					1.0000	
Female	51.42	0.5719	51.42	0.4419	0.00	
Male	48.58	0.5719	48.58	0.4419	0.00	
Race/Ethnicity					1.0000	
White/non-Hispanic	65.69	0.558	65.69	0.9865	0.00	
Black/non-Hispanic	10.91	0.4783	10.91	0.7295	0.00	
Other/non-Hispanic	8.05	0.2928	8.05	0.5763	0.00	
Hispanic	15.34	0.451	15.34	0.8231	0.00	
Education					0.0258	
Less than high school	16.25	0.4856	14.32	0.555	1.93	
High school graduate	25.00	0.6249	25.79	0.6248	-0.78	
Some college thru AA	26.63	0.6815	28.25	0.5784	-1.62	
Bachelors or higher	32.12	0.6501	31.65	0.7294	0.47	
Work Status					0.1487	
Full time/full year	40.47	0.5351	38.98	0.688	1.48	
Less than full time/full year	37.07	0.62	38.86	0.6764	-1.79	
Did not work	22.46	0.6984	22.15	0.4665	0.31	
Citizenship					0.1061	
US Citizen	93.65	0.413	94.61	0.3984	-0.96	
Non US citizen	6.35	0.413	5.39	0.3984	0.96	
Self/Proxy					0.1037	
Self	39.41	0.4916	40.42	0.4181	-1.01	
Proxy	60.59	0.4916	59.58	0.4181	1.01	
Household Relationship					0.1170	
Household respondent	39.41	0.4916	40.42	0.4181	-1.01	
Child of reference person	30.45	0.7919	28.95	0.5415	1.51	
Other	30.14	0.4475	30.64	0.396	-0.50	
Household Size					0.4495	
1-4 person household	81.17	0.9723	82.20	0.9848	-1.03	
5+ person household	18.83	0.9723	17.80	0.9848	1.03	

Source: 2013 CPS ASEC Content Test. Unweighted n=29,629 (Test n=16,401; Control n=13,228). Chi-Square p-values are reported

Table 2. Weighted Comparison of Old and New Detailed Coverage Type Estimates, 2013 CSP ASEC Content Test

	New CPS Design		Old CPS Design		New - Old	P
	%	SE of %	%	SE of %		
Population Size	n=243,474,924		n=243,474,924			
INDIVIDUAL COVERAGE TYPES						
ESI	63.47	0.7783	58.02	0.9839	5.46	<.0001
Direct Purchase	10.13	0.4319	9.76	0.4222	0.37	0.5431
Outside Household	0.01	0.0094	3.24	0.2410	-3.22	<.0001
Medicaid/CHIP/other government	11.87	0.5732	13.22	0.6887	-1.35	0.1203
Medicare	15.74	0.3811	16.21	0.4736	-0.46	0.4458
Military	3.28	0.2490	4.95	0.3736	-1.67	0.0002
AGGREGATED COVERAGE TYPES						
Private (ESI, Direct, Outside household)	72.31	0.7497	69.38	0.8687	2.93	0.0120
Medicare and/or Medicaid	26.42	0.6487	27.84	0.7849	-1.42	0.1546
Medicaid/CHIP/other government, Medicare, Military	28.60	0.6895	31.17	0.8000	-2.58	0.0144
Insured	89.39	0.5112	88.02	0.5200	1.37	0.0795

Source: 2013 CPS ASEC Content Test. Unweighted n=29,629 (Test n=16,401; Control n=13,228). Chi-Square p-values are reported

Table 3. Weighted Comparison of Calendar Year and Point-in-Time Detailed Coverage Type Estimates Within New CPS, 2013 CPS ASEC Content Test

	Calendar Year		Point in Time		CAL % - PIT %	Adjusted McNemar's Test	
	%	SE of %	%	SE of %		Chi-Sq	p
	n=243,474,924		n=243,474,924				
INDIVIDUAL COVERAGE TYPES							
ESI	63.47	0.7783	61.31	0.8084	2.16	27.40	< 0.0001
Direct Purchase	10.13	0.4319	9.86	0.4290	0.27	3.42	0.0643
Medicaid/CHIP/other government	11.87	0.5732	11.21	0.5739	0.66	18.28	< 0.0001
Medicare	15.74	0.3811	16.17	0.3917	-0.43	45.00	< 0.0001
Military	3.28	0.2490	3.21	0.2524	0.07	1.27	0.2605
AGGREGATED COVERAGE TYPES							
Private (ESI, Direct, Outside household)	72.31	0.7497	70.66	0.8025	1.65	12.38	0.0004
Medicare and/or Medicaid	26.42	0.6487	26.19	0.6567	0.23	12.90	0.0004
Medicaid/CHIP/other government, Medicare, Military	28.60	0.6895	28.29	0.7069	0.31	16.27	< 0.0001
Insured	89.39	0.5112	87.98	0.5674	1.41	27.75	< 0.0001

Source: 2013 CPS ASEC Content Test. Unweighted n=29,629 (Test n=16,401; Control n=13,228). The null hypothesis for McNemar's test is that calendar year and point in time reports of coverage were indicated at the same rate. We ran McNemar's test on the effective sample size, to adjust for extremely large Chi-Square values as a results of the weighted distribution.

Table 4. Weighted Comparison of Old and New Aggregated Coverage Type Estimates by Domains and Subgroups, CPS ASEC Content Test

	Private						Public						Insured						
	New CPS		Old CPS		New - Old	p	New CPS		Old CPS		New - Old	p	New CPS		Old CPS		New - Old	p	
	%	SE of %	%	SE of %			%	SE of %	%	SE of %			%	SE of %	%	SE of %			
	72.31	0.75	69.38	0.87	2.93	0.01	11.87	0.57	13.22	0.69	-1.35	0.12	89.39	0.51	88.02	0.52	1.37	0.08	
Age																			
0-18	66.20	1.44	61.95	1.80	4.25	0.06	29.40	1.56	33.22	1.80	-3.82	0.08	93.91	0.84	92.84	0.83	1.08	0.39	
19-34	70.66	1.59	67.41	1.65	3.25	0.15	8.65	1.00	8.50	1.10	0.15	0.92	80.20	1.35	77.33	1.36	2.87	0.13	
35-64	78.33	0.88	76.42	0.84	1.91	0.12	5.20	0.46	6.13	0.48	-0.93	0.18	87.72	0.66	86.72	0.69	1.00	0.29	
65+	68.45	1.20	65.21	1.27	3.24	0.08	4.51	0.57	5.67	0.58	-1.16	0.17	98.51	0.37	98.20	0.35	0.31	0.55	
Race/Ethnicity																			
White/non-Hisp	81.07	0.70	77.53	0.70	3.54	0.00	6.67	0.55	8.21	0.48	-1.54	0.02	93.55	0.43	92.09	0.42	1.46	0.02	
Black/non-Hisp	60.00	2.69	52.81	3.56	7.20	0.12	22.00	2.06	28.62	3.20	-6.63	0.09	88.72	1.40	86.77	1.61	1.96	0.37	
Other/non-Hisp	71.06	3.51	71.63	2.82	-0.57	0.90	10.75	2.09	13.05	2.21	-2.30	0.45	85.88	2.80	87.56	1.70	-1.68	0.59	
Hispanic	44.19	2.57	45.08	2.42	-0.90	0.79	27.54	2.06	23.79	1.96	3.75	0.16	73.90	1.96	71.73	2.01	2.17	0.47	
Education																			
< high school	50.33	1.97	46.25	2.25	4.08	0.18	21.82	1.76	24.62	2.07	-2.80	0.30	78.07	1.64	78.26	2.24	-0.19	0.95	
High school grad	67.31	1.33	63.71	1.36	3.59	0.07	7.80	0.86	8.39	0.80	-0.59	0.63	84.88	1.02	82.58	1.07	2.29	0.13	
Some college-AA	75.54	1.17	72.68	1.21	2.87	0.07	5.15	0.67	5.93	0.60	-0.78	0.40	88.88	0.91	86.06	0.94	2.82	0.03	
Bachelors+	89.09	0.76	87.98	0.87	1.12	0.36	1.35	0.30	1.81	0.28	-0.47	0.27	94.76	0.61	94.46	0.59	0.30	0.74	
Work Status																			
Full time/full yr	88.01	0.78	87.75	0.71	0.25	0.81	1.20	0.24	1.31	0.28	-0.12	0.76	90.92	0.65	90.68	0.62	0.24	0.78	
< full time/full yr	59.58	1.16	56.16	1.12	3.42	0.04	13.93	0.94	15.27	1.01	-1.33	0.34	87.77	0.92	86.53	0.85	1.24	0.33	
Did not work	71.41	1.35	69.46	1.36	1.95	0.32	7.35	0.75	6.74	0.70	0.61	0.55	83.18	1.08	80.03	1.28	3.15	0.06	
Citizenship																			
US Citizen	73.94	0.75	70.87	0.83	3.07	0.01	11.90	0.59	13.24	0.71	-1.34	0.13	91.33	0.46	89.84	0.41	1.49	0.02	
Non US citizen	48.22	3.05	43.21	4.17	5.01	0.33	11.47	1.72	12.83	2.89	-1.36	0.67	60.88	2.94	56.19	4.00	4.69	0.35	

Source: 2013 CPS ASEC Content Test. Unweighted n=29,629 (Test n=16,401; Control n=13,228). Notes: Private coverage includes ESI and direct purchase coverage. Public includes Medicaid, CHIP and other government coverage. Chi-Square p-values are reported

Table 5: Unadjusted and Adjusted Odds Ratios for Old Versus New CPS, 2013 CPS ASEC Content Test

	Private			Public			Insured		
	Odds Ratio	SE	p	Odds Ratio	SE	p	Odds Ratio	SE	p
Overall Sample									
Model 1	1.152	0.0651	0.0120	0.884	0.0705	0.1230	1.147	0.0889	0.0778
Model 2	1.132	0.0731	0.0549	0.916	0.0882	0.3639	1.158	0.0928	0.0678
Model 3	1.128	0.0725	0.0604	0.923	0.0882	0.4021	1.171	0.0939	0.0495
Retired Sample									
Model 1	1.17	0.0926	0.0536	0.90	0.0923	0.32	1.19	0.1280	0.1009
Model 2	1.33	0.1387	0.0065	0.81	0.1000	0.09	1.34	0.1598	0.0130
Model 3	1.31	0.1373	0.0091	0.81	0.0997	0.09	1.36	0.1603	0.0103
<p>Each parameter is from a separate regression. Model 1 reports the unadjusted odds ratios. Model 2 controls for age, race/ethnicity, sex, household tenure (owned/rented) and the marital, education and work status of the head of household. Model 3 controls for Model 2 covariates and relationship to household respondent (self, child, other) and household size. Complete model results are produced in the appendix. Source: 2013 CPS ASEC Content Test. Notes: OR (odds ratio) is the odds of coverage from the new instrument relative to the odds of coverage from the old instrument. Main unweighted sample n=29,629 (Test n=16,401; Control n=13,228); Retired unweighted control sample n=10,296; test n=5,818. All estimates are weighted.</p>									

**Appendix Table 1. Weighted Comparison of Old and New Detailed Coverage Type Estimates Among Non-Elderly, 2013
CSP ASEC Content Test**

	New CPS Design		Old CPS Design		New - Old	p
	%	SE of %	%	SE of %		
All (n=23,129)	n=10,911		n=12,218			
ESI	67.99	0.8739	61.56	1.1008	6.43	<.0001
Direct Purchase	6.33	0.4315	6.39	0.4194	-0.06	0.92
Outside Household	0.02	0.0110	3.70	0.2867	-3.68	<.0001
Medicaid/CHIP/other government	13.14	0.6547	14.52	0.7998	-1.38	0.17
Medicare	2.96	0.2358	3.38	0.2864	-0.42	0.28
Medicare and/or Medicaid	15.39	0.6705	16.92	0.8266	-1.53	0.14
Military	2.65	0.2634	4.25	0.4273	-1.60	0.00
Private (ESI, Direct, Outside household)	72.97	0.8597	70.10	1.0113	2.87	0.03
Medicaid/CHIP/other government/Medicare/Military	17.79	0.7167	20.74	0.8599	-2.95	0.01
Insured	87.82	0.5946	86.27	0.6169	1.55	0.09

Source: 2013 CPS ASEC Content Test. Unweighted n=29,629 (Test n=16,401; Control n=13,228). Chi-Square p-values are reported

Appendix Table 2: Results of Logistic Regression for Respondents Who Report Having Private Insurance

	Model 1		Model 2		Model 3	
	Parameter Estimate (SE)	p	Parameter Estimate (SE)	p	Parameter Estimate (SE)	p
Intercept	0.82 (0.04)	< 0.01	0.57 (0.30)	0.06	-0.04 (0.33)	0.92
Treatment	0.14 (0.06)	0.01	0.12 (0.07)	0.06	0.12 (0.06)	0.06
Age						
0-18			-0.44 (0.09)	< 0.01	-0.17 (0.13)	0.19
19-34			-0.06 (0.09)	0.52	0.07 (0.10)	0.5
35-64			0.22 (0.08)	< 0.01	0.28 (0.08)	< 0.01
Race						
Black/non-Hispanic			-0.66 (0.12)	< 0.01	-0.64 (0.11)	< 0.01
Other/non-Hispanic			-0.54 (0.13)	< 0.01	-0.50 (0.12)	< 0.01
Hispanic			-1.01 (0.10)	< 0.01	-0.93 (0.10)	< 0.01
Sex (female versus male)			0.11 (0.04)	< 0.01	0.09 (0.04)	0.01
Marital Status of Head						
Married			0.40 (0.10)	< 0.01	0.53 (0.10)	< 0.01
Divorced			-0.35 (0.14)	0.01	-0.34 (0.14)	0.01
Never married			-0.17 (0.13)	0.17	-0.16 (0.12)	0.19
Educational Status of Head						
Less than high school			-2.31 (0.15)	< 0.01	-2.22 (0.16)	< 0.01
High school graduate			-1.52 (0.13)	< 0.01	-1.50 (0.13)	< 0.01
Some college			-1.36 (0.13)	< 0.01	-1.34 (0.13)	< 0.01
Associates degree			-1.11 (0.14)	< 0.01	-1.08 (0.15)	< 0.01
Bachelor's degree			-0.37 (0.12)	< 0.01	-0.36 (0.13)	< 0.01
Work Status of Head						
Full time/Full year			0.85 (0.08)	< 0.01	0.88 (0.08)	< 0.01
Less that full time/full year			-0.39 (0.09)	< 0.01	-0.39 (0.09)	< 0.01
Housing tenure						

Owned		0.92 (0.25)	< 0.01	0.99 (0.26)	< 0.01
Rented		0.13 (0.25)	0.6	0.16 (0.26)	0.53
Citizenship (Citizen vs non-citizen)		0.65 (0.13)	< 0.01	0.57 (0.14)	< 0.01
Relationship to hh respondent					
Child				-0.17 (0.09)	0.05
Other				-0.35 (0.04)	< 0.01
Household size (1-4 versus 5+)				0.65 (0.09)	< 0.01

Source: 2013 CPS-ASEC Content Test. Standard errors (SE) are from successive difference replication. Unweighted n=29,629 (Test n=16,401; Control n=13,228).

Model 1 is the basic model. Model 2 controls for age, race/ethnicity, sex, household tenure (owned/rented/occupied w/o rent) and the marital, education and work status of the head of household. Model 3 controls for Model 2 covariates and relationship to household respondent (self, child, other) and household size.

Appendix Table 3: Results of Logistic Regression for Respondents Who Report Having Public Insurance

	Model 1		Model 2		Model 3	
	Parameter Estimate (SE)	p	Parameter Estimate (SE)	p	Parameter Estimate (SE)	p
Intercept	-1.88 (0.06)	< 0.01	-4.49 (0.48)	< 0.01	-3.96 (0.50)	< 0.01
Treatment	-0.13 (0.08)	0.12	-0.09 (0.10)	0.36	-0.08 (0.10)	0.4
Age						
0-18			2.97 (0.15)	< 0.01	2.83 (0.19)	< 0.01
19-34			0.94 (0.18)	< 0.01	0.84 (0.18)	< 0.01
35-64			0.64 (0.13)	< 0.01	0.58 (0.13)	< 0.01
Race						
Black/non-Hispanic			0.76 (0.14)	< 0.01	0.75 (0.14)	< 0.01
Other/non-Hispanic			0.46 (0.16)	< 0.01	0.42 (0.16)	0.01
Hispanic			0.68 (0.13)	< 0.01	0.62 (0.13)	< 0.01
Sex (female versus male)			0.24 (0.05)	< 0.01	0.26 (0.06)	< 0.01
Marital Status of Head						
Married			-0.68 (0.17)	< 0.01	-0.77 (0.17)	< 0.01
Divorced			0.23 (0.18)	0.21	0.22 (0.18)	0.21
Never married			0.11 (0.19)	0.57	0.09 (0.19)	0.63
Educational Status of Head						
Less than high school			2.11 (0.19)	< 0.01	2.00 (0.19)	< 0.01
High school graduate			1.54 (0.16)	< 0.01	1.51 (0.16)	< 0.01
Some college			1.11 (0.18)	< 0.01	1.08 (0.18)	< 0.01
Associates degree			1.21 (0.22)	< 0.01	1.15 (0.22)	< 0.01
Bachelor's degree			0.14 (0.20)	0.49	0.13 (0.20)	0.51
Work Status of Head						
Full time/Full year			-0.71 (0.12)	< 0.01	-0.74 (0.12)	< 0.01
Less that full time/full year			0.64 (0.11)	< 0.01	0.63 (0.11)	< 0.01
Housing tenure						

Owned	-0.99 (0.33)	< 0.01	-1.02 (0.34)	< 0.01
Rented	-0.06 (0.33)	0.86	-0.06 (0.34)	0.86
Citizenship (Citizen vs non-citizen)	0.59 (0.21)	< 0.01	0.59 (0.21)	< 0.01
Relationship to hh respondent				
Child			-0.03 (0.13)	0.84
Other			0.14 (0.09)	0.11
Household size (1-4 versus 5+)			-0.58 (0.15)	< 0.01

Source: 2013 CPS-ASEC Content Test. Standard errors (SE) are from successive difference replication. Unweighted n=29,629 (Test n=16,401; Control n=13,228).

Model 1 is the basic model. Model 2 controls for age, race/ethnicity, sex, household tenure (owned/rented/occupied w/o rent) and the marital, education and work status of the head of household. Model 3 controls for Model 2 covariates and relationship to household respondent (self, child, other) and household size.

Appendix Table 4: Results of Logistic Regression for Respondents Who Report Having Insurance

	Model 1		Model 2		Model 3	
	Parameter Estimate (SE)	p	Parameter Estimate (SE)	p	Parameter Estimate (SE)	p
Intercept	1.99 (0.05)	< 0.01	3.27 (0.43)	< 0.01	3.00 (0.44)	< 0.01
Treatment	0.14 (0.08)	0.08	0.15 (0.08)	0.07	0.16 (0.08)	0.05
Age						
0-18			-1.33 (0.20)	< 0.01	-0.83 (0.22)	< 0.01
19-34			-2.79 (0.18)	< 0.01	-2.55 (0.20)	< 0.01
35-64			-2.27 (0.12)	< 0.01	-2.20 (0.18)	< 0.01
Race						
Black/non-Hispanic			-0.20 (0.12)	0.1	-0.15 (0.13)	0.23
Other/non-Hispanic			-0.61 (0.17)	< 0.01	-0.57 (0.16)	< 0.01
Hispanic			-0.95 (0.10)	< 0.01	-0.89 (0.10)	< 0.01
Sex (female versus male)			0.23 (0.05)	< 0.01	0.19 (0.05)	< 0.01
Marital Status of Head						
Married			0.44 (0.18)	0.02	0.50 (0.18)	0.01
Divorced			-0.10 (0.21)	0.63	-0.12 (0.21)	0.55
Never married			0.06 (0.21)	0.79	0.03 (0.21)	0.87
Educational Status of Head						
Less than high school			-1.98 (0.21)	< 0.01	-1.90 (0.21)	< 0.01
High school graduate			-1.56 (0.19)	< 0.01	-1.52 (0.19)	< 0.01
Some college			-1.56 (0.20)	< 0.01	-1.54 (0.20)	< 0.01
Associates degree			-1.12 (0.23)	< 0.01	-1.09 (0.23)	< 0.01
Bachelor's degree			-0.48 (0.19)	0.01	-0.48 (0.19)	0.01
Work Status of Head						
Full time/Full year			0.75 (0.08)	< 0.01	0.75 (0.08)	< 0.01
Less that full time/full year			0.35 (0.11)	< 0.01	0.37 (0.11)	< 0.01
Housing tenure						

Owned	0.44 (0.30)	0.14	0.48 (0.30)	0.11
Rented	0.27 (0.30)	0.36	0.26 (0.30)	0.39
Citizenship (Citizen vs non-citizen)	1.23 (0.12)	< 0.01	1.21 (0.12)	< 0.01
Relationship to hh respondent				
Child			-0.53 (0.11)	< 0.01
Other			-0.35 (0.06)	< 0.01
Household size (1-4 versus 5+)			0.33 (0.11)	< 0.01

Source: 2013 CPS-ASEC Content Test. Standard errors (SE) are from successive difference replication. Unweighted n=29,629 (Test n=16,401; Control n=13,228).

Model 1 is the basic model. Model 2 controls for age, race/ethnicity, sex, household tenure (owned/rented/occupied w/o rent) and the marital, education and work status of the head of household. Model 3 controls for Model 2 covariates and relationship to household respondent (self, child, other) and household size.

**Appendix Table 5. Weighted Demographic Characteristics by Panel of Retired Subsample, 2013
CSP ASEC Content Test**

	New CPS Design		Old CPS Design		New - Old	p
	%	SE of %	%	SE of %		
	n=117,805,832		n=12,841,528		n/a	
Age					0.0077	
0-18	40.28	0.6260	39.92	0.4687	0.36	
19-34	18.69	1.0648	16.59	0.4779	2.10	
35-64	36.58	0.6919	37.99	0.479	-1.41	
65+	4.45	0.3198	5.49	0.3221	-1.04	
Sex					0.9012	
Female	51.62	0.6276	51.71	0.4612	-0.09	
Male	48.38	0.6276	48.29	0.4612	0.09	
Race/Ethnicity					<.0001	
White/non-Hispanic	61.91	0.9819	68.04	1.0492	-6.14	
Black/non-Hispanic	22.30	0.9113	16.87	0.8935	5.43	
Other/non-Hispanic	15.79	0.6212	15.09	0.6598	0.71	
Education					0.0737	
Less than high school	19.90	0.8163	17.85	0.5613	2.06	
High school graduate	20.31	0.9816	20.76	0.7603	-0.44	
Some college thru AA	24.12	1.0963	26.96	0.7033	-2.84	
Bachelors or higher	35.66	1.2163	34.44	0.7721	1.23	
Work Status					0.1777	
Full time/full year	44.38	0.9041	42.43	0.6931	1.96	
Less than full time/full year	31.74	0.9089	33.85	0.7365	-2.11	
Did not work	23.88	1.0548	23.72	0.6111	0.16	
Citizenship					0.4605	
US Citizen	94.55	0.6137	95.04	0.3082	-0.49	
Non US citizen	5.45	0.6137	4.96	0.3082	0.49	
Self/Proxy					0.3866	
Self	29.41	0.5051	29.92	0.2993	-0.51	
Proxy	70.59	0.5051	70.08	0.2993	0.51	
Household Relationship					0.5902	
Household respondent	29.41	0.5051	29.92	0.2993	-0.51	
Child of reference person	43.06	0.7614	42.30	0.4958	0.76	
Other	27.52	0.5758	27.78	0.4115	-0.25	
Household Size					0.4621	
1-4 person household	73.98	1.7625	72.45	1.0148	1.52	
5+ person household	26.02	1.7625	27.55	1.0148	-1.52	

Source: 2013 CPS ASEC Content Test.

Appendix Table 6. Weighted Comparison of Old and New Aggregated Coverage Type Estimates by Domain and Subgroup of Retired Subsample, 2013 CSP ASEC Content Test

	Private						Public						Insured						
	New CPS		Old CPS		New - Old	P	New CPS		Old CPS		New - Old	P	New CPS		Old CPS		New - Old	P	
	%	SE of %	%	SE of %			%	SE of %	%	SE of %			%	SE of %	%	SE of %			%
	76.43	1.20	73.56	0.96	2.87	0.05	13.46	1.00	14.70	0.76	-1.24	0.31	91.98	0.67	90.59	0.49	1.40	0.10	
Age																			
0-18	75.33	1.54	74.42	1.28	0.91	0.63	22.50	1.69	23.41	1.35	-0.91	0.67	96.51	0.72	95.26	0.51	1.25	0.19	
19-34	73.66	2.40	69.17	1.59	4.49	0.12	10.40	1.77	11.76	1.03	-1.37	0.51	85.04	1.84	81.63	1.28	3.42	0.15	
35-64	81.79	1.36	78.93	1.00	2.86	0.10	5.48	0.75	7.01	0.57	-1.53	0.13	90.04	0.99	88.81	0.73	1.23	0.32	
65+	53.90	4.55	43.30	3.02	10.60	0.05	10.11	2.40	13.46	1.99	-3.35	0.31	96.11	1.91	95.94	1.27	0.17	0.94	
Race/Ethnicity																			
White/non-Hisp	83.72	1.33	80.42	1.08	3.29	0.06	10.98	1.16	13.01	0.94	-2.04	0.18	94.69	0.67	93.46	0.50	1.23	0.14	
Black/non-Hisp	59.68	2.74	50.89	2.06	8.78	0.01	22.17	2.09	20.55	1.94	1.63	0.54	88.65	1.43	81.69	1.28	6.95	0.00	
Other/non-Hisp	71.51	3.71	67.93	2.50	3.58	0.43	10.89	2.19	15.77	1.63	-4.87	0.09	86.07	2.98	87.54	1.66	-1.47	0.66	
Education																			
< high school	60.21	3.02	59.72	1.90	0.49	0.88	24.37	2.69	22.28	1.63	2.09	0.49	87.42	1.99	86.94	1.32	0.48	0.83	
High school grad	66.95	2.45	55.89	1.83	11.06	0.00	10.57	1.70	15.63	1.24	-5.06	0.02	82.38	2.01	80.06	1.31	2.31	0.37	
Some college-AA	76.40	2.16	75.05	1.36	1.36	0.59	8.02	1.42	7.75	0.75	0.27	0.86	90.24	1.41	87.18	0.97	3.07	0.08	
Bachelors+	91.18	1.30	90.06	0.84	1.13	0.50	1.57	0.54	2.45	0.33	-0.88	0.24	94.83	1.04	95.21	0.66	-0.37	0.76	
Work Status																			
Full time/full yr	90.54	1.02	89.07	0.72	1.47	0.24	1.57	0.44	2.36	0.33	-0.79	0.17	92.95	0.84	92.45	0.66	0.50	0.63	
< full time/full yr	57.21	2.40	55.48	1.51	1.73	0.53	21.11	2.02	18.94	1.11	2.18	0.31	86.88	1.75	85.15	1.08	1.73	0.39	
Did not work	76.17	2.14	71.39	1.72	4.78	0.08	8.76	1.35	11.55	1.04	-2.79	0.11	87.51	1.68	85.90	1.09	1.60	0.45	
Citizenship																			
US Citizen	76.53	1.22	73.84	0.97	2.69	0.07	13.69	1.03	14.80	0.79	-1.10	0.37	92.40	0.67	91.03	0.47	1.37	0.11	
Non US citizen	74.67	4.30	68.14	4.10	6.53	0.27	9.43	2.63	12.82	2.67	-3.38	0.38	84.83	3.33	82.11	3.04	2.71	0.55	

Source: 2013 CPS ASEC Content Test. Notes: Private coverage includes ESI and direct purchase coverage. Public includes Medicaid, CHIP and other government coverage.

*<p<0.05;**p<0.01;***p<0.001.

