Changing the CPS Health Insurance Questions and the Implications on the Uninsured Rate: Redesign and Production Estimates

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DISCLAIMERS

INTRODUCTION

The Annual Social and Economic Supplement to the Current Population Survey (CPS ASEC) generates widely used estimates on health insurance coverage and the uninsured.[2,3,4,5] However, research suggests that the calendar year estimate of the uninsured is higher than estimates from other federal surveys and that estimates from the CPS ASEC

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[2] Glied, Sherry, Dahlia K. Remler, and Joshua Graff Zivin. 2002. "Inside the Sausage Factory: Improving Estimates of the Effects of Health Insurance Expansion Proposals." *Milbank Quarterly:* 80(4): 603-35.
[3] Holahan, John. 2011. "The 2007-09 Recession and Health Insurance Coverage." *Health Affairs:* 30(1): 145-52.
[4] Klerman, Jacob A., Michael Davern, Kathleen Thiede Call, Victoria Lynch, and Jeanne D. Ringel. 2009. "Understanding the Current Population Survey's Insurance Estimates and the Medicaid 'Undercount.'" *Health Affairs – Web Exclusive*: w991-w1001. Available at: http://content.healthaffairs.org/content/28/6/w991.
[5] Ziegenfuss, Jeanette Y., and Michael E. Davern. 2011. "Twenty Years of Coverage: An Enhanced Current Population Survey – 1989–2008." *Health Services Research:* 46(1): 199-209.

may actually reflect a mixture of current and past year coverage.[6,7] To address this concern, the Census Bureau substantially redesigned the CPS ASEC health insurance module over the past ten years.[8] The redesigned instrument was fielded in a large national content test in March 2013. In addition to the features of the redesigned instrument, the content test also takes better advantage of automated computer-assisted interviewing and adds important new content to the instrument. The 2013 content test fielded a complete CPS ASEC interview to previous CPS respondents who were interviewed by Census Bureau telephone center staff.

This report highlights results of the content test with those from the 2013 CPS ASEC.[9] Specifically, the evaluation includes only production CPS data collected in telephone centers in March 2013, rather than the full ASEC CPS dataset. In addition, this report compares calendar-year estimates with point-in-time estimates from the content test. The 2013 content test is not compared to other surveys here because the purpose is to evaluate the change in the questions from the CPS ASEC. Both the datasets are unedited. Comparing to other surveys would introduce too many additional sources of variation then is necessary for the evaluation of the content test itself. From this point, the restricted CPS ASEC will be referred to as the production instrument.

HIGHLIGHTS

- The percentage of people without health insurance was 10.6 percent in the content test and 12.0 percent in the production instrument.
- The percentage of people with government coverage was statistically lower in the content test than the production instrument.
- The percentage of people with private coverage was statistically higher in the content test than the production instrument.

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[6] DeNavas-Walt, Carmen, Bernadette D. Proctor, and Jessica C. Smith. 2012. Pg. 21 in *Income, Poverty, and Health Insurance Coverage in the United States: 2011.* U.S. Bureau of the Census, Current Population Reports, P60-243. Washington, D.C.: U.S. Government Printing Office.

[7] Kenney, Genevieve, and Victoria Lynch. 2010. "Monitoring Children's Health Insurance Coverage Under CHIPRA Using Federal Surveys." Pgs. 65-82 in *Databases for Estimating Health Insurance Coverage for Children: A Workshop Summary*, edited by Thomas J. Plewes. Washington, D.C: National Academies Press.

[8] For examples of this research, please see the following:

Hess, J., J. Moore, J. Pascale, J. Rothgeb, and C. Keeley. 2001. "The Effects of Person-level vs. Household-level Questionnaire Design on Survey Estimates and Data Quality." *Public Opinion Quarterly:* 65(4):574-584. Available at: http://poq.oxfordjournals.org/content/65/4/574.extract.

Pascale, J. 1999. "Methodological Issues in Measuring the Uninsured." Paper presented at the Seventh Health Survey Research Methods Conference, Proceedings. U.S. Dept. of Health and Human Services, National Center for Health Statistics. Hyattsville, Maryland, pp. 167-173. Available at: http://www.cdc.gov/nchs/data/slaits/conf07.pdf.

Pascale, J. 2008. "Assessing Measurement Error in Health Insurance Reporting: A Qualitative Study of the Current Population Survey." *Inquiry* 45(5) pp 422-437. Available at: http://www.inquiryjournalonline.org.pinnacle.allenpress.com/doi/full/10.5034/inquiryjrnl_45.04.422.

Pascale, J. 2009A. "Findings from a Pretest of a New Approach to Measuring Health Insurance in the Current Population Survey." Proceedings of the Federal Committee on Statistical Methodology Conference, November, 2009. Also part of the US Census Bureau's Research Report Series, #2009-07. Available at: https://www.census.gov/srd/papers/pdf/rsm2009-07.pdf.

Pascale, J. 2009B. "Survey Measurement of Health Insurance Coverage Cognitive Testing Results of Experimental Questions on Integrated Current and Calendar Year Coverage." Available through "Q-BANK," a database of questions and reports on cognitive testing maintained by the National Center for Health Statistics: http://wwwn.cdc.gov/qbank/report/Pascale_Census_2009_HealthInsurance.pdf.

Pascale, Joanne, Marc I. Roemer and Dean M. Resnick. 2009. "Medicaid Underreporting in the CPS: Results from a Record Check Study." *Public Opinion Quarterly:* 73(5): 497-520.

[9] Data are subject to error arising from a variety of sources. For information on confidentiality protection, sampling error, non-sampling error, and definitions see: http://www.census.gov/prod/techdoc/cps/cpsmar13.pdf and http://www.reginfo.gov/public/do/PRAViewDocument?ref_nbr=201211-0607-002.

- The percentage of people uninsured in the previous calendar year in the content test was significantly lower than the percentage of people uninsured at the time of the interview.
- The average time to complete the health insurance questions in the content test was 1:32 minutes longer than in the production instrument. However, when excluding questions that added new material on health insurance exchanges and employer-sponsored insurance offers and take-up, the content test was 1:20 minutes longer than the production instrument.

BACKGROUND

For a more complete discussion of the motivation for the redesigned health insurance instrument and the 2013 content test, please see OMB Supporting Statement A[10] and the paper on the 2013 content test presented at the Joint Statistical Meetings in 2013.[11]

Inflated estimate of the uninsured compared to other federal surveys

Although the CPS ASEC is a widely used indicator of the uninsured in the United States, many researchers have questioned its validity.[12] In particular, the estimate of the uninsured in the previous calendar year was higher than in other federal surveys; researchers have stated that the estimate in the CPS ASEC may actually reflect a mixture of current and past year coverage. [4,6,7] Research has also shown that people have difficulty recalling health insurance coverage in the distant past. For example, short spells of Medicaid that occurred early on in the previous calendar year may not be salient enough for people to recall during the interviewed up to a year or so later. This measurement error is partially due to both the reference period and timing of data collection.[4]

Redesigned health insurance instrument

The redesigned health insurance instrument differs from the traditional CPS ASEC in three primary ways: questions about type of coverage, questions about past coverage, and the household-level design. The complete redesigned instrument was previously tested in 2010, in a survey that replicated certain elements of the CPS ASEC interview.[13,14] While this 2010 survey provided the proof of concept for the redesigned instrument,[15] it did not include the full battery of CPS Basic and supplemental income questions that would be asked during an actual CPS ASEC interview. Therefore, in order to evaluate the redesigned health insurance instrument operationally in the CPS environment, the Census Bureau fielded a nation-wide content test in 2013, which follows the method of redesigned health insurance instrument closely.[10]

One of the main differences between the traditional and redesigned health insurance instruments is the reference period for data collection. The traditional instrument asks about coverage at any time in the past calendar year. The

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[10] U.S. Census Bureau. 2013. OMB Supporting Statement A. Available at: http://www.reginfo.gov/public/do/PRAViewDocument?ref_nbr=201211-0607-002.

[11] Medalia, Carla. 2013. "Health Insurance in the Current Population Survey: Now and Later?" Unpublished paper presented at the Joint Statistical Meetings in Montreal on August 4, 2013. Available from author upon request.

[12] The issues with the traditional CPS ASEC health insurance estimates have been well established, as discussed in the Census Bureau's annual publication on health insurance. The Census Bureau devotes two-thirds of a page in the Income, Poverty, and Health Insurance Coverage in the United States: 2012 (DeNavas-Walt et. al. 2013: 22; 65-66) to flaws in the estimate. The quality of health insurance data has long been a concern of Health and Human Services.

[13] Pascale, Joanne. 2012. "Findings from a Split-Ballot Experiment on a New Approach to Measuring Health Insurance in the Current Population Survey." Unpublished Census Bureau report. Presented at American Society of Health Economists Conference, Minneapolis, MN, June 2012.

[14] Pascale, Joanne, Jonathan Rodean, Jennifer Leeman, Carol Cosenza, Alisu Schoua-Glusberg. 2013. "Preparing to Measure Health Coverage in Federal Surveys Post-Reform: Lessons from Massachusetts." *Inquiry*. 50(2):106-23. Available at: http://inq.sagepub.com/content/50/2/106

[15] Boudreaux, Michael, Brett Fried, Joanna Turner, and Kathleen Thiede Call. 2013. "SHADAC Analysis of the Survey of Health Insurance and Program Participation." State Health Access and Data Assistance Center. Availabe at: http://www.shadac.org/files/shadac/publications/SHIPP_final_report.pdf.

redesigned instrument also captures this information, but does so in a different way: it starts by asking about current coverage and then uses follow-up questions to find out (1) when that coverage began and (2) which months the individual had the coverage. If the individual does not have current coverage, the instrument asks about coverage during the previous calendar year through the present. The change in the reference period should make it easier for respondents to report their coverage. It also means that the redesigned instrument can capture information about all months between January of the previous year and the interview month. In this regard, the redesign captures similar information as the redesigned Survey of Income and Program Participation, another Census Bureau survey, which measures monthly coverage of health insurance during the previous calendar year.

Other differences between the traditional and redesigned instruments include the identification of plan type and which household members are covered by each plan. First, the traditional instrument asks about each plan type. By contrast, the redesigned instrument asks a series of questions, beginning with the general source of coverage and then asking more specific questions to identify the plan type. Second, the traditional instrument asks if anyone in the household was covered by a particular plan type, and if yes, who was covered. On the other hand, the redesigned instrument asks about an individual's own coverage, and then asks if the same plan type covered any other household members. Additional questions ask each household member about any additional plans that they may have.

New content in the CPS ASEC

In addition to redesigning the CPS ASEC health insurance section, the Census Bureau added new questions to address two areas. First, new questions allow for the measurement of health insurance exchanges, and second, new questions allow the Census Bureau to determine rates of employer-sponsored insurance offers and take-up.

Exchanges. One of the key features of the Patient Protection and Affordable Care Act (ACA) is the implementation of state-specific "Health Insurance Exchanges" in 2014. An exchange is a state-level marketplace of private health insurance options for individuals and small businesses. While the redesigned health insurance instrument measures the types of coverage included in the traditional instrument, it also is able to measure health insurance exchange coverage and premium subsidization through new questions. This new content was cognitively tested in 2012 in Massachusetts.[14]

Employer-sponsored insurance offers and take-up. The ACA may lead to changes in the rates of employer-sponsored health insurance offers and take-up, or whether or not someone who is offered insurance through their employer enrolls in that plan.[16,17] As a result, the Council for Economic Advisors asked the Census Bureau to add questions to the ASEC to measure these changes. The redesigned instrument includes a short series of questions asked of people who are currently employed but who do not have health insurance through their own employer. These questions were originally asked in the CPS Contingent Worker Supplement, fielded in February of 1995, 1997, 1999, 2001, and 2005. This particular set of questions only works with a current coverage question.

DATA AND METHODS

Data

The sample for the 2013 content test was selected from retired sample for the CPS. None of these households had been given the CPS ASEC before, but they had received the CPS Basic and other CPS supplements, such as the Displaced Workers supplement, Child Support, or Food Security. The retired sample was between one and two years old, meaning that their last CPS interview was one to two years prior. The sample was selected to exclude households that had been selected for another survey, the American Time Use Survey, as well as other

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[16] Maxwell, Nan L. 2013. "The ACA, Health Care Costs, and Disparities in Employer-Sponsored Health Insurance." Mathematica Policy Research Reports, Mathematica Policy Research. Available at: http://EconPapers.repec.org/RePEc:mpr:mprres:7683.

[17] Thurm, Scott. 2013. "Will Companies Stop Offering Health Insurance Because of the Affordable Care Act?" *The Wall Street Journal,* June 16. Available at: http://online.wsj.com/article/SB10001424127887323582904578488781195872870.html.

characteristics.[18] To be interviewed, households needed to be reachable by the same phone number that they had when they were last interviewed one to two years before. Furthermore, households needed to live at the same addresses as their last interview. The final sample size for the content test was 22,508 households with 1,168 households ineligible for the CPS ASEC interview, which reduced the sample to 21,340 households. The data presented have been weighted by the Census Bureau to reflect the total civilian non-institutionalized population.

Trained CPS ASEC interviewers at three Census Bureau telephone centers, in Hagerstown Maryland, Jeffersonville Indiana, and Tucson Arizona, conducted 9,195 household interviews (including complete and partial interviews) for the CPS Basic part of the interview. The analytical sample for the content test, which included only those individuals that were still in the survey by the health status question, was 16,401 individuals.

The data from the content test have been partially recoded to replicate the data produced by the traditional ASEC to make the population controlled to the population of interest. Census Bureau staff edited the demographic characteristics, such as those collected during the CPS Basic part of the interview, using the same programs used in the traditional CPS. Furthermore, the Census Bureau recoded data from the content test so that they contain the same information as the traditional ASEC variables.

The data that serve as the comparison group is the 2013 CPS ASEC, which was conducted in February, March and April which was conducted with a combination of in-person and phone center interviews. The original sample size for the full ASEC sample was 98,095 households. After removing ineligible addresses, the sample was reduced to 83,225 households, which includes both interviews and Type A noninterviews. These households contained 202,634 individuals. The analysis focuses on interviews conducted in March 2013 in ASEC call centers, which included 6,410 households. These households contain the final analytical sample, which was 13,228 individuals. This sample consisted of unedited responses to the types of health insurance coverage using household and individual information. We chose not to use the imputation flags that reside on the person public use microdata file (zero indicates that the insurance type was not imputed or allocated). There were seven more unweighted people insured if we used these flags. We are assuming, but not verifying, that those seven people had an incorrect imputation flag.

The types of health insurance coverage are private insurance plans and government coverage. Private insurance includes direct purchase and employer-sponsored insurance. Government insurance includes Medicare, Medicaid, other government health care, and military coverage. Note that in this paper, as in all of the CPS reports, the Census Bureau considers "Medicaid" as Medicaid, CHIP and other government health care.[19,20] We do not show military coverage here due to the small sample sizes. Indian Health Services does not count as health insurance coverage because it is clinic-based or hospital-based health care.

Nonresponse and section dropout

Due to survey dropout, not all of the households interviewed for the CPS Basic were included in the sample for the health insurance section. The overall response rate for the CPS Basic production instrument was 90.7 percent in 2013, which is substantially higher than for the redesigned instrument, which was 43.1 percent. As shown in Table 1, this corresponds to an initial nonresponse rate of 9.3 percent in the traditional instrument and a 56.9 percent nonresponse rate in the content test.

In addition to the CPS Basic nonresponse rate, respondents sometimes drop out of the survey once it has begun. The dropout rate among those households that were considered complete or partial CPS Basic interviews but dropped out

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[18] For a complete description of the sampling method used for the 2013 content test, please see the following paper: Brault, Matthew. 2013. "Non-Response Bias in the 2013 CPS ASEC Content Test." Paper presented at the Federal Committee on Statistical Methodology 2013 Annual Meeting. Available at: http://www.census.gov/hhes/www/hlthins/publications/sehsd_wp_2014-17.pdf.

[19] These individual types of health insurance are on the PUMS file so an analyst can make their own decisions.

[20] Both Medicaid and CHIP programs are managed by the same agency (Centers for Medicare & Medicaid Services), and many states have the CHIP program as an extension of the Medicaid program, and both programs serve low-income children. Other government programs are also included because that category is small and they are means-tested programs, like Medicaid and CHIP.

before the end of the health insurance section was 15.9 percent in the content test, compared to 14.5 percent in the traditional instrument. Combining the section dropout with the CPS Basic nonresponse, 63.8 percent of eligible households were dropped from the analytical sample in the content test, compared with 22.5 percent in the traditional instrument. This means that the analytical sample for the content test included 36.2 percent of the eligible households, compared with 77.5 percent for the traditional instrument.

The content test, which was only in call centers, was weighted to reflect the national population in March of 2013. However, that population is larger than the analytical sample because of the dropout rate. Again, the analytical sample is the people that answered the health insurance questions. The CPS ASEC is also weighted to the national population in March of 2013. The dropout rate affects the weighted CPS ASEC. In addition, the call centers represent a subset of the national population estimate and were only from March.

Methods

Differences between the traditional CPS ASEC and the content test include the different survey designs, as described above, as well as differences in mode, both of which could have an effect on results. All content test interviews were conducted in call centers in the month of March, compared with a combination of call center and in-person interviews in February, March and April for the traditional CPS ASEC. An example of the mode effect can be seen by looking at just the traditional ASEC. Table 2 shows that the distribution of demographic characteristics, such as age, differs between the total sample and the call center, March only sample. In order to focus the analysis on the differences between survey design, this analysis controls for survey mode by comparing the content test to the traditional ASEC for March call centers only.

Along important dimensions, the analytical sample from the CPS ASEC was different from the full sample. For example, there were proportionately too many full-time, full-year workers in the analytical sample for the ASEC call centers than in the CPS ASEC national population.[21] This might bias the estimates because most of this group gets their insurance through an employer. To address this problem, CPS ASEC call center estimates were reweighted to be represented of the weighted content test estimates. The final weight adjustment for the CPS ASEC call centers was as follows:

$$adjwgt_i = rk_{age,sex,r\_e,ftfy} * wgt_i$$

> Where $adjwgt$ is the adjusted weight that equals the analytical content test estimate

> *Rk* is the raking factor. The raking factor is controlled to age (0-17, 18-34/35-64, 65+), sex, race and ethnicity (nonHispanic Whites, nonHispanic Black, nonHispanic Other, and Hispanics), and full-time full-year workers aged 18-64

> *Wgt* is the ASEC weight

Again, this adjusted weight makes the data from the call centers that were used to collect CPS ASEC data similar to the content test data in terms of demographic and work characteristic; i.e., we wanted to control for population effects within the mode of call centers.

All statistical tests were performed at the 90 percent confidence level.

FINDINGS

We analyze the health insurance content test data in two ways. The analysis compares estimates for the 2012 calendar year from the redesigned instrument to the production CPS ASEC March call centers. Our expectation is that the redesigned instrument will have an uninsured rate that is lower than the traditional instrument. Second, estimates for the 2012 calendar year from the content test are compared to the current coverage estimates from the

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[21] In the production CPS ASEC final sample, there were 86.1 percent under age 65. In the March call centers, 78.6 percent of the population was under age 65. After adjusting the call center estimate, 85.3 percent of the sample was under age 65 in both the content test and the March call centers.

content test. We expect that the uninsured rate for the calendar year estimate will be lower than the current coverage estimate.

Comparing the content test to production ASEC

Table 3 shows results for the comparison of the content test to the production ASEC. Unless otherwise noted, the estimates that are reported are statistically different at the 90 percent confidence level. The discussion of the results will focus on the comparison of the production ASEC March call center unedited and adjusted weighted results (hereafter referred to as the ASEC call centers) to the unedited weighted redesign results (hereafter referred to as the content test).[22] Note that estimates for ASEC call centers are subtracted from the content test estimates.

The percentage of people without health insurance was 10.6 percent in the content test and 12.0 percent in the ASEC call centers. In other words, the content test had a 1.4 percentage point lower uninsured rate than the ASEC call centers. This pattern, where the percentage of those uninsured was lower in the content test than in the production call centers, was consistent by age group. Those aged 18 to 64, aged 19 to 25, and aged 35 to 44 had lower levels of uninsured in the content test than in the production call centers. The difference for those in all other age groups except 45 to 64 were in the same direction but none of the other age groups are statistically different between the two surveys. For this last group, aged 65 and above, we would not have expected a difference between the content test and production ASEC because the population is almost entirely covered by Medicare.

The percentage of people who were uninsured in the content test was generally lower than in the ASEC call centers by race and Hispanic origin. The differences for White alone, non-Hispanic White, and Black alone were all lower in the content test than in the ASEC call centers, while the difference for Hispanic and Asians were in the same direction but not statistically significant.

In addition to the percentage of people without coverage for the previous calendar year, rates by type of coverage are also shown. For all ages, the percentage of people with private coverage was higher in the content test than in the production ASEC, while the percentage of people with government coverage was lower in the content test than in the production ASEC. This pattern is also present for those under age 18 and aged 18 to 64, although private coverage for these age groups is not statistically significant.

Comparing the content test calendar year to current coverage estimate

As previously described, the CPS ASEC is often criticized for producing calendar year estimates that may actually reflect a combination of past year and current coverage. To address this, the redesign explicitly asks about both current coverage as well as calendar year coverage. Therefore, in addition to comparing the 2012 calendar year content test estimate to the production ASEC, it can also be compared to the current coverage estimate from the content test. Note that the current coverage estimates are subtracted from calendar year estimates .

In the sample, the percentage of people who were uninsured in 2012 was 10.6 percent, compared to 12.0 percent at the time of the interview. Therefore, more people report being uninsured currently than are uninsured for the entire previous calendar year, which is consistent with the expectation that people are generally more likely to be currently uninsured than they were for the entire previous calendar year.

In addition to examining the difference between calendar year and current coverage for the uninsured rate, we examined the difference by coverage type. All of the differences by type were in the expected direction and statistically significant. Unlike the uninsured status, a negative relationship is expected for private coverage, since someone is more likely to have had private insurance at any time in the previous calendar year than to currently have private insurance. This was found to be the true in the content test: the percentage of people with private health insurance coverage was 72.0 percent in 2012 and 70.4 percent at the time of the interview. In 2012, the percentage of people covered by government insurance was 28.6 percent, compared to 28.3 percent for the current coverage estimate. The percentage of people with Medicare was 15.7 percent in the calendar year and 16.2 percent at the time of the interview. Finally, the percentage of people on Medicaid in 2012 was 11.9 percent, compared to 11.2 percent at the time of the interview.

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[22] The table also includes additional production ASEC estimates for the original weighted ASEC (final estimate) and the ASEC March call center unedited but not adjusted weighted estimate.

Comparing the content test to production instrument: mean length of interview

The mean time for a total health insurance interview increased for the content test from the production instrument. [23] The total mean household time for a health insurance interview was 2:39 for the production instrument, compared to 4:12 for the content test, for an average increase of 1:32. This figure includes the complete health insurance instrument, including the self-rated health questions for both instruments as well as the new content added to the content test health insurance instrument (employer-sponsored insurance take-up and offers and exchange-related health insurance questions). Excluding the new content in the content test, the average household time for an interview in the production instrument remains steady at 2:39 but is 3:59 for the content test, for an average increase of 1:20. In other words, the new content added 0:13 on average to the length of the interview.

DISCUSSION

One of the main hypotheses for this comparison is that the redesigned calendar year estimate of the uninsured will be lower than it is for the production instrument. This hypothesis is based on research which shows that the production CPS uninsured estimate is higher than other national surveys , and that the CPS ASEC reflects a mixture of current and past year coverage.[4,6,7] Because the redesigned instrument explicitly addresses this concern by asking about both current and past coverage, the instrument allows for estimates of current coverage and calendar year coverage that have discrete reference periods. Therefore, the second hypothesis is that we expected the estimate of the uninsured rate for current coverage to exceed the uninsured rate for the calendar year.

Results supported both hypotheses presented in this paper. With respect to the first hypothesis, we found that the redesigned instrument led to a lower estimate of the uninsured compared to the production CPS ASEC. Second, we found that there was a gap between the calendar year and current coverage estimates from the redesigned instrument, where someone was more likely to be uninsured at the time of the interview than for the entire calendar year. These findings support the research which found that the CPS ASEC health insurance estimate was too high and reflected not just calendar year coverage but also current coverage.

This paper shows that the redesigned instrument measures health insurance in two distinct reference periods – the past calendar year and current coverage. The gap in the uninsured rate between these two reference periods was 1.4 percentage points, which is not as large as we had predicted based on data from other federal surveys. One explanation for this is nonresponse bias. The sampling frame required respondents to the content test to live at the same address and have the same telephone number since their last CPS interview, which was one to two years prior to this survey. Therefore, respondents to the content test are different from the population who typically responds to the CPS ASEC and may have experienced less churning in insurance coverage status than the general population.

Making comparable measures to the production CPS proves difficult when the sample's respondents are not reflective of the larger population. The content test's low response rate raised concerns about what role nonresponse bias would have on key estimates. A separate analysis of nonresponse showed that non-response exerted downward bias on estimates of uninsurance and upward bias on Medicare coverage.[18] More research is being conducted to examine these possible sources of nonresponse bias and the effect that it could have on the results presented in this paper.

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[23] For a thorough analysis of the time it took to complete the content test and CPS ASEC interviews, please see: Bee, Adam and Aaron Cantu. 2013. "Evaluating Respondent Burden of the CPS ASEC Content Test with Timer Data." Paper presented at the Federal Committee on Statistical Methodology 2013 Annual Meeting. Available at: http://fcsm.sites.usa.gov/files/2014/07/H3_Bee_2013FCSM.pdf.

TABLES

Table 1. Nonresponse and dropout in the 2013 CPS ASEC and 2013 Content Test

| | | Production CPS ASEC | |
	Content Test	March Call Centers	Total Sample
CPS Basic nonresponse	56.9%	0.0%	9.3%
Section dropout (through end health insurance)	15.9%	11.4%	14.5%
Total nonresponse and dropout	63.8%	11.4%	22.5%
Analytical sample (as percent of eligible households)	36.2%	88.6%	77.5%

Source: CPS ASEC health insurance production instrument and content test (2013).
Notes: "CPS Basic nonresponse" refers to nonresponse in the CPS Basic interview. "Section dropout" refers to the all dropout from before the supplement began through the end of the health insurance section. "Total nonresponse and dropout" refers to all nonresponse and dropout from the beginning of the CPS Basic interview through the end of the health insurance section.

Table 2. Demographic characteristics of the 2013 CPS ASEC and 2013 Content Test

	Production instrument									Content Test		
	Final estimates			Call centers, March			Call centers, March, adjusted			Call centers, March		
	N (in 1000s)	%	SE (%)	N (in 1000s)	%	SE (%)	N (in 1000s)	%	SE (%)	N (in 1000s)	%	SE (%)
Age												
Under 65	268,008	86.1	0.0	16,400	78.6	0.6	207,615	85.3	0.4	207,615	85.3	0.4
0 to 17	74,425	23.9	0.0	3,459	16.6	0.4	57,760	23.7	0.5	57,760	23.7	0.4
18 to 34	71,777	23.1	0.0	4,253	20.4	0.5	51,480	21.1	0.5	51,480	21.1	1.2
35 to 64	121,806	39.2	0.0	8,687	41.6	0.5	98,376	40.4	0.6	98,376	40.4	0.7
65 and over	43,108	13.9	0.0	4,472	21.4	0.6	35,860	14.7	0.4	35,860	14.7	0.4
Race and ethnicity												
White non-Hispanic	195,330	62.8	0.0	16,856	80.8	0.6	159,950	65.7	1.0	159,950	65.7	0.6
Black non-Hispanic	37,619	12.1	0.0	1,307	6.3	0.4	26,566	10.9	0.7	26,566	10.9	0.5
Other non-Hispanic	24,937	8.0	0.0	994	4.8	0.4	19,608	8.1	0.6	19,608	8.1	0.3
Hispanic	53,230	17.1	0.0	1,714	8.2	0.5	37,351	15.3	0.8	37,351	15.3	0.5
Work Status for persons aged 18-64												
Full time, full year	98,762	51.0	0.2	98,762	51.0	0.2	75,509	50.4	0.8	75,509	50.4	0.8
Less than full time, full year	47,070	24.3	0.2	47,070	24.3	0.2	39,022	26.0	0.6	39,022	26.0	0.9
Not working	47,753	24.7	0.2	47,753	24.7	0.2	35,325	23.6	0.7	35,325	23.6	0.6
Sex												
Male	152,335	49.0	0.0	10,258	49.2	0.4	118,284	48.6	0.4	118,284	48.6	0.6
Female	158,781	51.0	0.0	10,613	50.9	0.4	125,191	51.4	0.4	125,191	51.4	0.6
N (in thousands)	311,116			20,871			243,475			243,475		
n (sample size)	172,662			13,228			13,228			16,401		

Source: CPS ASEC health insurance production instrument and content test (2013).

Table 3. Health insurance coverage in the 2013 CPS ASEC and 2013 Content Test

		Production CPS ASEC			Content Test		Difference	
		Production (final estimate)	Production Call Centers, March (unedited)		Call Centers, March (unedited)		Production and Contest Test	Content Test Only
Universe	Estimate	Original weight	Original weight	Adjusted weight	Calendar year	Current Coverage	Content Test - Prod. (adj)	Current Coverage - Calender year
Total by Coverage Type								
Total	Uninsured	15.4	10.1	12.0	10.6	12.0	-1.4 *	1.4 *
Total	Private	63.9	72.9	69.8	72.0	70.4	2.3 *	-1.6 *
Total	Gov.	32.6	33.8	31.0	28.6	28.3	-2.4 *	-0.3 *
Total	... Medicare	15.7	22.5	16.2	15.7	16.2	-0.5	0.4 *
Total	... Medicaid	16.4	9.6	13.0	11.9	11.2	-1.1	-0.7 *
Under 18 by Coverage Type								
Aged 0 to 17	Uninsured	8.9	5.7	6.4	6.0	7.0	-0.3	1.0 *
Aged 0 to 17	Private	60.1	66.7	62.7	65.9	64.1	3.2	-1.8 *
Aged 0 to 17	Gov.	39.2	33.9	37.1	32.2	30.6	-4.9 *	-1.5 *
Aged 0 to 17	... Medicare	1.0	0.9	1.1	0.8	0.8	-0.3	0.1
Aged 0 to 17	... Medicaid	35.9	29.9	33.4	29.6	28.1	-3.7	-1.6 *
18 to 64 by Coverage Type								
Aged 18 to 64	Uninsured	21.0	14.3	16.6	14.6	16.6	-2.1 *	2.0 *
Aged 18 to 64	Private	67.2	76.7	73.5	75.3	73.7	1.8	-1.7 *
Aged 18 to 64	Gov.	16.6	13.6	14.1	12.2	12.0	-1.8 *	-0.2
Aged 18 to 64	... Medicare	4.2	4.5	4.2	3.8	4.1	-0.4	-0.3 *
Aged 18 to 64	... Medicaid	10.6	5.9	6.9	6.8	6.3	-0.1	-0.4 *
Race and Hispanic Origin by Coverage Status								
White Alone	Uninsured	14.7	9.7	11.6	9.9	10.9	-1.7 *	0.9 *
... Non-Hispanic White	Uninsured	11.1	7.9	7.9	6.5	7.3	-1.5 *	0.9 *
Black Alone	Uninsured	19.0	14.2	13.8	12.4	17.4	-1.4 *	5.0 *
Asian Alone	Uninsured	15.1	11.7	12.4	10.3	11.3	-2.0	1.0
Hispanic	Uninsured	29.1	28.4	28.3	26.1	27.5	-2.3	1.4
Age by Coverage Status								
0 to 18	Uninsured	9.2	6.0	7.2	6.1	7.3	-1.1	1.2 *
19 to 25	Uninsured	25.5	21.1	23.9	18.3	22.8	-5.6 *	4.5 *
26 to 34	Uninsured	27.1	20.0	23.2	20.1	21.0	-3.0	0.9
35 to 44	Uninsured	21.2	16.7	19.8	14.1	16.0	-5.7 *	1.9 *
45 to 64	Uninsured	16.1	9.9	11.0	11.4	13.1	0.4	1.7 *
65 and above	Uninsured	1.5	1.5	1.8	1.5	1.0	-0.3	-0.5 *
N (in thousands)		311,116	20,871	243,475	243,475	243,475	--	--
n (sample size)		172,662	13,228	13,228	16,401	16,401	--	--

Source: CPS ASEC health insurance production instrument and content test (2013).
Notes: * indicates that the difference is statistically significant at the 90% confidence level or higher.