The Current Population Survey (CPS) and State Health Insurance Coverage Estimates

The Census Bureau’s Current Population Survey (CPS) is the most commonly used data source for estimating health insurance coverage and uninsurance rates at the federal and state level. This issue brief provides background information on the CPS and use of the CPS coverage estimates for state health policy.

CPS March Supplement: Background and Purpose

The U.S. Census Bureau has been conducting the CPS for more than 50 years. Its primary purpose is to collect labor force data on the civilian noninstitutional population 16 years of age and older. The CPS is made up of a core basic monthly survey that does not change from one month to the next. In addition to the core CPS monthly survey, several supplemental modules are added to the CPS on an annual, biennial, or intermittent basis. These supplemental modules are used to gather in-depth information on topics such as previous work experience, income, and employee benefits.1

The March CPS Supplement, also called the Annual Demographic Survey, is added to the regular CPS questionnaire each March. It includes questions on income, work experience, and noncash income sources such as food stamps, Medicaid, Medicare, and employer-provided health insurance. The March supplement first included health insurance questions in 1980.2

The sample for the March CPS Supplement consists of the basic CPS sample and an additional sample of Hispanic households. In recent years, about 93 percent of eligible households have provided basic labor force information in the CPS, while 80 to 82 percent of eligible households have completed the March Supplement, which includes the health insurance questions.

CPS Survey Methods

The CPS is a nationally representative household-based survey of approximately 64,990 households.3 The CPS sample consists of independent samples of households in each state and the District of Columbia. Each state’s sample is tailored to the demographic and labor market conditions in that state. Based on the probability of selection, a weight is associated with each household and person record so that estimates of the population by state, race, age, gender, and Hispanic origin match the population projections made by the Bureau of the Census each month.
Sampling PSUs

In the first stage of sampling, the CPS divides states into Primary Sampling Units (PSUs) composed of a metropolitan area, a large county, or a group of neighboring smaller counties. The 3,141 counties and independent cities in the U.S. are divided into 2,007 PSUs. Within each state, PSUs are then grouped with other PSUs that have similar labor force characteristics, such as unemployment rates, number of persons employed in various industries, and average monthly wages for various industries. Among these PSUs, one PSU within each group of similar PSUs in a state is randomly selected for inclusion in the CPS sample. PSUs consisting of major metropolitan areas are always included in the CPS sample. This method of sampling ensures that a state’s CPS sample is representative of the entire statewide population. However, it means that all counties within a state are not included in the CPS sample.

In the second stage of sampling, a sample of housing units is drawn within the selected PSUs. A household unit is in the CPS sample for a total of eight months (four months in the sample, followed by eight months out of the sample, and then another four months in the sample). At least one person from each household is interviewed every month that the household is in the sample, for a total of eight interviews. Each month, the survey consists of the basic survey and supplementary questions scheduled for that month.

Use of In-Person and Telephone Surveys

The CPS surveys are usually conducted as in-person interviews for the first and fifth months that a household is in the sample. Yet 90 percent of interviews in the remaining six months are conducted by phone. The March Supplement, including the health insurance questions, may be asked as part of an in-person interview (in households who are in their first or fifth month of CPS participation, or who do not have a phone) or as part of a phone survey (in households with phones who are in the second through fourth or sixth through eighth months of CPS participation). The majority of March Supplement interviews, therefore, are conducted as phone surveys.

CPS LIMITATIONS FOR STATE POLICY

Sample Size and Sample Frame

In many cases, the CPS cannot be used to make precise sub-state estimates of insurance coverage because of small sample sizes and the fact that the CPS sample does not include all PSUs or counties within each state. For example, it is not possible to make uninsurance estimates for each county or region within a state because many counties are not included in the sample. In addition, for most states it is not possible to make precise estimates for specific population groups defined by age, race, or country of origin because of small sample sizes.

Three-year rolling averages of CPS estimates should be used when reporting health insurance coverage rates for states because of the relatively small CPS sample size within each state. Pooling three years of sample from a specific state reduces the amount of sampling error associated with a specific state coverage estimate by approximately 30 percent. This reduction in sampling error allows an analyst to make more precise estimates of health insurance coverage for a specific state.
CPS Health Insurance Questions

In the selected housing units, respondents are asked whether they and other members of their household had any of several types of private or public health insurance in the previous calendar year. The CPS collects data about employment-based health insurance, individually purchased health insurance, Medicare, Medicaid, military, Veterans Administration, Indian Health Service, and state-specific health programs.

The design of the CPS health insurance questions has raised concerns about their ability to accurately estimate coverage. CPS respondents are asked to recall their health insurance status for the previous calendar year, a period of time that begins 14 to 15 months prior to being interviewed. The long recall period increases the likelihood that respondents will fail to accurately report their health insurance coverage.

The CPS assigns persons who do not respond “yes” to any of the questions about any of the types of insurance to the uninsured category. Consequently, it tends to result in higher estimates of uninsurance, compared to state surveys that specifically ask if a person was uninsured. A new question was added to the March Supplement in 2000 that directly asks respondents if they were uninsured during the previous year. The Census Bureau is currently evaluating this question to assess its potential impact on uninsured estimates derived from the CPS. If the Census Bureau decides to produce uninsured estimates using data from this question, it will also continue to produce estimates based on assigning persons who do not say they have insurance to the uninsured category. Thus, it will still be possible to use the CPS data to analyze trends over time.

CPS respondents are allowed to report more than one type of health insurance coverage. However, it is not clear from the CPS data whether persons reporting multiple types of coverage had the coverage concurrently or at different times during the previous year. This question format does not capture potential gaps in coverage during the calendar year.

The CPS may tend to underestimate public program coverage. Although the CPS includes some state-specific names for Medicaid and major state-based health insurance programs, it does not have an exhaustive list of all the possible types of publicly funded insurance programs for every state. Medicaid under-reporting may be more prevalent in states with Medicaid managed care programs or higher income eligibility thresholds.

In order to correct for under-reporting of public program participation, some researchers recommend that the CPS Medicaid numbers be adjusted to more closely match Medicaid administrative data. For example, the Urban Institute uses a computer simulation model to test for Medicaid eligibility among persons in the CPS sample who do not report having insurance. The number of Medicaid participants in the model is then adjusted so that the size of the resulting Medicaid population matches Health Care Financing Administration administrative data, according to the age and disability status of all persons enrolled in Medicaid in a given year.
Conclusions

Data from the CPS are widely used to estimate health insurance coverage. The CPS estimates are consistent, available on an annual basis, and useful for examining health insurance trends. CPS estimates are also being used to allocate federal funding for the State Children’s Health Insurance Program (SCHIP) to states, and to evaluate the effectiveness of SCHIP in reducing the number of uninsured children.

Despite its flaws, the CPS is the only ongoing survey that provides an annual estimate of health insurance coverage that can be used for national as well as cross state comparisons. States using CPS data should understand the type of information it can provide and how best to present estimates. Recent increases to the CPS state sample size will improve state estimates in the future.\(^7\)

Notes


3 The sample size for March 2001 will be increased to about 99,000 households. See Issue Brief #2 for a discussion of the impact of this change.


7 See SHADAC Issue Brief #2 ”Impact of Changes to the Current Population Survey (CPS) on State Health Insurance Coverage Estimation” for additional information about the potential impact of the changes (www.shadac.org).