kaiser commission on medicaid and the uninsured

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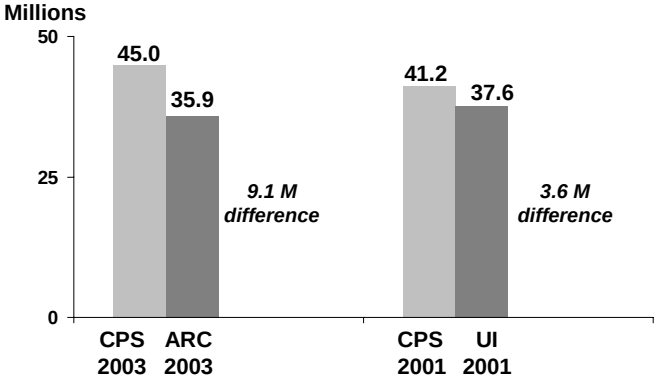
What Is the Current Population Survey Telling Us About the Number of Uninsured?

By Catherine Hoffman and John Holahan

The estimate of the number of uninsured has become one of this nation's leading public health indicators—unique as it is to the United States. Since 1980 the Census Bureau's Current Population Survey (CPS) has produced annual estimates of America's health insurance coverage, as part of a broader purpose of trending personal incomes and employment. Although the CPS' health coverage estimates are the most widely-used, the accuracy of its health insurance measures—in particular, the number of uninsured and those covered by Medicaid—has often been questioned because of discrepancies with other more in-depth health surveys and Medicaid administrative data.

Recently, in an effort to get a better handle on just how many Americans go without health insurance coverage over the course of a year, the Department of Health and Human Services' Assistant Secretary for Planning and Evaluation (ASPE) used two ongoing independent studies. Both assumed that the Census Bureau's survey undercounts the number of people covered by Medicaid, which in turn, could inflate the number of people who are uninsured over the course of a full year. One of the studies concluded that the annual Census Bureau's measure may be over-estimating the number of uninsured by almost four million and the other estimated the overcount to be nine million (Figure 1).

Figure 1



ARC = Actuarial Research Corporation; UI = The Urban Institute
Adjusted for Medicaid Undercount relative to CMS enrollment data
SOURCE: Presentations by CM Callahan and L Giannarelli at AEI conference, April 2005

While the two simulations generated quite different results, they are both useful in raising important issues about how we measure the number of uninsured. This issue brief describes the main concerns with the Census Bureau's CPS health coverage estimates, how analysts have attempted to adjust for problems, and concludes with implications for how the CPS might be enhanced in order to improve the measurement of health insurance coverage.

The Current Population Survey

Interviews for the Current Population Survey are conducted throughout the year, but only in March with the Annual Social and Economic Supplement are people asked to describe their health insurance coverage. The Census Bureau quickly produces an annual report on health insurance coverage just a few months later, usually by late summer or early autumn. At the same time it makes the dataset available to the public for further study.

The most recent estimates, released in August 2004 describing calendar year 2003, showed that the share of Americans with employer-sponsored insurance had again decreased, resulting in an increase in the number of uninsured, now totaling 45 million.

Among the four national surveys that can be used to estimate health coverage, the CPS has the largest sample size. The other three surveys are the Survey of Income and Program Participation (SIPP), the Medical Expenditure Panel Survey (MEPS), and the National Health Interview Survey (NHIS). The CPS'large sample ensures that many social and economic subgroups relevant to health insurance policy can be studied each year. In addition, it is the only federal survey able to provide annual estimates for all 50 states.

Over the years, changes in the CPS' sample design and its health insurance questions have been made. These have improved the annual estimates, but also confound another unique strength of the CPS—the ability to observe trends in health coverage over time.

Problems with the CPS' Health Insurance Estimates

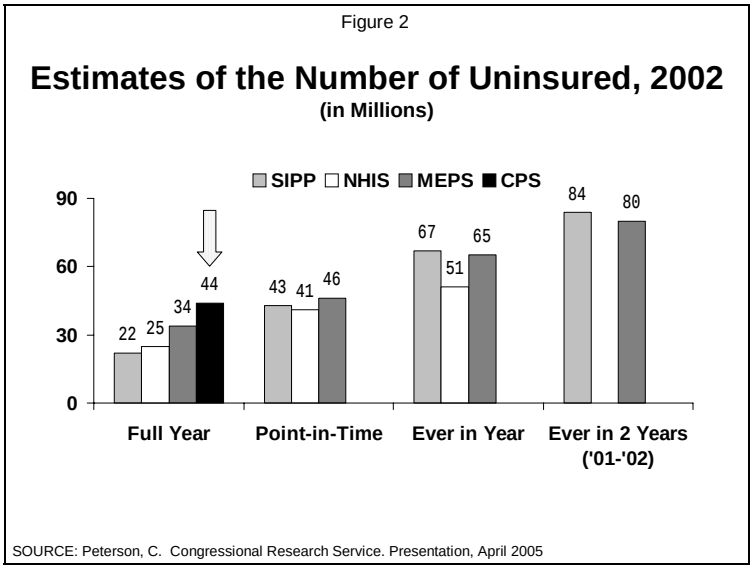
Because the CPS primarily focuses on annual income and employment, individuals are interviewed about their health coverage for the span of a calendar year as well. However, a year is a long period of time to recall, especially if a person's health coverage has changed during that period. The other national surveys have shorter recall periods and some derive their full-year estimates by following the same households over a period of time. The CPS' longer recall period contributes to two well-known problems with its health insurance estimates:

- a likely overcount of the number of people uninsured for the full calendar year and
- an undercount of the number of people who had Medicaid coverage at some point in the previous calendar year.

Estimates of the Uninsured. The CPS asks people about their health coverage over the previous year through a series of questions about group plans, privately purchased plans, and public insurance programs, including Medicaid, the State Children's Health Insurance Program (SCHIP), other state programs, Medicare, and military-related coverage. Since 2000, all those who say "no" to each of these questions have then been asked to verify that they actually were uninsured for the entire year. This should produce an estimate of the number of people uninsured for the full year.

However, when comparing the CPS uninsured estimate with other national surveys' uninsured full-year estimates, it is considerably larger. In fact, closer to the point-in-time, rather than the full-year, estimates they produce (Figure 2). For example, in 2002 the CPS estimate yielded 44 million uninsured, which was 10 to 20 million greater than other national surveys' full-year estimates, and fell within the range (41 to 46 million) of their point-in-time estimates.

Figure 2



SOURCE: Peterson, C. Congressional Research Service. Presentation, April 2005

Because the CPS uninsured number is consistently closer to other national surveys' point-in-time measurements, many analysts believe the CPS estimate actually reflects the average number of uninsured on any given day in a year, rather than the number uninsured throughout the full year. In other words, it combines both those who have been uninsured for the full year and some of those uninsured for shorter periods of time. Estimates that count both the full-year and part-year uninsured (as can be done with the MEPS) tend to approximate the CPS' estimate also, which suggests that the CPS is capturing more people than just those who are uninsured for the full year.

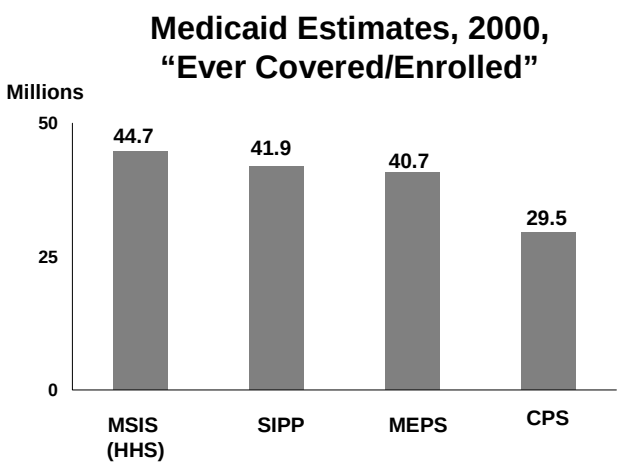
The other federal surveys also provide estimates of the number of people *ever uninsured* over the course of a year and over the course of two years. Both of these estimates produce much larger numbers of uninsured because they count those who have been uninsured for short periods, but have not been without coverage for the full year. In

addition, the chances of identifying more people who have had a brief uninsured spell increases the more years they are asked to recall. Each of the four types of estimates provides a different perspective on the number of uninsured Americans and how long people remain uninsured.

Estimates of Medicaid Coverage. Medicaid estimates from the CPS have been consistently lower than Medicaid enrollment numbers from the Centers for Medicare and Medicaid Services (CMS), as well as other surveys (Figure 3). For example, in 2000 the CMS administrative data counted 45 million people who had been enrolled in Medicaid sometime in the year. Even after adjustments for incomplete responses, the CPS estimated just 30 million persons with Medicaid coverage some time during that year.

Health insurance coverage can be transient and this probably explains much of the survey's Medicaid undercount. Respondents may forget short periods of Medicaid coverage or not know the insurance status of all the members of their household. When a family's situation changes, parents may fail to realize that their children are still covered by Medicaid because of their state's automatic continuous eligibility period for children.

Figure 3



MSIS = Medicaid Statistical Information System
All survey estimates include SCHIP and the "other public" group in the Medicaid total.
SOURCE: Peterson, CL and A Grady. Congressional Research Service Memorandum, March 2005

In addition, when Medicaid coverage is provided through a private HMO, the insurance card itself may have little information indicating Medicaid as the payer and the survey respondent may report private insurance as their source of coverage when Medicaid is financing their care from a private sector managed care plan. Finally, because the low-income population is harder to include in surveys, the CPS may also be under-representing Medicaid-eligible groups.

Although these sources of survey error are significant, there are also reasons to believe that enrollment data provided to CMS by each of the states may not be completely accurate either. Enrollment numbers may be inflated as people's lives change in ways

that affect Medicaid eligibility, for example, their marital status, income, and state residence—factors that may make them no longer eligible yet their names remain on the rolls for a period of time. Duplication in enrollment lists can also occur for many reasons, for example, when children split their time between two separate households.[1] Research conducted by the Urban Institute has also shown that some states' reported enrollment numbers are higher than the number of state residents estimated to be eligible for Medicaid, given the state's income and eligibility standards.[2]

Still, the Medicaid undercount in the CPS raises an important question—if the number of Medicaid beneficiaries was closer to CMS administrative totals, would the number of uninsured be considerably lower?

Adjusting for a Medicaid Undercount. For a number of years the Census Bureau has routinely adjusted their Medicaid estimate upward by assigning Medicaid coverage to those who are generally regarded as "categorically eligible" because they receive other public assistance payments. In calendar year 2001, for example, 23 million people actually reported having Medicaid or SCHIP coverage to surveyors, but after making these adjustments (plus other imputations for missing responses) the Census Bureau's official estimate was 30 million. The Census Bureau believes this adjustment may be growing less valid over time however, because most Medicaid enrollees are no longer cash assistance recipients and the number of people receiving public assistance has been decreasing as a result of welfare reform.

The two independent studies commissioned by ASPE—one by the Actuarial Research Corporation and the other by the Urban Institute—attempted to correct for the Medicaid undercount. They used different methods to determine which CPS survey respondents could be reasonably reclassified as Medicaid beneficiaries and how the uninsured estimate changes when different adjustment methods are applied (Figure 1). Both of these studies used characteristics of Medicaid beneficiaries to reassign uninsured and privately insured respondents to the Medicaid group in order to reach the target Medicaid enrollment number (from CMS data).

The Actuarial Research Corporation analysis applied the demographic profile of self-reported Medicaid beneficiaries from the CPS itself to reassign other respondents to the Medicaid group.[3] By targeting the CMS enrollment data number, the number covered by Medicaid increased by 17 million and the number of uninsured decreased by nearly 9 million. Because so many low-income persons are reassigned to Medicaid in this analysis, the demographics of the uninsured shifted as well, so that after adjusting, the majority of the uninsured no longer were from low-income families.

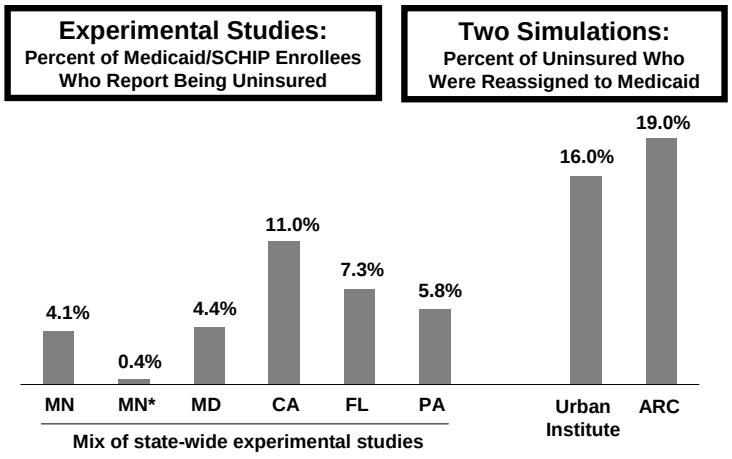
The Urban Institute analysis (part of a larger microsimulation model of taxes, transfer programs, and health insurance referred to as TRIM3) identified who may be eligible for enrollment in Medicaid and SCHIP, taking into account not only personal characteristics, but also state-specific eligibility rules.[4] In their analysis, respondents were reassigned to Medicaid if they met state and federal eligibility criteria until enrollment targets for each beneficiary group in each state were met. By adjusting upward to the Medicaid

enrollment level, the total number of uninsured dropped by 3.6 million compared to the CPS 2001 number.

Limitation of the Studies. These two examples demonstrate how varied methods of adjusting for the Medicaid undercount produce different estimates of the uninsured and can change the profile of the uninsured. Knowing more about who is not reporting Medicaid and SCHIP coverage in the CPS is important to improving the accuracy of its health insurance estimates. Simulations depend on the underlying assumptions about which people have incorrectly responded and their accuracy is highly dependent on the validity of these assumptions.

State-specific studies that compare known Medicaid enrollees' responses to surveys about insurance coverage indicate that both of these simulations may have reassigned too many uninsured people to Medicaid. Medicaid beneficiaries sometimes report having no health insurance in surveys, but do so infrequently. Most Medicaid enrollees who do not report Medicaid as their source of coverage when surveyed, report they have another type of health insurance, not that they are uninsured.[5] As shown in Figure 4, the percentage of Medicaid enrollees who when interviewed in state surveys said they were uninsured ranged from less than 1% to 11%. In contrast, the Urban Institute and ARC analyses reassigned 16 and 19 percent of the uninsured to the Medicaid group, respectively.[5]

Figure 4



*Adults enrolled in MN Medicaid Blue Cross.
SOURCE: K. Call. Conference Presentation: Survey and Administrative Data Sources of the Medicaid Undercount; sponsored by SHADAC and HCFO, May 2005.

While the CPS uninsured number may be inflated as a full-year estimate, it is more likely that those incorrectly reporting being uninsured throughout the year actually had private coverage rather than Medicaid for part of the year. The Census Bureau was able to examine this somewhat when the health insurance verification question was added to the 2000 CPS (when respondents who had not reported any health coverage were then again asked whether they had actually been uninsured for the full year). Comparing the two

estimates—the number of uninsured before and after the verification question was asked—decreased the number of uninsured by 3.3 million people. Of those, 2.9 million reported having private insurance and only about 300,000 said they were covered by Medicaid.[6]

Conclusion

The Census Bureau's Current Population Survey still remains the most widely-used estimate of the uninsured for a number of reasons. It provides annual estimates in a timely way to policymakers and researchers, is based on a sample large enough to study important subpopulations and state health coverage, and provides a long time series.

Results of experimental studies that check the accuracy of survey self-reports against the Medicaid/SCHIP administrative rolls can provide important information to improve the CPS estimates. Currently, a fairly large experimental study in cooperation with the U.S. Census Bureau is underway—matching several states' Medicaid enrollment data to existing Census data files to inform the process of correcting for either over- or under-reporting of Medicaid enrollment.[7]

Adjusting the Medicaid numbers alone will not address what many believe is an over-count of the number of full-year uninsured from the CPS. Shortening the recall period would improve the precision of the estimates. For example, by asking respondents what their insurance coverage is at the time of the interview, the meaning of the estimate would be much clearer and bring the Census Bureau's uninsured estimate even closer to other national surveys' point-in-time estimates. However, it would need to be done in a way that did not affect the validity of other key indicators the survey measures (i.e., annual income and work status).

In summary, the CPS' estimate of 45 million uninsured is most likely an over-estimate of the number of Americans who were uninsured for the full calendar year in 2003. Comparisons with other surveys show that the CPS does not provide a good measure of those who are uninsured for a full year. Rather, the CPS closely approximates the estimate from other surveys of the number of uninsured at a point in time. Thus, it is including both those who are uninsured throughout the full year as well as some of those who are uninsured for shorter periods of time. Stated differently, the current CPS estimate might be thought of as the average number of uninsured on any given day in the year. Thus, while the CPS is likely too high an estimate of those who are uninsured for the entire year, by including those who are uninsured for only part of the year, it probably does provide a reasonable estimate of the size of the public health problem that the nation faces. There is clear evidence that those who are uninsured for part of the year have access to health care problems similar to those who are uninsured for the full year.[8]

It is important to continue to improve the methods of measuring the number of uninsured for there is broad-based agreement that the magnitude of this public health problem is serious and needs to be addressed through health policy reforms. Perhaps even more important to policymaking than the number of uninsured, is knowing who the uninsured are—based on valid and reliable survey data rather than simulated estimates.

This issue brief was authored by Catherine Hoffman of the Kaiser Commission on Medicaid and the Uninsured and John Holahan of The Urban Institute.

ENDNOTES

[1] Davern, Michael. "Nine Million Fewer Uninsured?" Presentation for the American Enterprise Institute Conference, April 8, 2005.

[2] Giannarelli, L, P Johnson, S Nelson, and M Williamson. "TRIM3's 2001 Baseline Simulation of Medicaid and SCHIP Eligibility and Enrollment: Methods and Results; TRIM3 Microsimulation Project Technical Report." 2005 (April). The Urban Institute. Available at http://aspe.hhs.gov/health/reports/05/medicaid-schip-simulation/index.htm.

[3] Callahan, Cathi. "Uninsured, Medicaid and the Current Population Survey." Presentation for the American Enterprise Institute Conference, April 8, 2005. Full report available at http://aspe.hhs.gov/health/05/est.uninsured.

[4] Giannarelli, Linda. "Adjusting for the Medicaid Undercount with the TRIM3 Microsimulation Model." Presentation for the American Enterprise Institute Conference, April 8, 2005.

[5] Call, Kathleeen. "Cumulative Evidence: The Impact of Response Error on Survey Estimates of Uninsurance." Conference Presentation: Survey and Administrative Data Sources of the Medicaid Undercount. Sponsored by SHADAC and HCFO, Washington, DC. May 5, 2005.

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[7] State Health Access Data Assistance Center, University of Minnesota School of Public Health. "Project Summary – Unraveling the Medicaid Undercount." January 2005.

[8] Hoffman, Catherine et al. "Gaps in Health Coverage Among Working-Age Americans and the Consequences." Journal of Health Care for the Poor and Underserved, 12(3), 2001. Schoen, Cathy and C DesRoches. "Uninsured and Unstably Insured: The Importance of Continuous Insurance Coverage." Health Services Research 35(1), Paat II, April 2000. Burstin H et al. "The Effect of Change of Health Insurance on Access to Care." Inquiry 35:389-07 (Winter 1998/99).

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