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Comparing Federal Government Surveys that Count Uninsured People in America

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The number of Americans who don't have health insurance coverage is large and growing over time (see graph two), yet there continues to be debate about exactly how many Americans are uninsured. Researchers use data from several different national surveys to estimate the number of uninsured people and discrepancies in their estimates are common. This brief compares estimates of health insurance coverage from three national health surveys sponsored by the federal government, identifies the differences in their estimates of uninsurance, and identifies three common themes: (1) all the surveys report very large numbers of Americans living without health insurance; (2) all surveys show that these numbers have risen over the decade, particularly for adults; and (3) children's rates of uninsurance declined earlier in the decade, largely due to growth of public programs such as the State Children's Health Insurance Program (SCHIP), but in recent years has stayed steady or grown slightly (depending on the survey).

Federal Government Surveys Used to Measure the Uninsured

The Annual Social and Economic Supplement (ASEC) to the U.S. Census Bureau's Current Population Survey (CPS) produces the most visible estimate of the number of uninsured in the United States. The CPS estimates of health insurance coverage are used to monitor state and national trends in health insurance coverage and to allocate federal funds to states to implement the SCHIP. The CPS data tend to produce estimates of health insurance coverage that differ significantly from other major survey estimates of coverage.¹ These other federal government surveys include the National Health Interview Survey (NHIS) and the Medical Expenditure Panel Survey Household Component (MEPS). This brief does not provide detailed descriptions of the surveys under discussion, but this information is available elsewhere.^{2,3}

These three federal surveys, CPS, NHIS and MEPS, were each designed to collect specific information for different research and policy purposes. The CPS is a monthly labor force survey and the health insurance questions are added at the end of an annual supplement to the monthly questionnaire. Conversely, the NHIS and MEPS are designed specifically to collect health information from the U.S. population. Collecting information on health insurance coverage, the type of coverage, and lack of coverage are higher priority questions in these surveys.

Comparison of National Estimates from Different Federal Surveys

Table 1 shows the differences between the national-level estimates from the three major federal surveys that measure health insurance coverage for 2005 (the most recent year available across all sources), for people under 65 years of age. The CPS provides the highest estimate of the number of people without health insurance coverage for the entire year at 44.4 million people and NHIS produces the lowest at 29.0 million.

TABLE 1: Trends among the Surveys in the Number of People under 65 Years of Age Who are Uninsured for Entire Year and Point-in-Time (in millions): 2005

Survey	Uninsured for the Entire Year	Uninsured at a Specific Point-in-Time
CPS	44.4	N/A
NHIS	29.0	41.0
MEPS	34.8	49.8

Source: Current Population Survey, 2006 with estimates tabulated by the State Health Access Data Assistance Center; Cohen et al., Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, 2007; MEPS-HC on-line tables Table 5 and 5.a. (2005), http://www.meps.ahrq.gov/mepsweb/data_stats/quick_tables_results.jsp?component=1&subcomponent=0&year=2005&tableSeries=4&searchText=&searchMethod=1&Action=Search

The range of the point-in-time estimates is much smaller (from 41.0 to 49.8 people) relative to the full-year estimates. The fact that the CPS full-year uninsured estimate falls within the range of the other two surveys' point-in-time estimates makes it tempting to interpret the CPS estimate as actually a point-in-time measure; however, the CPS does not produce an official point-in-time estimate.⁴ Treating the CPS as a point-in-time measure rather than a full-year uninsured measure can lead to vastly different estimates of the size of important policy-relevant groups such as the number uninsured people who are eligible for public health insurance coverage. This partially explains variations in estimates of the number of eligible but uninsured kids in the U.S.⁵

Reasons for the Discrepancies

Researchers have suggested many explanations for why health insurance estimates differ across surveys. We explore several of the most important possible explanations below.

REFERENCE PERIOD

The CPS asks respondents if they had health insurance coverage at any point in the last calendar year. Since these respondents are typically interviewed in February or March, they are expected to remember coverage they had up to 15 months prior to the interview. The NHIS and MEPS surveys, on the other hand, have a much shorter recall period as well as a point-in-time measure. As a result, CPS respondents tend to have more recall error (e.g., they forget about coverage they may have had and they may report coverage they have at the time of the interview rather than the prior calendar year).⁶

MISREPORTING BY RESPONDENTS AND THE MEDICAID UNDERCOUNT

Misreporting of uninsurance by Medicaid enrollees is a major concern for policy-makers. Misreporting can impact uninsurance estimates in two ways: those with insurance may falsely report they are uninsured and those without insurance may mistakenly report they have insurance.

In comparison to administrative data (e.g., Medicaid enrollment records), most surveys undercount the number of people thought to be enrolled in Medicaid. Researchers speculate that this could be due to a variety of factors such as underreporting of Medicaid coverage due to social stigma, lack of awareness of eligibility, or confusion about the type of coverage respondents have (e.g., Medicare or Medicaid).⁷ The extent to which uninsurance estimates are overestimated varies by the reference period — the longer the recall period, the more likely a known Medicaid enrollee will erroneously report being uninsured. The CPS, with its long reference period, demonstrates the most significant amount of recall error for Medicaid enrollees reporting being uninsured. Other surveys that measure point-in-time coverage, which lacks a recall period, have modest upward bias to uninsurance estimates.⁷

DIFFERENCES IN HANDLING MISSING DATA

Data processing prior to estimation of coverage rates accounts for some of the discrepancy between the CPS and the other surveys. Between 10 and 15 percent of the CPS sample is missing health insurance data and the Census Bureau imputes (or estimates) these missing values. Recent research shows that the Census Bureau's method for imputing health insurance coverage may lead to an undercount of people with employer-sponsored coverage and result in an overestimate of the number of people who are uninsured.⁸ By contrast, the other surveys have very little missing health insurance coverage data and, therefore, fewer cases to impute.

DIFFERENCES IN DATA EDITING

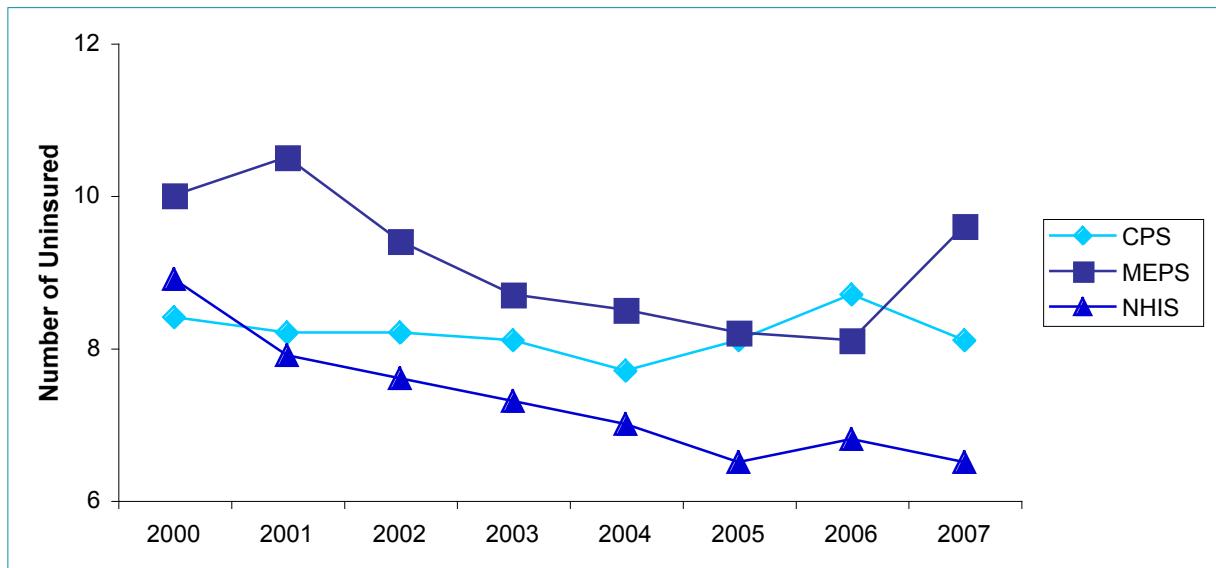
The NHIS is the only survey that collects detailed verbatim responses on health insurance coverage and analysts use this information to help edit the reported health insurance data. They use verbatim reports of plan names and descriptions to determine if the reported health insurance is public or private insurance, or if the coverage reported is not actually comprehensive health insurance coverage (e.g., Indian Health Service, Veteran's Administration or single service plan coverage, serious and dread disease, workers' compensation, accident and disability policies).⁹ This recoding of health insurance mainly affects estimates of private insurance coverage (which decrease) and uninsurance (which increase), as many people who report private health insurance coverage are edited to be uninsured. For example, these data edits increased the NHIS uninsurance rate from 15.6 to 16.8 percent in 1998.¹⁰

Conclusion

The number of uninsured in the U.S. will never be exactly determined. Surveys produce different estimates because they each handle complex survey and estimation issues in slightly different ways. While research can focus on improving surveys and estimation methodologies, we still are left with just that: estimates. Nonetheless, these surveys are the only tools available to estimate the number of uninsured. The bottom line is that there are tens of millions of uninsured people in this country. The number of uninsured adults has recently declined after a pattern of increases this decade. The number of uninsured children declined earlier in the decade, but in recent years has stayed steady or grown slightly.

Graph 1 shows estimates of children under 18 years of age in America who are uninsured for an entire year from the CPS and the point-in-time estimates from MEPS and NHIS. The individual estimates vary for reasons discussed previously, yet they all show similar trends. The number of uninsured children shows a drop in all the surveys from 2001-2004 while the number of uninsured adults is increasing rapidly in all three surveys (see Graph 2). For children, the CPS and MEPS surveys show a recent trend toward growing rates of uninsurance through 2006, while the CPS and NHIS show the number decreasing in 2007 (with the MEPS showing an increase). As detailed analyses have demonstrated elsewhere, the decrease in coverage among adults is mainly due to dropping private health insurance coverage. For children over this time frame, there has been both an increase in the number enrolled in public programs and a decrease in the number enrolled in private coverage, so the overall number of uninsured has not changed significantly or dropped slightly.¹¹ Focusing on the differences and methods used to produce those numbers is important, but should not distract policy-makers from the need to address issues of cost and access for those without health insurance coverage in the United States.

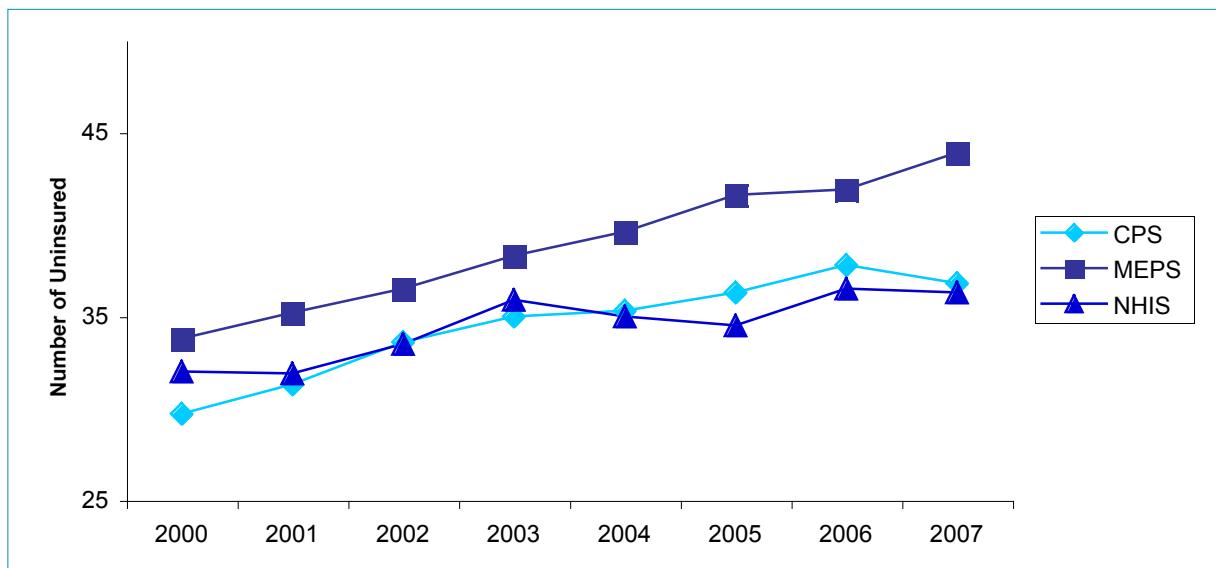
GRAPH 1: Trends among the Surveys in the Number of Children (under 18 years) Who are Uninsured for Entire Year (CPS) and Point-in-Time (MEPS and NHIS) (in millions)



Note: Slightly new methods were imposed in the NHIS and CPS 2005 uninsured estimates, resulting in fewer uninsured.

Current Population Survey, 2001-2008 with estimates tabulated by the State Health Access Data Assistance Center; Cohen et al., Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, 2007; and MEPS-HC on-line tables, Table 5 (multiple years), http://www.meps.ahrq.gov/mepsweb/data_stats/quick_tables_results.jsp?component=1&subcomponent=0&year=2005&tableSeries=4&searchText=&searchMethod=1&Action=Search

GRAPH 2: Trends among the Surveys in the Number of Adults (18-64 years of age) Who are Uninsured for Entire Year (CPS) and Point-in-Time (MEPS and NHIS) (in millions)



Note: Slightly new methods were imposed in the NHIS and CPS 2005 uninsured estimates, resulting in fewer uninsured.

Current Population Survey, 2008 with estimates tabulated by the State Health Access Data Assistance Center; Cohen et al., Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, 2007; and MEPS-HC on-line tables, Table 5 (multiple years), http://www.meps.ahrq.gov/mepsweb/data_stats/quick_tables_results.jsp?component=1&subcomponent=0&year=2005&tableSeries=4&searchText=&searchMethod=1&Action=Search

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