COMPARING FEDERAL GOVERNMENT SURVEYS THAT COUNT UNINSURED PEOPLE IN AMERICA

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The number of uninsured Americans is large and growing over time, 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 in America and discrepancies in their estimates are common. This brief compares estimates of health insurance coverage from three national surveys sponsored by the federal government, identifies the differences in their estimates of uninsurance, and identifies two common themes: (1) all the surveys report very large numbers of Americans living without health insurance, and (2) all surveys show that these numbers have risen over time.

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 are used to allocate federal funds to states to implement the State Children’s Health Insurance Program. The CPS data tend to produce estimates of health insurance coverage that differ significantly from other survey estimates of coverage. The other federal government surveys include the National Health Interview Survey (NHIS) and the Medical Expenditure Panel Survey Household Component (MEPS). Detailed descriptions of these surveys are available elsewhere.

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 CPS. Conversely, the NHIS and MEPS are designed specifically to collect health information from the US population. Collecting information on health insurance coverage, the type of coverage, and lack of coverage are high 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 2004 (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 45.5 million people and NHIS produces that the lowest at 28.9 million.
The range of the point-in-time estimates is much smaller (from 39.6 to 48.1 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.4 Treating the CPS as point-in-time measure versus an all year uninsured measure can lead to vastly different estimates of the size of important policy relevant like groups the number of people eligible but enrolled in public health insurance coverage (this partially explains the vastly different numbers from two teams of Urban Institute researchers of the number of the eligible but uninsured kids in the United States (See Hudson and Selden 2007 for a discussion)).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
CPS respondents are expected to remember coverage they had up to 15 months prior to the interview, whereas the other national surveys have a much shorter recall period and a point-in-time measure as well. 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 of 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, 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 enrollment, 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 say they are uninsured. The CPS with its long reference period demonstrates the most significant amount of recall error with Medicaid enrollees reporting they are uninsured. Surveys using point-in-time measures of coverage result in modest upward bias to uninsurance estimates.7

<table>
<thead>
<tr>
<th>TABLE 1:</th>
<th>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): 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Uninsured for the Entire Year</td>
</tr>
<tr>
<td>CPS</td>
<td>45.5</td>
</tr>
<tr>
<td>NHIS</td>
<td>28.9</td>
</tr>
<tr>
<td>MEPS</td>
<td>34.4</td>
</tr>
</tbody>
</table>

Source: CPS Estimates were 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, June 2007; and MEPS-HC on-line tables (http://www.meps.ahrq.gov/mepsweb/data_stats/quick_tables_results.jsp?component=1&subcomponent=0&year=-1&tableSeries=4&searchText=&searchMethod=1&Action=Search)
Second, while some people with coverage may report that they are uninsured, it is also possible
that some uninsured people report having coverage. There are two likely reasons for these false
reports. First is the tendency of respondents to choose a socially acceptable response. Having health
insurance is a socially acceptable answer, and uninsured people may feel pressure to answer “yes”
to having coverage. Second, coding errors favor a report of coverage as it only takes one positive
response to a type of health insurance for a respondent to be considered insured. It is possible that
any errors due to underreporting are offset somewhat by the potential corresponding tendency to
falsely report coverage.

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 are 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. 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, Veterans Administration or single service plan coverage, serious and
dread disease, workers’ compensation, accident and disability policies. This recoding of health
insurance mainly affects estimates of private insurance coverage (which drop) 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.

Conclusion

The number of uninsured in the US will never be exactly pinned down. 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 used to produce better
estimates, we still are left with just that: estimates. The bottom line is that there are tens of millions
of uninsured people in this country. The number of uninsured over this period has held steady for
children under 18 (the exception being a significant increase in the CPS in 2006), but for adults age
18-64 the number continues to grow at a steady rate.

Figures 1 and 2 show estimates of the number of people 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 do
vary for reasons discussed above, yet they all show similar trends. The number of uninsured children
is generally holding steady (with the exception being a significant increase in the CPS in 2006) (see
Figure 2) while the number of uninsured adults is increasing rapidly in all three surveys. 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 as dramatically. 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.
Figure 1: Trends among the Surveys in the Number of Children Under 18 Years of Age Who are Uninsured All Year (CPS) and at a Point in Time (MEPS and NHIS) (in millions)

Figure 2: Trends among the Surveys in the Number of Adults 18-64 Years of Age Who are Uninsured all Year (CPS) and at a 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.

Acknowledgements

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References


3 Other surveys also provide national estimates but are not conducted by the federal government such as the Community Tracking Survey and the National Survey of America’s Families. The Behavioral Risk Factor Surveillance System is conducted by the federal government and contains health insurance coverage estimates however in many states children are excluded.


