Making Sense of Recent Estimates of Eligible but Uninsured Children

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As Congress reauthorizes the State Children’s Health Insurance Program (SCHIP), accurate estimates of the number of children who are eligible for Medicaid and SCHIP but remain uninsured are critical for policy and budget development. Weighing in on this topic in a letter to Senator Baucus, the Congressional Budget Office (CBO) concluded that there are between 5 and 6 million children who are uninsured and eligible for Medicaid and SCHIP (Orszag 2007). CBO’s assessment is in sharp contrast to estimates released recently by the Bush Administration that indicating there were only 1.1 million eligible but uninsured children (USHHS 2007; Finegold and Ginnarelli 2007).

This brief describes the methodologies underlying the two sets of estimates that have been at the center of the controversy and relied on the Annual and Social Economic Supplements to the Current Population Survey (CPS). The first set of estimates was produced by researchers in the Urban Institute’s Health Policy Center for the Robert Wood Johnson Foundation and the Kaiser Commission on Medicaid and the Uninsured. The second set was produced by researchers in the Urban Institute’s Income and Benefit Policy Center under contract with the Assistant Secretary for Planning and Evaluation at the Department of Health and Human Services. The following sections describe the two sets of studies, compare their methodologies, and close with implications for policy.
The Studies

In a November 2006 *Health Affairs* article, Dubay, Holahan, and Cook (2006), of the Urban Institute’s Health Policy Center, used the Current Population Survey (CPS) to produce a point-in-time measure of the number of uninsured children eligible for Medicaid or SCHIP in 2004. They estimated that there were 5.4 million eligible but uninsured children in 2004, after adjusting for the under-reporting of Medicaid on the CPS. Subsequent analyses based on these data reported that 3.7 million were eligible for Medicaid and 1.7 million were eligible for the SCHIP in 2004 (Figure 1) (Holahan, Cook and Dubay 2007; Kenney and Cook 2007).

Dubay, now at the Johns Hopkins Bloomberg School of Public Health, has also generated estimates that do not account for the under-reporting of Medicaid enrollment that is reflected in the CPS data; these unadjusted data indicate that 6.1 million uninsured children were eligible for coverage, with 4.4 million eligible for Medicaid and 1.7 million eligible for SCHIP in 2004 (Dubay, Guyer, Mann and Odeh 2007). These estimates each...
stem from a consistent eligibility simulation model; the remainder of this brief focuses on the estimates produced in Holahan, Cook, and Dubay.

On June 17, 2007, the Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (HHS/ASPE) released estimates of the number of children who are eligible for Medicaid or SCHIP. This study finds that there were 1.1 million children uninsured for a full year eligible for Medicaid and SCHIP in 2003/2004. Developed by Finegold and Ginnarelli, researchers from the Urban Institute’s Income and Benefits Policy Center, the Administration estimates indicate that there were 257,000 Medicaid eligible uninsured children and 794,000 SCHIP eligible children uninsured for a full year. These estimates were derived from the Current Population Survey (CPS) and relied on the Transfer Income Model, Version 3 (TRIM3) to simulate eligibility and adjust for the under-reporting of Medicaid coverage on the CPS.

Why Do These Estimates Differ?

The strategies employed by the two sets of researchers to address long documented problems with the CPS are at the root of the differences between the two analyses. Over the years, questions have been raised as to whether CPS estimates of insurance coverage reflect coverage during the past year and consequently being uninsured for the whole year, as the survey is designed, or rather reflect insurance coverage and uninsurance at a point-in-time (Swartz 1986; Short 2001; Congressional Budget Office 2003; DeNavas-Walt, Proctor and Lee 2006; Orszag 2007). In addition, under-reporting of Medicaid coverage on the CPS relative to administrative data has been extensively documented (Call et al. 2006; Call et al. 2007). However, no definitive study
exists regarding the extent and source of such under-reporting and how administrative
data and survey data should be reconciled. Each of these issues and the strategies the two
sets of researchers used to address them lead to the divergence in results.

**Time Period Reflected by CPS Estimates**

The CPS is the most frequently cited national survey on health insurance for
Americans and was the basis for setting SCHIP allotments when the program was
implemented. The CPS has both strengths and weaknesses. Its strengths include that it is
fielded annually, has samples that are fairly large, is conducted in person, has a high
response rate, and has excellent income data. Despite the utility of the CPS, many
experts have questioned whether the CPS is measuring the uninsured for the entire year
as intended, or whether responses more closely reflect the uninsured and those with other
coverage at a point-in-time (KCMU 2006). This distinction matters when estimating the
number of uninsured children because insurance coverage often changes during the
course of a year. More children may be without coverage at a point-in-time during the
year or over the course of a year than are uninsured for the entire year.

The way in which the CPS asks individuals to respond about their insurance
coverage would seem to lead to an estimate of the number of uninsured for all of the
previous year. However, comparisons to other surveys thought to more reliably measure
health insurance coverage suggest that the number of individuals without coverage is
much closer to point-in-time estimates and well above full year estimates (Swartz 1986;
Short 2001; Congressional Budget Office 2003; Orszag 2007). In fact, the Census
Bureau commented on this in its most recent release, stating that CPS estimates of the
uninsured more closely align with other national surveys’ point-in-time estimates (DeNavas-Walt, Proctor and Lee 2006).

Estimates of the number of uninsured children from the 2004 Medical Expenditure Panel Survey (MEPS) can be used to illustrate this issue. The MEPS is thought to produce a more reliable estimate of uninsurance than the CPS because it surveys respondents over the course of a year, requires a shorter recall period, and can produce both point-in-time and full year uninsurance rates (Congressional Budget Office 2003). Moreover there does not appear to be a Medicaid undercount on the MEPS (Congressional Research Service 2007). Using data from 2004, estimates from the MEPS indicate there were 8.5 million children under age 18 uninsured at any given point-in-time and 4.7 million children uninsured for the full year (Rhoades 2005; Rhoades 2006). In contrast, estimates from the CPS indicate that there were 8.3 million children under 18 uninsured for the full year, estimates that are much closer to the MEPS point-in-time estimate than the full year estimate.

The estimates produced by the Dubay, Holahan, and Cook assume that the CPS is representing a point-in-time estimate and interpret the data as such. In contrast, the estimates produced by the Administration assume that CPS data represent a full-year uninsured concept. This choice also has implications for how the two teams correct for the Medicaid undercount.

**Adjustment for the Medicaid Undercount**

It has long been noted that the number of people reporting Medicaid on the CPS falls short of the number that states report in administrative data that they enroll (Call et

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1 In contrast to the CPS, the MEPS sample size is smaller and the MEPS cannot be used to generate state specific estimates.
al. 2006; Call et al. 2007). This issue often is referred to as the Medicaid “undercount.” Designed as a fiscal reporting system, Medicaid and SCHIP administrative data serve an important accounting purpose and are especially useful for examining trends in Medicaid and SCHIP coverage over time. However, there is no reason to believe that individual reports of coverage in the CPS should be identical to administrative data for a variety of reasons (Call et al. 2006; Call et al. 2007; Klerman et al. 2005).

In particular, children can be counted in the administrative data as being in both Medicaid and SCHIP in a given year; they may be in one program in some months and in the other program in other months, if family income has changed. In addition, continuous eligibility means that the administrative data may count children who have obtained private coverage while still enrolled in Medicaid. In other words, the same children may show up more than once in the administrative data, or in both the administrative data for Medicaid and the CPS data for children with private coverage. Yet another problem is that use by states of the presumptive eligibility option means the administrative data may include some children who were never granted full program eligibility. Supporting these concerns, there is evidence to suggest that some of those who report being uninsured on surveys such as the CPS, but who are classified as having Medicaid coverage have service-use patterns that are consistent with being uninsured.

Moreover, the share of children who report Medicaid or SCHIP coverage on the CPS relative to “average-monthly” counts of enrollment from administrative data varies tremendously across states relative to the national average of 77 percent. In Colorado and Tennessee, CPS reports of Medicaid or SCHIP coverage for children account for 47 and 57 percent of the administrative enrollment totals, respectively. In Wisconsin, Utah,
and Montana, more children reported having Medicaid and SCHIP coverage than are counted in the administrative totals. Similar patterns no doubt exist for the “ever-on” enrollment counts. While some of this variation may be due to differences in parent’s reporting patterns across states, it is more likely due to disparities in administrative data systems and policies across the 50 states and the District of Columbia.

Assuming that the CPS represents a point-in-time estimate of coverage, the Dubay, Holahan, and Cook team adjusted the CPS to “average monthly” enrollment counts from the administrative data. Acknowledging the potential for over-counting of enrollment on the administrative data, the authors adjust the CPS to half of the difference between the CPS estimates and the administrative totals drawing one-third of the population from the uninsured and two-thirds from those with employer-sponsored coverage. As a result, the analysis alters the CPS to increase the number of Medicaid and SCHIP covered children by 3.0 million and reduces the number of uninsured and

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2 Author’s tabulation of administrative data and CPS for 2004.
privately insured children by 1.0 million and 1.8 million respectively (Figure 2). The end result is an estimate of 5.4 million eligible but uninsured children, 3.7 million who are Medicaid eligible and 1.7 million who are SCHIP eligible at point-in-time during the year.

In contrast, the Administration’s estimates make the assumption that the administrative data represent the standard to which survey data should be adjusted. In addition, since they interpret the CPS as representing coverage at any point in the past year, CPS estimates of the number of children with Medicaid must be adjusted upward to match the annual “ever-on” administrative data. As a result, the Administration’s analysis creates an additional 12.4 million children with Medicaid coverage relative to the number reported in the CPS. This is achieved by reclassifying as enrolled in Medicaid 7.4 million children whose parents report having private or other coverage and 5 million children whose parents report them being uninsured. As a result of the large adjustment that must be made to match the “ever-on” enrollment counts, virtually all Medicaid eligible children reported to have private coverage are forced to report having both Medicaid and private coverage and almost all uninsured Medicaid eligible children are simulated to be enrolled. The Administration’s final estimate is that there are 1.1 million eligible children uninsured for the entire year, of which 0.3 million are Medicaid eligible and 0.8 million are SCHIP eligible.

The insurance distribution from which the undercount was drawn was based on data from Call et al. (2002), Call et al. (2006), Call et al. (2007).

Moreover, individuals who are not simulated to be eligible for Medicaid or SCHIP are not allowed to retain the public coverage that they report (923,000 children). In other words, close to a million children whose parents report they are enrolled in Medicaid are reclassified as not having Medicaid in the CPS under the Administration’s estimates. This decision is significant because it results in an even larger mismatch between the number of children enrolled in Medicaid according to the CPS (as modified by the Administration’s researchers) versus state administrative data. As a result, the Administration’s researchers must reclassify an even larger number of low-income uninsured children as being enrolled in Medicaid to match the administrative data.
Comparisons to other Evidence

Analysis done by researchers at the Agency for Health Care Research and Quality using the MEPS provides additional evidence on the extent of eligible but uninsured children and provides a frame of reference for the two sets of estimates discussed here. As mentioned previously, the MEPS has a number of advantages relative to the CPS in producing national estimates including substantially lower under-reporting of Medicaid and its ability to produce estimates of uninsurance at both a point-in-time and for a full year (CBO 2003). Table 1, adapted from Peterson (2007), compares estimates produced using the MEPS with the estimates produced using the CPS.

Table 1
Estimates of Eligible but Uninsured Children

<table>
<thead>
<tr>
<th>Model</th>
<th>Data, Year, Adjustments</th>
<th>Uninsured at Point-in-time</th>
<th>Uninsured Entire Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holahan, Cook, and Dubay (2007) Appendix 1</td>
<td>2004 CPS Adjustment for undercount up to “average monthly” enrollment counts and non-citizen eligibility</td>
<td>Eligible for Medicaid: 3.7 Eligible for SCHIP: 1.7 All Eligible: 5.4</td>
<td></td>
</tr>
<tr>
<td>TRIM (HHS)</td>
<td>2003/2004 CPS Adjustment for undercount up to annual “ever-on” enrollment counts and non-citizen eligibility</td>
<td>Requested from HHS but not received.</td>
<td>Eligible for Medicaid: 0.3 Eligible for SCHIP: 0.8 All Eligible: 1.1</td>
</tr>
<tr>
<td>KIDSIM (AHRQ)</td>
<td>2004/2005 MEPS No adjustment needed for undercount Adjustment for non-citizen eligibility</td>
<td>Eligible for Medicaid: 3.7 Eligible for SCHIP: 1.7 All Eligible: 5.4</td>
<td>Eligible for Medicaid: 1.8 Eligible for SCHIP: 0.9 All Eligible: 2.7</td>
</tr>
</tbody>
</table>

The estimates produced by the Dubay, Holahan, and Cook team that adjust for the undercount produce point-in-time estimates that are identical to those produced using the MEPS. The estimates produced with the TRIM model for the Administration are quite similar to the MEPS estimate of children eligible for SCHIP and uninsured for an entire year. However, they are significantly lower than the comparable numbers for Medicaid eligible children. Relative to the MEPS data, the Administration’s estimates appear to understate the number of children eligible for Medicaid but uninsured for a full year by a factor of 6 and children eligible for Medicaid and SCHIP but uninsured for a full year by a factor of 2.5. This large difference for Medicaid eligible children and subsequently the overall estimate raises serious questions about the validity of the Administration’s methodology.\(^5\)

**Conclusion and Policy Implications**

Dubay, Holahan, and Cook, researchers at the Urban Institute’s Health Policy Center and the Johns Hopkins Bloomberg School of Public Health, use the CPS to produce estimates of 5.4 million eligible but uninsured children at a point-in-time. Their estimates draw on the current consensus regarding what the CPS health insurance measures represent, evidence from the peer-reviewed literature on the extent and source of the Medicaid undercount, and expert judgment regarding the strengths and weaknesses of the administrative data. In contrast, the estimates of 1.1 million eligible children uninsured for the entire year produced for the Administration run counter to widely accepted evidence regarding what insurance measures of the CPS reflect, as well as, previously published evidence on the undercount. Moreover, by relying on the

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\(^5\) Requests for point in time estimates produced using the TRIM model were made by the Congressional Research Service and the author but have not been received.
administrative data as the “gold-standard” to which the CPS should be adjusted, the Administration’s analysis overstates Medicaid coverage of children and results in an undercount of children without coverage.

Putting aside the questions on whether the estimates released by the Administration accurately represent the number of children who are uninsured for the full year, these estimates are not appropriate for generating budget estimates for SCHIP reauthorization. Estimates of full-year uninsurance provide an incomplete portrait of uninsured children. Data from the MEPS indicate that full-year uninsurance estimates for children understate point-in-time estimates by a factor of 1.5 and understate estimates of ever uninsured in the past year by a factor of 2.4. Similarly, evidence produced by Sommers (2005), using two consecutive years of the CPS, indicates that 3 million children who were covered by Medicaid in the first year were uninsured in the next, despite appearing to still be eligible for the program suggesting that many children may face partial years of uninsurance. Point-in-time estimates include both children who were uninsured for a full year but also those that were uninsured for just some part of the year. Consequently, it is point-in-time estimates of uninsurance that are relevant to the budget and policy decisions that need to be made under SCHIP reauthorization.

In a recent analysis of this issue, the Congressional Budget Office indicated that the number of uninsured Medicaid and SCHIP eligible children at a point-in-time is between 5 and 6 million and acknowledged that point-in-time estimates are what needed for policy considerations and budgeting purposes. The Administration’s estimates are not consistent with the previous peer-reviewed evidence on the topic of uninsured but eligible children, and are also not relevant to the process of SCHIP reauthorization where
legislators need to understand the potential impact of initiatives to enroll eligible children and the extent of the problem of uninsured eligible children that remains.

This brief was prepared by Lisa Dubay of the Johns Hopkins Bloomberg School of Public Health. Conclusions or opinions expressed in this report are those of the author and do not necessarily reflect the views of the Kaiser Family Foundation.
REFERENCES


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