



Changes in Health Care Financing & Organization (HCFO)

findings brief

The Medicaid Undercount: Real or Perceived Bias in Estimates of Coverage in General Population Surveys?

key findings

- Population surveys that collect point-in-time coverage information do a good job of measuring and determining those with and without health insurance.
- The small amount of bias created by an undercount among Medicaid enrollees does not greatly undermine the validity of estimates of the uninsured or the policies resulting from that information.

Policies to cover the uninsured rely in large part upon the accuracy of estimates of this population. However, estimates of those uninsured can vary by data source due to variations in the definition of coverage, time frame differences, and recall bias and confusion by individuals about their insurance status. Some research supports a general assumption that population surveys, a critical data source, may in fact undercount the number of individuals with Medicaid coverage, which in turn can bias estimates of uninsurance.¹ Administrative data, considered to be the “gold standard” in terms of accuracy of enrollment counts, has limitations as well. These include the potential for duplicate enrollment in programs and the potential for ambiguity about enrollment status. The discrepancy between survey estimates and administrative counts is assumed to lead to an overestimate of the number of uninsured and, therefore, a disconnect between the real needs of a state’s residents and the allocation of resources to develop programs to address those needs. For state policymakers who monitor the dynamics of health insurance coverage, estimate costs of

public programs, and develop outreach and coverage initiatives, complete and accurate data are critical.

Kathleen Thiede Call, Ph.D., and colleagues at the University of Minnesota tested the undercount assumption. They examined responses from Minnesota Medicaid enrollees about their coverage status and found that most individuals knew whether they had public coverage, although there was some uncertainty about the exact program. Although some enrollees did indeed report they had no coverage, the researchers concluded that in fact there was only a small biasing effect resulting from an undercount of the Medicaid population. Accordingly, the estimate of the number of uninsured was generally on target, rather than biased significantly upward. In a HCFO-funded study, Call and her team replicated their analysis in three additional states, California, Florida, and Pennsylvania. In addition, they conducted an analysis of administrative data collection processes (administrative data case study) through which the researchers examined the potential sources of discrepancy in



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counts of the number of Medicaid enrollees in administrative records.

“We were interested in what the results would show in states with different populations, different health insurance programs, and different population survey designs,” says Call. “If in fact the Medicaid undercount was responsible for biased estimates beyond Minnesota, we wanted to explore whether states should consider making adjustments to their survey estimates. If the undercount assumption was not reliable, adjusting estimates of the uninsured might not be necessary or advisable. We knew that the findings could have very significant implications for policymakers using survey data to make coverage decisions on behalf of state residents, including allocations for SCHIP. Finally, we wanted to gain a better understanding of accuracy of the various data sources, since administrative data on Medicaid enrollment is generally assumed to be more accurate than survey data. We wanted to examine administrative data systems and processes to determine whether there was something inherent in this data source that contributes to the discrepancy in Medicaid enrollee counts.”

Background and Analysis

In collaboration with those conducting population surveys in each of the three states, the researchers conducted phone surveys of known public program enrollees to see how they responded to questions about health insurance coverage (the Medicaid Undercount Experiment or MUE). The implications of any measurement error among MUE respondents could then be considered when evaluating uninsurance estimates based on each state’s Household Survey (SHS). The two surveys (MUE and SHS) had similar structures and were administered at the same time by the same interviewers to ensure comparable results. “In fielding the MUE survey,” notes Call, “our goal was to determine if Medicaid or other public program recipients, who might be confused about their insurance status, reported no coverage.” This negative response could lead to an overestimate of the number of uninsured reported in the SHS.

As part of the administrative data case study, the researchers examined how administrative data are collected, verified, maintained, updated, and used. They conducted site visits to each of the three replication states, where they conducted key informant interviews and review of enrollment data.

Results

Medicaid Undercount Experiment

The researchers found that upwards of 80 percent of enrollees accurately reported their coverage in the Medicaid program, and many of those failing to report Medicaid coverage, reported that they had another form of public or private insurance. In addition, they determined that even when a moderately large percentage of Medicaid enrollees misreported having no coverage (e.g., 10 percent of enrollees in California), this does not translate to a large upward bias of the number of uninsured.

Administrative Data Case Study

The researchers identified several broad programmatic, structural, and data management sources of potential overcounts and undercounts of Medicaid enrollment in administrative data. For example, they found that various features of a variety of Medicaid programs, may contribute to inaccurate enrollment counts. The sheer complexity of the varied eligibility categories and enrollment periods within Medicaid programs contributes to the difficulty in formulating a count that is comparable to a count that would be derived from a population survey. Although further inspection of administrative counts of enrollment and care in developing the appropriate enrollment count comparison is in order, in the end, the researchers were convinced that much of the Medicaid undercount is caused by survey reporting error.

Study Limitations

The researchers were aware when launching their study that states could challenge findings which called into question traditional methods of making adjustments to address a Medicaid undercount in population surveys. To allay these concerns, the researchers vetted their findings with analysts at a variety of institutions.

The researchers concluded that their findings were not generalizable to all survey formats. In particular, they found that their results were not easily generalizable to the Current Population Survey (CPS), which inquires about coverage in the prior calendar year, rather than point in time or current coverage collected in state surveys.

Finally, the researchers pointed out the challenges associated with establishing partnerships with officials in the three replication states, accessing administrative data, and working with primary data from those three very diverse states.

“Overcoming those multi-state challenges and achieving a positive collaboration with a variety of stakeholders within each of the three states was as satisfying as generating study results,” remarked Call.

Implications for Policy and Practice

Call noted that population surveys that collect point in time coverage information do a good job of measuring and estimating those with or without health insurance; they do less well at estimating enrollment in specific types of coverage. “What we learned,” says Call, “is that low-income, unemployed and disabled enrollees, parents reporting for child enrollees, and those with comprehensive rather than more limited Medicaid benefits were consistently more likely to correctly report their Medicaid coverage status than others surveyed.”

Call’s findings suggest that given the limited bias in estimates of uninsurance in population surveys that collect current health insurance coverage information, policymakers should not be overly concerned or create disproportionate corrections. “Ultimately,” says Call, “policymakers should be comfortable with using data from population surveys. The small amount of bias created by an undercount among Medicaid enrollees does not greatly undermine the validity of estimates of the uninsured or the policies resulting from that information.”

Call notes that “in replicating the Minnesota analysis across the three additional states, our goal was to devise a methodology for calibrating coverage estimates to account for the Medicaid undercount in general population surveys, tempered by possible methodological differences among state surveys of insurance coverage. We gained a greater appreciation of other potential sources of measurement error and instead concluded that there is no compelling need to adjust population

surveys to correct for an undercount of Medicaid enrollees in state surveys that measure current insurance coverage.”

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Endnotes

- 1 See Lewis, K., M. Ellwood, and J.L. Czajka. *Counting the Uninsured: A Review of the Literature*. The Urban Institute, 1998; Kincheloe, J., et al., “Can We Trust Population Surveys to Count Medicaid Enrollees and the Uninsured?,” *Health Affairs*, Vol. 25, No. 4, July/August 2006.