GrantWatch: Report

Can We Trust Population Surveys To Count Medicaid Enrollees And The Uninsured?

This research suggests that the California Health Interview Survey is doing a fairly good job of counting populations at risk.

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ABSTRACT: Health foundations, such as the Robert Wood Johnson Foundation (RWJF), make multimillion-dollar investments in programs to expand insurance coverage. These efforts are driven largely by estimates of the number of uninsured people derived from population surveys, which might overestimate the number of uninsured people if they undercount people enrolled in Medicaid. This paper reports the results of the RWJF-funded California Medicaid Undercount Experiment (CMUE) to estimate the extent of underreporting of Medicaid in the California Health Interview Survey (CHIS) and its effect on estimates of uninsurance. Although some over- and underreporting occurs, overall CHIS Medicaid estimates match administrative counts for adults. [*Health Affairs* 25, no. 4 (2006): 1163–1167; 10.1377/hlthaff.25.4.1163]

Reducing the number of uninsured Americans is a goal of private initiatives and public programs nationwide. The Robert Wood Johnson Foundation (RWJF) has been a leader in these efforts, which have been driven largely by estimates of uninsurance such as those of the U.S. Census Bureau. They are derived from population surveys such as the Current Population Survey (CPS), used nationally and in many states, and state-specific surveys such as the California Health Interview Survey (CHIS).

Health policy analysts use these surveys to estimate the number of uninsured people who are eligible for public programs and those who would be eligible if changes were made to eligibility policies. CPS-derived estimates of low-income uninsured children are one input to the federal formula used to allocate State Children's Health Insurance Program (SCHIP) dollars among the states. States and foundations use such estimates when allocating funds for outreach and insurance expansions. The RWJF's Covering Kids and Families program is the most comprehensive such effort, with a four-year (2002–2006), $55-million funding commitment supporting projects in forty-five states and more than 140 communities.[1] The

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DOI 10.1377/hlthaff.25.4.1163

California Endowment (TCE) has similarly committed $45 million to a five-year Children's Coverage Program in California.[2]

However, the CPS and other population surveys appear to undercount the number of people enrolled in Medicaid when compared with administrative enrollment counts and also might overestimate the number with private health insurance coverage.[3] If some Medicaid enrollees report being uninsured, this would upwardly bias survey estimates of the number of uninsured people. It could also bias statistics on the characteristics of the uninsured eligible for Medicaid and on differences between the insured and the uninsured in access to and use of services—data that foundations use for program planning.

The RWJF and TCE are stakeholders in survey estimates of uninsurance. With a grant in 2000 and renewal funding in 2005, the RWJF established the University of Minnesota's State Health Access Data Assistance Center (SHADAC) to help states monitor rates of health insurance coverage and to understand factors associated with uninsurance. The RWJF has invested a total of $5.4 million there over eight years.[4] TCE has been a major funder of CHIS, to help correct underreporting of insurance coverage and establish a more accurate and commonly accepted source of data on uninsurance. Since CHIS started in 2001, foundations have contributed $12.2 million for its three surveys. A biennial random-digit-dialed telephone survey of 42,000–56,000 households, CHIS is one of the largest health surveys in the United States and has largely supplanted the state's use of the CPS. CHIS was designed to reduce underreporting of Medi-Cal and other coverage and includes more than forty questions on the respondent's health insurance coverage. The CPS focuses mainly on employment and income and includes fewer questions on health insurance coverage.

Compared with the CPS, CHIS 2001 and CHIS 2003 produced higher estimates of Medi-Cal coverage and lower estimates of uninsurance.[5] It has not been clear, though, whether CHIS questions actually reduce enrollees' underreporting of Medi-Cal coverage or whether they simply encourage more people to report Medi-Cal, thereby increasing the total but not the accuracy of the Medi-Cal count.

According to prior research, several factors might contribute to the Medicaid undercount. (1) Confusion over program name: Medicaid managed care enrollees might report the name of their private health plan, and other Medicaid enrollees might report Medicare or other public coverage instead of Medicaid, especially if they have limited English proficiency.[6] (2) Dual coverage: Medicaid enrollees who also have Medicare or private coverage might report that coverage and not Medicaid.[7] (3) Scope of benefits: People eligible for only a limited scope of benefits, such as emergency, pregnancy, or TB services, might not consider themselves insured by Medicaid.[8] (4) Health status: Beneficiaries in excellent health might be less aware of their coverage status than those who are in poor health or who have high use of health services.[9] (5) Automatic enrollment: In some states, including California, cash-aid recipients automatically receive Medicaid and might be unaware of coverage. (6) Stigma: The stigma associated with Medicaid participation could influence enrollees to report no coverage or different insurance.[10]

In 2003 the RWJF Changes in Health Care Financing and Organization (HCFO) Initiative funded a $738,000 multistate study of the Medicaid undercount and its impact on estimates of uninsurance. This paper reports the results of one part of the larger RWJF initiative, the California Medicaid Undercount Experiment (CMUE), which administered a version of CHIS to known Medicaid enrollees.

Study Methods

We first compared CHIS 2003 estimates of Medi-Cal (California Medicaid) enrollees ages 18–64 with administrative enrollment counts to determine how well CHIS data overall estimate Medi-Cal enrollment. We then administered CHIS 2003 health insurance coverage questions to a sample of known adult Medi-Cal enrollees drawn from the state's Medi-Cal administrative files.

The CMUE sample was drawn from

3,129,396 noninstitutionalized adult Medi-Cal enrollees in December 2003. Interviews were completed with 1,423 Medi-Cal enrollees (53.1 percent of those sampled and located) in English, Spanish, Cantonese, Mandarin, Vietnamese, and Korean between February and May 2004. The California Department of Health Services (DHS) verified beneficiaries' Medi-Cal eligibility at the time of the interview. This study focuses on 1,094 respondents ages 18–64; it excludes elderly CMUE respondents.

Study Results

■ **Medicaid enrollment estimates.** The DHS average nonelderly adult Medi-Cal enrollment count for the months that CHIS was in the field was 2,555,316, of whom 1,952,564 had full benefits. The CHIS 2003 weighted estimate for nonelderly adults was 2,487,000, with the comparable DHS administrative count falling within the CHIS 95 percent confidence interval (2,378,000, 2,597,000). However, the CHIS estimate of Medi-Cal enrollees was 43 percent higher than the CPS estimate for 2004 of 1,737,000 (95% CI: 1,604,000, 1,870,000), which falls close to, but somewhat below, the DHS count of Medi-Cal enrollees with full benefits.

■ **Reporting Medicaid enrollment and lack of coverage.** Three-quarters of nonelderly adults with verified Medi-Cal enrollment correctly reported their Medi-Cal status (Exhibit 1). Of those who did not report Medi-Cal coverage, most stated that they were uninsured or had employment-based or privately purchased coverage. Among those who had Medi-Cal coverage when selected for the sample in December 2003 but who had disenrolled at the time of the CMUE interview, a noteworthy 66 percent (n = 69) still reported Medi-Cal enrollment (not shown).

■ **Enrollee characteristics and reporting accuracy.** Based on previous studies and our experience, we expected that Medi-Cal enrollees with full benefits, those in the fee-for-service (FFS) program, those who responded in English, those in poorer health, and noncash aid recipients would be the most likely to accurately report having Medi-Cal coverage. The study results confirmed three of these expectations. There were two exceptions. First, those who enrolled in Medi-Cal automatically through a cash aid program reported their insurance coverage with greater accuracy (90 percent) than those who had to apply for Medi-Cal directly (78 percent). Second, among Medi-Cal enrollees with full benefits, equally high proportions of those in man-

EXHIBIT 1
Self-Reported Insurance Status Among Medi-Cal-Enrolled, Nonelderly Adult Respondents To The California Medicaid Undercount Experiment Survey, 2004

Self-reported health insurance source	All Medi-Cal-enrolled, nonelderly respondents		Nonelderly respondents who did not report Medi-Cal coverage[a]	
	Percent	95% CI	Percent	95% CI
Medi-Cal	78	(75, 81)	–[b]	–[b]
Medicare/other public	1	(0, 2)	5	(3, 9)
Employment-based	5	(4, 7)	24	(19, 31)
Privately purchased	<1	(0, 1)	3	(1, 6)
Uninsured	13	(11, 16)	60	(53, 67)
Data missing[c]	2	(1, 3)	8	(5, 12)

SOURCE: Authors' analysis of California Medicaid Undercount Experiment 2004 survey data.
NOTE: Percentages might not add up to 100 percent because of rounding. CI is confidence interval.
[a] A subset of all Medi-Cal-enrolled respondents.
[b] Not applicable.
[c] Respondent did not know or refused to answer, or the information was not ascertained.

aged care plans (88 percent) and those in the FFS program (89 percent) reported Medi-Cal coverage. Although respondents who took the interview in a non-English language were less likely than others to report Medi-Cal coverage accurately, this association disappeared when we looked at those with full benefits only. Respondents with limited benefits (disproportionately immigrants and non-English speakers) were far less likely to report Medi-Cal enrollment (50 percent) than were respondents with full benefits (87 percent). Regardless of benefit package, those in good health were less likely to report Medi-Cal (74 percent) than were those in fair or poor health (85 percent).

Higher income (above 200 percent of the federal poverty level) was associated with lower reporting of Medi-Cal (63 percent versus 80 percent for respondents with incomes below 200 percent of poverty), higher reporting of private coverage (30 percent versus 4 percent), and lower reporting of uninsurance (4 percent versus 14 percent), perhaps because of stigma or because employment and private coverage had been obtained since enrolling in Medi-Cal.

Discussion

The results of this study indicate that population surveys using carefully crafted questions to elicit self-reported measurements of health insurance can produce reasonably accurate estimates of adult Medicaid enrollment. Although most enrollees understand that they are in Medicaid and report it, some are confused about their public coverage. Evidence suggests some under- and overreporting of Medi-Cal in CHIS, perhaps because of stigma, dual enrollment, or confusion about program name, but CHIS estimates of adult Medi-Cal enrollment match administrative counts.

Underreporting of Medicaid coverage is most common among enrollees with limited benefits, who might pay out of pocket for many—perhaps most—health services. These enrollees might dismiss such coverage as insufficient or temporary and characterize their status as uninsured. In the CMUE survey, Medi-Cal enrollees with limited benefits who did not report Medi-Cal coverage were far more likely to report being uninsured (40 percent) than to report having other public or private coverage (9 percent), but only 5 percent with full benefits reported uninsurance.

Surveys do not capture the scope of a respondent's insurance coverage, and further research is needed to explore how to achieve this. It would be useful to count respondents with limited benefits separately from those with full benefits. Giving respondents the option to identify limited-benefit coverage (for example, asking if they have insurance for a medical emergency only) could reduce underreporting of Medicaid among this group. For benchmarking comparisons between administrative and survey data, we could then exclude limited-benefits enrollees from administrative enrollment counts.

The CMUE study does not include children, for whom the CHIS 2003 estimate for Medi-Cal enrollment is 10 percent lower than the administrative count; the CMUE findings thus might not apply to Medicaid child enrollees.[11] The CMUE study also does not permit a broader examination of overreporting of Medi-Cal among people who are not enrolled, including those who recently lost coverage. Such overreporting might partially offset, at an aggregate level, the underreporting by some enrollees and thus mask potential biases in analyses of the Medicaid and uninsured populations. In addition, errors in reporting by people with coverage other than Medi-Cal might contribute to over- or underestimates of uninsured populations.

POLICYMAKERS AND private foundations that invest in programs to reduce the number of uninsured people need assurance that estimates of the size of the uninsured population and the number of those eligible but not enrolled in public coverage programs are reasonably accurate. Although rising estimates of the number of uninsured people stimulate support for expanded coverage, inflated estimates might discourage expansions of public health care programs by

exaggerating their estimated costs.

Population surveys are the best available tool for estimating the number of uninsured people and the number of such people who are eligible for public programs. Overall CHIS estimates of adult Medi-Cal enrollment closely match administrative enrollment counts, which suggests that the CHIS estimate of adult uninsurance is not biased by a Medi-Cal undercount. These estimates match administrative data counts more closely than CPS estimates do; thus, CHIS estimates could provide more accurate estimates of uninsurance. However, all surveys could estimate Medicaid and uninsurance more accurately if they measured the comprehensiveness of benefits covered.

Medicaid administrative data provide an important benchmark for population surveys estimating insurance coverage, but one can argue that survey and administrative data measure different things. Administrative data capture information about a state's financial obligations for the program, while survey data measure a respondent's perception of his or her insurance status. Administrative data might include enrollees who are unaware that they are insured or whose Medi-Cal benefits are so limited that enrollment does not provide the coverage enjoyed by most people with comprehensive public or private insurance.

This research was supported by funds from the Robert Wood Johnson Foundation (RWJF) and the California Program on Access to Care (CPAC), California Policy Research Center, University of California. The views and opinions expressed do not necessarily represent those of the RWJF, the Regents of the University of California, CPAC, its advisory board, or any state or county executive agency represented thereon.

NOTES

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