



Executive Summary: "Evaluating Federal Funding Formulas: The State Children's Health Insurance Program."

Lynn A. Blewett and Michael Davern

February 2007

Journal of Health Policy Politics and Law
forthcoming 2007, Vol. 32 No. 3

BACKGROUND

The State Children's Health Insurance Program (SCHIP) is designed as a block grant that provides matching funds to states, "to initiate and expand child health assistance to uninsured, low-income children."¹ The SCHIP funding formula distributes federal funds to the states and uses key state-level inputs to determine need as well as state capacity and effort for program expansion.

As part of the reauthorization of federal funds to continue SCHIP programs, the federal funding formula may be a key point of discussion.² This Executive Summary highlights key findings of research conducted by the State Health Access Data Assistance Center (SHADAC) to understand the impact of using state-level data inputs on the number of low-income uninsured children from the Current Population Survey (CPS) to determine the distribution of federal dollars to the states.

To effectively translate the SCHIP program objectives into an accurately targeted aid formula, the best data inputs should be used and refined as better data and models become available. While the full paper discusses each formula component in more detail, this Executive Summary highlights key points that relate to specific recommendations to improve the SCHIP federal funding formula.

SCHIP FUNDING FORMULA BASICS

Federal SCHIP allocations are calculated using a formula with two key components: 1) the Child Component Factor (CCF); and 2) the Health Cost Factor (HCF). The CCF is a combination of the number of low-income children (under 200 percent of the Federal Poverty Level (FPL)) and the number of low-income uninsured children based on three years of pooled state estimates from the CPS. The HCF is used as a proxy for estimated program expenses. The HCF is based on Bureau of Labor Statistics estimates of the ratio of the average state wage in the health services industry relative to the national health services wage for the most recent three years of available data. States must contribute to the program cost and the federal government provides matching payments to the states up to their annual capped federal allotment. The matching rates are based on the Medicaid Federal Matching Assistance Percentages (FMAP) but are "enhanced" reflecting greater federal financial participation.

PROBLEMS WITH THE SCHIP FUNDING FORMULA

We describe six specific issues with the federal funding formula and offer possible recommendations to resolve these issues. The first three items are associated with use of CPS data as a basis for making state allocations in a funding formula. The last three items relate to the distribution process for SCHIP allocations.

1. Estimating the Number of Low-Income Uninsured Children

The CPS was not designed to produce precise state-level estimates of the SCHIP target population, which is “children in families with too much income to qualify for Medicaid, but too little to afford private coverage.”³ Even though state SCHIP eligibility ranges from 150 to 350 percent of FPL, the SCHIP formula defines the low-income uninsured children as those living in households with incomes below 200 percent of FPL. While the CPS can be used to produce state level estimates, the sample sizes are too low to produce reliable estimates of the targeted subpopulation by state. For example, 41 states had fewer than 100 children in the CPS sample that were below 200% FPL and uninsured (see Table 1).

During the baseline years 1998/89 (on which all future allocations are based) the average SCHIP allocation was \$82,829,000 with a 95 percent confidence interval (+/- \$21,365,000.) That is, on average any state’s SCHIP allocation could be off by as much as 25 percent either too high or too low.⁴ A state where this random variation resulted in a high estimate of uninsured low-income kids in the baseline year (1998/99) locked in this advantage, as federal allocations cannot go below a hold harmless floor over time. Conversely, a state with a low baseline estimate due to random variation locked in this disadvantage as its allotments are essentially capped over time.

Recommendation: 1) Replace low-income child component of the CCF estimates with direct survey estimates of the number of low-income children in each state based on data from the American Community Survey (ACS), which has a larger state sample; and 2) Develop a small area estimation model to use both CPS and ACS data to develop model-based estimates for the low income uninsured children portion of the SCHIP funding formula.

2. Missing Values for Income and Insurance on the CPS

Seventeen percent of respondents in the CPS do not report income and 11.3 percent do not respond to the health insurance question.⁵ The Census Bureau uses statistical processes (called “hotdeck”) procedures to develop estimates to replace those missing values based on other respondent’s characteristics.

However, the way in which missing values are imputed does not take the state of residence into account, leading to biased state estimates of the uninsured.⁵ As a result, respondents from Texas (the state with the highest uninsurance rate in 2005) can be used to fill in missing data for health insurance coverage responses to respondents in Minnesota (the state with the lowest uninsurance rate in 2005).

Recommendations: The Census Bureau should: 1) include aggregations of states with similar income and health insurance coverage in its procedure to replace missing data; or 2) Change current hotdeck procedure to a multiple imputation strategy to replace missing income and health insurance coverage data using state as one of the model inputs.

3. Child Component Factor Measurement

The Child Component Factor (CCF) of the SCHIP federal funding formula includes an estimate of low-income children and an estimate of low-income uninsured children. It does not, however, include an estimate of those low-income children who were successfully enrolled in SCHIP. Thus, states that successfully enroll low-income children in Medicaid and SCHIP will see a reduction in their future SCHIP allocations. States with little or no reduction in the number of low-income uninsured children – perhaps due to less aggressive program implementation efforts – will retain a higher proportion of the total federal allotment. This may result in SCHIP programs operating at less than maximum capacity.

Recommendation: The CCF component of the SCHIP funding formula should include “an adjusted administrative estimate of children enrolled in SCHIP along with the estimate of low-income uninsured children.”⁶ Adding SCHIP enrollment to the funding formula will increase incentives for SCHIP enrollment. The formula would include an estimate of the number of low-income uninsured children and the number of low-income children enrolled in SCHIP.

4. Reallocation of Unspent SCHIP Funds

If states spend below their annual federal allotment, these funds are allowed to be rolled over for an additional two years (three years total). Any unspent funds after the roll-over period goes back to the federal government, pooled with other unspent funds and then reallocated to states that are spending more than their annual allotment.

Notwithstanding the beneficial impact of aggressive outreach and enrollment for enrollees, rewarding programs with additional funds sets a precedent. A recent Government Accounting Office (GAO) report indicated that 18 states were projected to spend more than their available funds (including current and prior year) between 2005 through 2007.⁷ Hold-harmless provisions guarantee that states that underspend will continue to underspend in the future. This means that, without additional funding, there will likely always be a redistribution pool and incentives for more aggressive states to expand their programs.⁸

In addition, there is some evidence of “mission creep” – that is with the increase in states using the available Health Insurance Flexibility and Affordability (HIFA) waivers, while some state eligibility levels for SCHIP are as low as 140 percent of FPL, other states have eligibility levels as high as 350 percent. Other states are also covering parents of eligible children, pregnant women and adults without children. There may be a mismatch between the funding formula target population and the population for which the funds are being spent.

Recommendation: States should be required to provide coverage for all low-income uninsured children defined as eligibility levels of 200 percent of FPL. Excess funds could be used to develop specific performance targets that could be linked to bonus payments to encourage full enrollment below 200% FPL for children. Program goals could be refined to allow states to use unspent funds to reach additional target populations only once original target population (uninsured children at 200 percent of FPL) needs are met. In addition, increased funding for SCHIP would help states meet their individual program objectives.

5. Enhanced Medicaid Match for SCHIP

The SCHIP federal matching rate is based on the rate used for the Medicaid program with the intent that the federal government pays a greater share of program costs for states with lower per capita income. The SCHIP matching rate for a particular state is slightly higher than the state’s Federal Matching Assistance Percentage (FMAP) for the Medicaid program. The “enhanced” rate varies from 65 percent to 85 percent, compared to Medicaid matching rates of 50 percent to 85 percent. The higher matching rates were designed to encourage states that had not previously covered low-income children under their Medicaid program to provide needed coverage at a lower cost. However, the way in which the formula was designed may have inadvertently produced an unintended outcome: “states with the lowest Medicaid match rates (presumably those with the greatest fiscal capacity) are awarded the largest increases under SCHIP, while states with the highest Medicaid match rates receive only marginally higher match rates under SCHIP.”⁹

Recommendation: Provide uniform percentage increase, for example, 10 percent above each state’s Medicaid matching rate eliminating the upper limit of 85 percent for the enhanced SCHIP match. This would allow states with the lowest match to get a greater enhancement which may provide additional incentives for SCHIP outreach and enrollment.

6. Performance Measurement

There are currently no specific performance measures built into the SCHIP funding formula or as set-aside bonuses for states that meet program targets. Indeed, there is significant variability in the implementation of SCHIP across states and wide variability in program outcomes. In an earlier study we found considerable variation in the impact of SCHIP on changes in uninsurance rates for children. While overall rates of uninsurance declined for all children between 1996 and 2002, we found a significant decrease in the number of uninsured children in just 15 states.¹⁰

Recommendation: Performance measures could be developed that reflect the unique state needs but could also be used to compare outcomes across states. One suggestion is that a proportion of unspent SCHIP funds in future years be allocated to a development fund that would be used to produce consistent and reliable performance measures. This fund could support efforts to develop performance measures and identify data sources that can be used to measure and potentially reward performance across states. The first priority should be to assist states in the development and implementation of specific data strategies to assess changes in the number of low-income uninsured children. Secondly, these measures should be applied toward incentives to improve coverage.

CONCLUDING COMMENTS

We believe the federal funding formula should be part of the discussion of the SCHIP funding reauthorization because better data and estimation techniques are now available to improve precision of the formula. A phased-in approach to any significant change can be adopted to ameliorate wide fluctuations in state funding levels from one year to the next. We acknowledge that discussion of changes to the SCHIP funding formula will stimulate political discussion of winners and losers, but the impact at the state level would be minimal with adequate funding levels, phased-in changes and hold harmless provisions.

Our role as researchers and policy analysts is to provide policy makers information on the best inputs and state-of-the-art estimation techniques that can be used in formula design. One important objective is to appropriately and effectively target limited public resources to those who need assistance, as defined by the program. We hope that our work can contribute to the discussions of improving the targeting of SCHIP funds to increase coverage for low-income uninsured children. Additional detail on our research and recommendations can be found in this full journal article, to be published in spring of 2007 in the *Journal of Health Politics, Policy and Law*, volume 32, number 3.

ACKNOWLEDGEMENTS

This research was funded by The Robert Wood Johnson Foundation through a grant to the State Health Access Data Assistance Center (SHADAC). The opinions and recommendations presented in this brief reflect those of the authors and do not represent the positions of the Robert Wood Johnson Foundation. This paper will be published by the *Journal of Public Policy and Law* (JHPPL) in late spring of 2007. Permission was granted by the editors of JHPPL to release an executive summary of our findings prior to publication of the full paper.

REFERENCES

- ¹ Balanced Budget Act of 1997. 1997. State Children's Health Insurance Program, Chapter 1 – State Children's Health Insurance Program, Establishment of Program. Public Law 105-33, Subtitle J – Section 4901. Available at: <<http://cms.gov/schip/didssum.asp>>; accessed on February 24, 2003.
- ² Governor Sonny Perdue. Written Statement of Georgia Governor Sonny Perdue On behalf of the Southern Governors' Association Before the Senate Committee on Finance Regarding the State Children's Health Insurance Program (SCHIP) February 1, 2007. Southern Governor's Association.
- ³ Ibid, page
- ⁴ Davern, M., L.A. Blewett, B. Bershadsky, K.T. Call, and T. Rockwood. 2003. Variation in states' proportion of the SCHIP allocation over time: How much variation is there, what are its sources, and can it be reduced? *Inquiry* 40: 47-60
- ⁵ Davern, M., L. A. Blewett, B. Bershadsky, and N. Arnold. 2004. Missing the Mark? Possible Imputation Bias in the Current Population Survey's State Income and Health Insurance Coverage Estimates. *Journal of Official Statistics* 20(3):519-49.
- ⁶ Czajka, J.L. and T. Jabine. 2002. Using survey data to allocate federal funds for the State Children's Health Insurance Program (SCHIP). *Journal of Official Statistics* 18 (3): 409-27.
- ⁷ Government Accounting Office. 2007. Children's health insurance: State experiences in implementing SCHIP and considerations for reauthorization. Testimony before the Committee on Finance, GAO-07-447T. Washington DC: Government Accounting Office.
- ⁸ Congressional Research Service). 2005. "SCHIP financing: Funding projections and state redistribution issues." Report no. RL32807. Washington DC: Congressional Research Service, updated July 6, 2005.
- ⁹ Czajka, J.L. and T. Jabine. 2002. Using survey data to allocate federal funds for the State Children's Health Insurance Program (SCHIP). *Journal of Official Statistics* 18 (3): 409-27.
- ¹⁰ Blewett, L.A. M. Davern, and H. Rodin. 2004. Covering Kids: Variation in Health Insurance Trends by State, 1996-2002. *Health Affairs*, 23(6): 170-180.

Table 1. Number of children in 2006 CPS-ASEC by state

| | Children 0-18 Years Old | | |
|----------------------|-------------------------|------------|--------------------------|
| | All Children | 0-199% FPL | 0-199% FPL and uninsured |
| Alabama | 657 | 282 | 27 |
| Alaska | 1,024 | 345 | 46 |
| Arizona | 1,038 | 524 | 138 |
| Arkansas | 720 | 319 | 47 |
| California | 6,375 | 2,749 | 608 |
| Colorado | 1,437 | 480 | 138 |
| Connecticut | 1,460 | 382 | 78 |
| Delaware | 1,018 | 357 | 74 |
| District of Columbia | 598 | 322 | 35 |
| Florida | 2,393 | 914 | 286 |
| Georgia | 1,373 | 594 | 117 |
| Hawaii | 965 | 284 | 24 |
| Idaho | 914 | 377 | 65 |
| Illinois | 2,025 | 699 | 130 |
| Indiana | 1,120 | 472 | 59 |
| Iowa | 1,234 | 395 | 34 |
| Kansas | 977 | 363 | 48 |
| Kentucky | 927 | 377 | 40 |
| Louisiana | 537 | 239 | 34 |
| Maine | 1,059 | 416 | 55 |
| Maryland | 1,414 | 394 | 72 |
| Massachusetts | 967 | 272 | 18 |
| Michigan | 1,755 | 605 | 43 |
| Minnesota | 1,466 | 365 | 44 |
| Mississippi | 627 | 330 | 60 |
| Missouri | 1,146 | 437 | 58 |
| Montana | 621 | 281 | 65 |
| Nebraska | 992 | 332 | 42 |
| Nevada | 1,047 | 392 | 94 |
| New Hampshire | 1,313 | 256 | 29 |
| New Jersey | 1,358 | 339 | 84 |
| New Mexico | 650 | 339 | 103 |
| New York | 2,788 | 1,123 | 138 |
| North Carolina | 1,291 | 536 | 115 |
| North Dakota | 842 | 303 | 54 |
| Ohio | 1,803 | 657 | 87 |
| Oklahoma | 811 | 377 | 62 |
| Oregon | 861 | 373 | 70 |
| Pennsylvania | 1,772 | 639 | 95 |
| Rhode Island | 1,092 | 372 | 38 |
| South Carolina | 829 | 350 | 53 |
| South Dakota | 1,012 | 375 | 60 |
| Tennessee | 901 | 375 | 58 |
| Texas | 3,872 | 1,920 | 554 |
| Utah | 1,113 | 396 | 90 |
| Vermont | 835 | 223 | 21 |
| Virginia | 1,278 | 391 | 77 |
| Washington | 1,103 | 392 | 61 |
| West Virginia | 601 | 265 | 25 |
| Wisconsin | 1,308 | 434 | 63 |
| Wyoming | 803 | 246 | 55 |
| Total U.S. | 66,122 | 24,979 | 4,571 |

Source: 2006 Current Population Survey - Annual Social and Economic Supplement