SCHIP CHILDREN:
How Long Do They Stay and Where Do They Go?

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As the most significant expansion in public health insurance coverage since Medicaid in the mid-1960s, the State Children’s Health Insurance Program (SCHIP) remains popular among policymakers and serves as a model for states and localities that seek to further expand coverage to children. The recent ongoing debate in Congress over SCHIP renewal has focused attention on many aspects of the program. Key among them is the retention of eligible children on SCHIP and the impact that SCHIP is having on the overall coverage of children. Improving retention of children on SCHIP is presumed to reduce the number of uninsured children. However, policymakers remain uncertain about the degree to which SCHIP actually provides coverage to children who would otherwise be uninsured, rather than those who would have obtained coverage through privately purchased insurance. Moreover, policymakers continue to have a limited grasp of how often children who lose SCHIP coverage obtain some other type of health insurance after they leave.

This brief highlights findings from a seven-state study examining retention of children in SCHIP and the coverage of children after leaving the program. The study used individual-level administrative data matched to a 2002 survey of nearly 10,000 families in seven states with a child enrolled in or recently disenrolled from SCHIP. Together, the seven study states constitute more than 40 percent of all SCHIP enrollments nationwide and reflect a mix of program structures (Smith et al. 2008). Although the study states are not sufficient in number to isolate how individual state policies affect SCHIP retention, they do provide a means to examine how SCHIP retention varies across states and the potential importance of state policy to that variation. Moreover, the unique combination of administrative and survey data enables us to explore how states vary in the coverage of children after they leave the program.

Findings reveal substantial variation in SCHIP coverage across the seven study states and suggest that much of this variation is due to the states’ own policies, as distinct from the characteristics of the children and families they insure. Findings further indicate that Medicaid is a critical provider of health insurance coverage to children after they leave SCHIP and that, by comparison, private coverage has a relatively minor role. Moreover, once SCHIP children leave public insurance (either directly from SCHIP or via Medicaid), they are far more likely to become uninsured—and to remain uninsured for some time—than they are to obtain private coverage. Together, these finding suggest the extent to which SCHIP has substituted for private insurance may be well below the more alarming rates, up to 50 percent, estimated in some studies (Congressional Budget Office 2007).

SCHIP is rare among major federal programs in the flexibility states have to define its structure. Notably, each state has the option of creating a program separate from its existing Medicaid program and/or creating a program that simply expands Medicaid eligibility to children who previously had been income ineligible. More than 30 states currently have a separate SCHIP (S-SCHIP) program, either by itself or in combination with a Medicaid expansion (M-SCHIP) program. Among the seven states included in the study, three had S-SCHIP programs (California, Florida and North Carolina); two had M-SCHIP programs (Louisiana and Missouri); and two had both types of programs (New Jersey and Illinois).
States choosing the S-SCHIP option can tailor their programs far more substantially than they can under traditional Medicaid; for example, they can offer different benefit packages, require cost-sharing and premiums, and make families wait to enroll in instances when they drop private coverage. All of these choices may influence the value of SCHIP coverage for families, and in turn affect how long they retain coverage for their children.

Adding to this policy variation are the many options that all states have to simplify the renewal process or otherwise make it easier for families to retain coverage. Common examples include mailing notifications and reminders to families in advance of the renewal date; allowing grace periods for families who submit renewal forms late; and reducing the burden of completing the renewal application through prepopulated forms, self-declaration of income and other simplification measures. A less common and perhaps more substantial example is the adoption of a passive renewal process, whereby children are presumed still eligible for coverage unless they notify the state otherwise. Only one study state, Florida, used this policy during the time that our data were collected.

A main challenge presented by the flexibility of the S-SCHIP option is the need to coordinate coverage with Medicaid. Namely, families whose children must leave SCHIP because they have become eligible for Medicaid may require assistance in making a successful transition between the two programs. This coordination challenge is particularly daunting in states with a county-based Medicaid system, because it means the families’ renewal application for SCHIP must be forwarded to a local office for processing, leading to possible administrative delays or added burden or confusion for families. The ability of policymakers in an S-SCHIP state to meet this coordination challenge may substantially affect the extent to which children can retain coverage after leaving the program.

The length of SCHIP enrollment differs dramatically across states. Across the seven study states, the estimated median length of SCHIP enrollment varied from a high of 53 months for children living in California and Missouri to 19 months for children living in Illinois who participate in the M-SCHIP component (Table 1). This variation is clearly evident within the first year or two after enrollment; after one year, for example, 92 percent of children remained enrolled in California’s program compared with just 78 percent and 70 percent in Illinois’ S-SCHIP and M-SCHIP components, respectively.

Cross-state differences in retention appear linked more to policy than to who enrolls. Although the characteristics of families who enroll their children in SCHIP varied substantially across states, estimated SCHIP retention between states differed only modestly when accounting for or not accounting for this variation. For example, whether or not we control for differences across states in a SCHIP enrollee’s age or race/ethnicity, the parents’ education and citizenship, or the household’s language and other characteristics, states showed little relative change in their estimated median lengths of SCHIP enrollment (Table 2). This finding suggests that differences in state policy and procedures, and not differences in socio-demographics, may be responsible for much of the variation in retention seen across states.
Medicaid is critical for extending coverage of children who leave SCHIP. Among children leaving SCHIP during the study period, roughly 45 percent enrolled in Medicaid. In turn, combining this coverage with their original SCHIP coverage, children’s retention on public insurance extended well beyond SCHIP alone (Table 3). In Missouri, for example, the estimated median length of coverage was 92 months in SCHIP and Medicaid combined compared to 53 months for SCHIP alone. Likewise, in North Carolina the estimated median coverage length was 66 months for both programs compared with 41 months for SCHIP alone. One notable exception to this pattern is California, which had the highest SCHIP retention

1The enrollment length estimated for children in Missouri reflects an outlier value that may have been temporary. At the time of the study, the state had an unusual policy whereby it conducted annual eligibility renewal for only a fraction of its Medicaid and M-SCHIP children (see Harrington 2002). The policy arose originally from staffing shortages and has since been eliminated.
rate among states in the study but a relatively low rate of transition to Medicaid. As a result, the estimated median length of coverage rose only modestly when accounting for Medicaid, from 53 months for SCHIP alone to 58 months for the two programs combined.

Private coverage does relatively little to extend coverage of children leaving SCHIP. Across all the study states, about half the children who left SCHIP retained health insurance coverage, either through private insurance or through Medicaid (Table 4). However, comparing these two types of coverage, private insurance covered relatively few children—only 5 percent of those who left SCHIP obtained private coverage compared with 45 percent who left and obtained Medicaid. Even in California, where Medicaid covered a relatively small fraction of those leaving SCHIP (22 percent), private coverage still insured a mere 4 percent. The remaining children who left SCHIP across the study states simply lost coverage—50 percent on average. This rate may appear high, though it is important to note that it followed an often lengthy period of continuous SCHIP coverage in most states (as seen above in Table 1).

Most SCHIP children become uninsured once they leave public coverage. When accounting for any Medicaid coverage children might have after leaving SCHIP, we still find that private insurance covers few children once they leave the public programs (Table 5). Indeed, across the study states, just 10 percent of SCHIP children were covered by private insurance after leaving the public programs while the remainder—fully 90 percent—became uninsured. Two states, Missouri and Illinois (S-SCHIP), had the highest rate of private coverage at 18 percent. However, even at this relatively high rate of private coverage, more than four out of five SCHIP children became uninsured in these states once they left the public programs.
Once they lose coverage, SCHIP children often remain uninsured for many months. In all but two states, California and Florida, children who leave SCHIP and fail to obtain other coverage typically go without insurance for a year or more (Table 6). Coupled with the limited take-up of private coverage upon leaving SCHIP, these often lengthy uninsured spells suggest that many families lack access to affordable private insurance after leaving the program.
### TABLE 6

**Length of Time Children Who Lose Coverage After Leaving SCHIP Remain Uninsured, by State**

<table>
<thead>
<tr>
<th>State</th>
<th>Median Length Without Insurance (Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida (S)</td>
<td>5</td>
</tr>
<tr>
<td>California (S)</td>
<td>9</td>
</tr>
<tr>
<td>Missouri (M)</td>
<td>12</td>
</tr>
<tr>
<td>Illinois (S)</td>
<td>12</td>
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<tr>
<td>New Jersey (M)</td>
<td>13</td>
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<tr>
<td>North Carolina (S)</td>
<td>13</td>
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<td>New Jersey (S)</td>
<td>18</td>
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<tr>
<td>Louisiana (M)</td>
<td>19</td>
</tr>
<tr>
<td>Illinois (M)</td>
<td>22</td>
</tr>
<tr>
<td><strong>Sample Size</strong></td>
<td><strong>2,120</strong></td>
</tr>
</tbody>
</table>

Source: 2002 survey of SCHIP enrollees and disenrollees, linked with state administrative files. 
(M) = M-SCHIP; (S) = S-SCHIP.

### DISCUSSION

Findings from this study reveal wide variation across states in how long children remain enrolled in SCHIP and, more fundamentally, how long they remain covered by health insurance. Given the modest number of states in the study, we cannot pinpoint which policies matter most to this variation. However, we do find strong evidence that policies to transition children successfully to Medicaid may be critical to extending their overall coverage. For example, based on the estimates in Table 3, children enrolled in each of the four M-SCHIP states in the study experienced notably large gains in insurance coverage as a result of Medicaid transfer—median lengths of coverage rose by an estimated 57 percent in New Jersey’s M-SCHIP component, 70 percent in Missouri, 120 percent in Louisiana and 142 percent in Illinois’ M-SCHIP component. Although several factors might have contributed to the relative success of these programs, the most important factor is likely the M-SCHIP model itself, which eliminates the need to coordinate coverage of children between two distinct programs. In turn, for states that have adopted a separate SCHIP model, our findings suggest that steps to more effectively coordinate eligibility between SCHIP and Medicaid can substantially improve children’s coverage.

Findings further suggest that SCHIP may be far more critical to increasing the coverage of lower-income children than some research has indicated. Some descriptive studies have found, for example, that children entering SCHIP often have had recent coverage through private insurance and might have been able to maintain this coverage, while others have used econometric modeling to predict that many children on SCHIP would have obtained or retained private coverage in its absence. These findings have led researchers to conclude that SCHIP substitutes for (or “crowds out”) private insurance for a sizeable fraction of those on the program—between roughly 25 and 50 percent according to a recent report by the Congressional Budget Office (2007). Results from this study do not speak directly to these crowd-out estimates but they do raise questions about whether those at the high end of this range could be accurate. Namely, examining the insurance status of SCHIP children after...
leaving public coverage, we find that only a small fraction—just 1 in 10—obtain private insurance. The rest go without insurance, often for more than a year. Certainly some of these uninsured children have left SCHIP for reasons that might also affect their ability to access affordable private coverage (for example, they reached the program’s age limit or experienced a decline in household income). Nevertheless, the question remains: If private insurance is a credible option for a large fraction of children currently enrolled in SCHIP, why would so many children go uninsured after leaving the program?

The study is based on a sample of 9,808 children enrolled in or recently disenrolled from SCHIP across seven states in the early months of 2002. When appropriately weighted, the sample provides the basis for measuring retention across states for a representative population of children on SCHIP at a point in time. This sample is distinct from one representing the population of all children who have been enrolled in SCHIP because it includes a smaller proportion of children who were enrolled for just a short time. This “length bias,” which is common to any point-in-time sample, probably leads the estimated SCHIP durations from the study to be longer than those based on all SCHIP children. However, the difference is likely to be modest because of censoring, which is more common among longer spells and acts to counterbalance the effects of length bias on estimates of duration (see Flinn 1986).

Across the states, 46 percent of children in the sample were observed leaving SCHIP following sampling. To measure their post-SCHIP coverage, data were obtained from a survey interview with their parents conducted soon after they were selected for the study. These survey data were then matched with administrative data on the children’s Medicaid and SCHIP coverage for up to four years prior to sampling and up to one year afterward. When combined, the resulting data file provided a means to measure both sample children’s duration of coverage in SCHIP and the type of coverage they obtained (SCHIP, Medicaid, private, or uninsured) after leaving the program.

Among those leaving SCHIP, about one in four had at least one month of missing data on their post-SCHIP coverage. In the large majority of these cases (69 percent), the missing data reflected a short period between leaving SCHIP and then returning to the program or transferring to Medicaid. For these cases, we imputed the missing data as uninsured because it is highly unlikely a child would transition to and from private insurance over such a short time. For the remaining cases, the administrative data showed no coverage in Medicaid or SCHIP after leaving the program and we lacked survey data to determine whether they had private insurance or no insurance. For these cases, we imputed children’s insurance status based on the probability of these two insurance types for children with similar demographics living in the same state. Findings presented in this brief are unaffected by this latter imputation. (For additional details on the study sample and data, see Trenholm et al. 2005).

Drawing on these data, the study used proportional hazard models to measure the median lengths of enrollment in SCHIP and public insurance across the study states, as well as to measure the probability of retaining coverage after specified periods of coverage (for example,
after 12 months). Except for Table 2, which compares regression-adjusted and unadjusted estimates, all estimates of coverage durations that we present (in Tables 1, 2, 3 and 6) are based on multivariate models. These models used a competing risks hazard framework in which the associations between the likelihood of leaving SCHIP and a set of demographic characteristics, including state of residence, were allowed to vary by the type of transition made out of SCHIP—to Medicaid, private insurance or no insurance. The covariates in the models included both child-level variables (the child's race/ethnicity, age at start of the spell and gender) and household-level variables (urban or rural location, parent's highest education level and citizenship). They also included variables measuring certain months of the enrollment spell (months 12, 24 and 36) in order to account for the mass points in the program disenrollment distribution. Estimates on the distributions of coverage after leaving SCHIP and public coverage (Tables 4 and 5, respectively) are based on simple weighted proportions.

**REFERENCES**


