Discontinuity of Coverage for Medicaid and S-CHIP Children at a Transitional Birthday

Patricia Ketsche, E. Kathleen Adams, Angela Snyder, Mei Zhou, Karen Minyard, and Rebecca Kellenberg

Research Objective. To investigate disenrollment from public insurance at the 6-year transitional birthday when eligibility for many children moves from Medicaid to State Children's Health Insurance Program (S-CHIP).

Data Sources. Data from Georgia's S-CHIP (PeachCare) and Medicaid programs from 2000 to 2002.

Study Design. The likelihood of dropping public coverage after the reference birthday is modeled for children turning age 6 compared with a control cohort of children turning age 9 controlling for demographic and geographic differences between enrollees.

Principal Findings. Over 17 percent of 6-year-olds versus only 7 percent of the control cohort dropped coverage. After controlling for other factors (e.g., race/ethnicity, prior enrollment, and geographic region) having lower historical expenditures is predictive of dropping coverage among all children, although the unadjusted effect is stronger among children enrolled in PeachCare before their sixth birthday. Only 1 percent of Medicaid children who remained covered transitioned to PeachCare.

Conclusions. Turnover at transitional birthdays identifies a common pathway for children into the ranks of the uninsured. Facilitating continuous enrollment would retain in the programs children with lower than average expenditures. This may be one of the more cost effective ways of reducing the number of uninsured children in Georgia.

Key Words. S-CHIP, Medicaid, expenditures, transitions, enrollment

The State Children's Health Insurance Program (S-CHIP) was created in 1997 to expand health insurance to uninsured low-income children. States have great latitude in designing and administering their programs. Fifteen states have opted to integrate their S-CHIP programs into the existing Medicaid program, others (15) have developed separate programs, and still others (20) have combined both approaches (Rosenbaum, Markus, and Sonosky 2004).

Eligibility for Georgia's separate S-CHIP program (PeachCare for Kids, hereafter called PeachCare) is designed to complement Medicaid eligibility so that children under age 19 living in families with incomes below 235 percent of FPL are income eligible for one of the two public programs.[1] As in many states, a child may "age out" of Medicaid when reaching his or her first and sixth birthday because eligibility for Medicaid participation falls from 185 to 133 percent and from 133 to 100 percent of the federal poverty level (FPL), respectively. These transitions create a point at which children might easily lose public coverage.

A growing body of literature regarding insurance coverage suggests the need to consider health insurance as a dynamic process rather than a static condition (Short and Graefe 2003; Olson, Tang, and Newacheck 2005). Among those eligible for public coverage this may be particularly true as some churning may be expected due to income fluctuations and movement into and out of jobs with or without coverage. Sommers (2007) finds that in a recent year (2005), over 40 percent of uninsured children eligible for public coverage had been enrolled in a public program during the prior year. If disenrollment from public programs is occurring above the expected level as a result of program design or administration, a focus on retention when enrollees are particularly vulnerable to disenrollment could expand coverage. The purpose of this study is to use data from one state (Georgia) to explore the extent to which the sixth birthday is associated with loss of coverage in excess of the routine transitions in and out of public coverage programs and to explore enrollee characteristics that affect coverage loss.

BACKGROUND

The S-CHIP program has been largely successful at reducing the number of children lacking coverage, increasing access to care, reducing the disparity in children's eligibility for public coverage between states, and providing an

Address correspondence to Patricia Ketsche, Ph.D., Institute of Health Administration, Robinson College of Business, Georgia State University, PO Box 3988, Atlanta, GA 30302-3988. E. Kathleen Adams, Ph.D., Professor, is with the Rollins School of Public Health, Department of Health Policy and Management, Emory University, Atlanta, GA. Angela Snyder, Ph.D., M.P.H., Director, Child Health Policy, Mei Zhou, M.S., M.A., Research Associate, and Karen Minyard, Ph.D., Executive Director, are with the Georgia Health Policy Center, Andrew Young School of Policy Studies, Atlanta, GA. Rebecca Kellenberg, Former Director of PeachCare for Kids, now resides in Missoula, MT.

example for federal state partnerships that allows for innovation and flexibility (Kenney and Chang 2004). The national success of the past 6 years in expanding coverage to children (Cunningham 2003; Selden, Hudson, and Banthin 2004) is reflective of the sum of the experiences of states and communities in which coverage levels vary substantially. There is strong evidence that state program characteristics are determinative of the relative success in reducing the number of uninsured children in each state (Wolfe and Scrivner 2005). One of those key characteristics is the choice of whether to expand Medicaid and administer a single program, a combination S-CHIP and Medicaid program, or two separate programs.

Although a Medicaid expansion could be less cumbersome, more information is needed to understand how families respond to different program characteristics and configurations. For example, a separate program might increase enrollment through favorable branding that has the potential to reduce stigma associated with Medicaid (Ketsche et al. 2007). Indeed, Wolfe and Scrivner (2005) find a separate program associated with a reduced likelihood of being uninsured. However, these results are not consistent with findings from Kronebusch and Elbel (2004) who use a similar data set but find that a single program results in higher total public enrollment. Different classification schemes for identifying states as having Medicaid expansions, separate S-CHIP programs, or a combined approach may contribute to the different findings in these studies.[2]

While the policy goal of making coverage available to children through S-CHIP is important, keeping children continuously covered once enrolled appears to be almost as important. Schoen and DesRoches (2000) find substantial reductions in access among individuals with discontinuous coverage compared with those continuously insured. Aiken, Freed, and Davis (2004) and Olson, Tang, and Newacheck (2005) find that children with a gap in coverage are more likely to report postponed medical care or experience significant problems accessing care. A particular concern for separate programs is maintaining continuous coverage for children. Sommers (2005) uses Current Population Survey (CPS) data from 2001 through 2004 to identify children who were enrolled in Medicaid or S-CHIP in one year and uninsured the following year. He finds that states with a separate program for Medicaid and S-CHIP exhibit a 45 percent higher dropout rate among children who remain income eligible for public coverage than do Medicaid expansion states.

The use of survey data for assessment of continuity of coverage among children is limited because of the inability to track a single child on a monthly basis and for more than two consecutive years. In addition, national surveys

cannot provide state-specific measures of instability and are not useful in identifying the relationship between prior utilization and coverage instability. Our study assesses the implication of a separate S-CHIP program on continuity of public coverage among a particular cohort (6-year-olds) vulnerable to disenrollment using monthly enrollment data that is not subject to survey data limitations.

S-CHIP IN GEORGIA

Although the S-CHIP and Medicaid programs in Georgia are separate programs, both are administered by the same agency, enrollees utilize the same network of providers, and providers receive the same level of reimbursement, regardless of the program in which the child is enrolled. Therefore, a transition between programs should not disrupt patterns of care or provider relationships for enrollees. Transitions in enrollment, however, may not be completely seamless for families. Children reaching age 6 and enrolled in Medicaid are notified of the need to reverify income or transition to PeachCare and begin paying a premium[3] if their most recent income verification places the family income above 100 percent of FPL. These children are usually enrolled in Right from the Start Medicaid (RSM), Georgia's poverty-related expansion group; we use these children as our Medicaid sample. However, not all RSM enrollees have incomes above poverty; some will continue to be eligible for Medicaid and will not face any transition. Children already enrolled in PeachCare at their sixth birthday will not necessarily face income verification but must begin paying a premium to retain coverage.

METHODS

Data and Statistical Analysis

Using claims and eligibility data from Georgia's public programs from January 2000 through December of 2002, we examine the enrollment of children pre and post their sixth birthday compared with a cohort of children reaching their ninth birthday, a point at which no programmatic change is required and premiums for coverage do not change.[4] Our study children reach their reference birthday between January 2001 and October 2002. We define droppers as children not enrolled in either program for two consecutive months of the 3 months following their birthday.

Covariates include the child's race/ethnicity and geographic area of residence. We also control for whether or not the child is enrolled for the full year before their birthday. Finally, given previous research that finds a relationship between prior health care expenditures and the decision to disenroll from Medicaid (Ellwood and Adams 1990) we test the effect of prior claims experience on disenrollment. Historical expenditures are measured on a log scale and represent the child's publicly insured in-patient and all other expenditures in the year before their birthday on a per member per month basis. Because outpatient healthcare expenditures including drug costs are generally more predictable than inpatient expenses, we test whether outpatient expenditures are a stronger predictor of coverage decisions.

Bivariate analyses are used to compare children who retain coverage with those whose coverage lapses for 6- and 9-year-olds.[5] Statistically significant differences are noted. For the multivariate analyses, we use logistic regression to estimate the likelihood that a child will drop coverage controlling for urban/rural location, race,[6] enrollment history, and prior year's expenditures. We include a dummy variable equal to one for those turning 6 to compare their rate of transition with the normal rate among the reference group of 9-year-olds. We estimate the equation for all children together and then separately for those with prior PeachCare and Medicaid enrollment to allow for a fully interactive model. Odds ratios are reported for each of the covariates.

RESULTS

Table 1 shows the cohort of children studied by age, program of enrollment before the reference birthday, and enrollment status by whether or not the children dropped, and if enrollment was maintained, program of enrollment at 6 months postbirthday. We see that 17 percent of Medicaid and 19 percent of PeachCare 6-year-olds drop coverage, compared with only 7 and 6 percent of the respective 9-year-old cohorts. We look at program enrollment post the reference birthday to see how many children who retain coverage transition from Medicaid into PeachCare. While income instability among eligible families implies substantial ongoing movement between programs, we expect a significantly larger movement from Medicaid to PeachCare for 6-year-olds due to a shift in eligibility for these children in families between 100 and 133 percent of FPL. However, for both age cohorts of children, movement from PeachCare into Medicaid is substantial, while movement from Medicaid into PeachCare is small to negligible. The recession of the early part of this decade made it more likely for low-income

Table 1:   Enrollment Status of 6-Year-Old and 9-Year-Old Children Pre- and Postreference Birthday

	6-Year-Olds		9-Year-Olds**	
Total by Age	*51,932*	*%*	*42,753*	*%*
Enrolled in Medicaid before birthday	34,856		25,997	
Dropped coverage	5,819	16.7	1,911	7.4
Stayed enrolled	29,037	83.3	24,086	92.6
Of those staying enrolled				
Stayed in Medicaid	28,762	99.1	24,050	99.9
Moved to PeachCare within 6 months	275	0.8	36	0.1
Enrolled in PeachCare before birthday	17,076		16,756	
Dropped coverage	3,174	18.6	934	5.6
Stayed enrolled	13,902	81.4	15,822	94.4
Of those staying enrolled				
Stayed in PeachCare	10,766	77.4	12,632	79.8
Moved to Medicaid within 6 months	3,136	22.6	3,190	20.2

**Chi-square test of significance for differences between 9- and 6-year-olds are significant at $p < .01$.
Source: Claims and monthly eligibility files for Medicaid and PeachCare, 2000–2002.

families to experience a decline, rather than an increase, in family income. Nonetheless, the small number of children moving from Medicaid to PeachCare at age 6 is surprising and this finding supports the need for additional study.

In Table 2 we compare the characteristics of those dropping and those retaining coverage separately for 6- and 9-year-olds. Seventeen percent of the study children (both public programs combined) dropped coverage after their sixth birthday, compared with only 7 percent of the control cohort who turned 9. Among those who drop, 9-year-olds are more likely to return to either program than the 6-year-olds. In both cohorts, significant differences between those who drop and those who remain covered are found with respect to location, race and ethnicity, and prior year expenditures. However, these effects are not the same for both age cohorts. For example, white non-Hispanics are more, and African-American children are less, likely to drop coverage among 6-year-olds; the opposite is true among 9-year-olds. Similarly, children with a full year's enrollment before their birthday are more likely to drop among 6-year-olds but less likely to drop among 9-year-olds.

Multivariate Analysis of Dropping Coverage

Based on the odds ratio, after controlling for demographic characteristics and prior utilization, children reaching their sixth birthday are almost three times

Table 2:   Characteristics of Children Dropping and Children Remaining Enrolled (by Age Group)

	6-Year-Olds			9-Year-Olds		
	Total	Remain Covered	Drop Coverage	Total	Remain Covered	Drop Coverage
N	51,932	42,939	8,993	42,753	39,908	2,845
Share dropping			17.3%			7%
Geographic location (%)						
Other metro	15	15	14**	17	17	15**
North rural	21	21	21	20	20	19
South rural	22	23	21***	24	24	22**
Metro Atlanta	42	42	44***	40	40	44***
Share PeachCare (%)	33	32	35***	39	40	33***
Share Medicaid (%)	67	68	65***	61	60	67***
Race/ethnicity (%)						
White non-Hispanic	47	46	50***	43	43	42**
African American	43	43	41***	47	46	51***
Other race	2	2	2	2	2	1***
Missing race data	5%	5	5	5	5	5
Hispanic	4	4	2***	3	3	1***
Enrolled <12 months	43	43	42%**	51	50	66***
Continuous enrollment (12 months)	57%	57	58**	49	50	34***
Prior year expenditures						
All other services		$75	$60***		$72	$60***
Inpatient		$8	$7		$9	$6
N returning (right censored)			2,264			942
Percent returning			25%			33%

**Difference between those who drop and those who remain covered significant at .05 level.
***Difference between those who drop and those who remain covered significant at .01 level.
Source: Claims and monthly eligibility files for Medicaid and PeachCare, 2000–2002.

more likely to drop coverage than the control cohort of 9-year-olds. Among those with prior Medicaid enrollment, 6-year-olds are 2.5 times more likely to drop coverage than are the control group, while among those with prior PeachCare enrollment, 6-year-olds are almost four times more likely than their 9-year-old counterparts to drop coverage (Table 3).

Among both groups, prior inpatient claims experience has no effect on the propensity to drop coverage. Higher prior claims experience for all other services is associated with a small but significant reduction in the probability of dropping coverage. The effect is significantly stronger for PeachCare children. For example, a 50 percent reduction in prior year expenditures will result in a

Table 3: Logistic Regression for the Probability of Dropping Coverage

	All Children			Prior Medicaid (RSM)			Prior PeachCare Enrollment			Significant difference from Medicaid
N—Total	94,685			60,853			33,832			
N—Dropping coverage	11,838			7,730			4,108			
Probability of dropping	12.5%			12.7%			12.1%			
Pseudo-R^2	4.5%			3.3%			10.0%			
	Odds ratio	95% CI		Odds ratio	95% CI		Odds ratio	95% CI		
Sixth birthday	2.97	2.84	3.11	2.52	2.38	2.66	3.81	3.52	4.12	***
Geographic location										
Other metro	Reference			Reference			Reference			
North rural	1.09	1.01	1.16	1.13	1.04	1.23	0.95	0.84	1.07	
South rural	1.01	0.94	1.08	1.05	0.97	1.13	0.89	0.79	1.01	
Metro Atlanta	1.18	1.11	1.25	1.19	1.11	1.29	1.00	0.90	1.12	
PeachCare enrolled	1.08	1.04	1.13							
Race/ethnicity										
White	Reference			Reference			Reference			
African American	0.89	0.85	0.93	0.77	0.73	0.81	1.28	1.18	1.39	***
Other race	0.69	0.59	0.80	0.90	0.75	1.08	0.57	0.49	0.67	***
Hispanic (any race)	0.76	0.69	0.84	0.62	0.53	0.73	0.42	0.31	0.57	
Missing race information	0.48	0.42	0.54	0.39	0.30	0.50	0.94	0.83	1.07	***
Enrolled for full year	1.01	0.97	1.06	0.87	0.82	0.91	1.28	1.19	1.38	***
Utilization (log PMPM)										
Inpatient	0.99	0.96	1.03	1.00	0.96	1.04	0.94	0.87	1.02	
All other services	0.88	0.87	0.89	0.97	0.95	0.98	0.72	0.71	0.74	***

***Difference between those with prior PeachCare enrollment and those with prior Medicaid enrollment significant at .01 level.

Source: Claims and monthly eligibility file for Medicaid and PeachCare, 2000–2002.

1 percent decline in the probability of dropping coverage among Medicaid and a 10 percent decline among PeachCare children.

The effect of some key determinants of dropping varies by program. African-American children are less likely to drop if previously enrolled in Medicaid but more likely to drop if previously enrolled in PeachCare than are white children. This may reflect unmeasured income differences between African-American and white children that make the former less likely to be in the income group subject to transition if Medicaid enrolled, and more sensitive to the premium imposed within PeachCare at the sixth birthday. Children with a full year's enrollment before the reference birthday are less likely to drop if Medicaid enrolled but more likely to drop if PeachCare enrolled.

Our study cohort of one aide category of Medicaid enrolled children (RSM) includes a substantial but unknown number of children who are in families with incomes below 100 percent of FPL and would thus not be required to transition or pay a premium. This confounding factor makes it difficult to use the marginal effects of Medicaid versus PeachCare drop out rates to differentiate a premium effect from a transition effect. However, Table 1 provides some evidence that can be used to make inferences about these effects.

The 9-year-old Medicaid drop out rate of 7.4 percent can be used to establish a base attrition rate for Medicaid children apart from a premium or a programmatic effect. Thus, of the 5,819 six-year-old Medicaid children who drop coverage, 3,240 are in "excess" of the predicted number. Can we then estimate the attrition rate above the base only for the 6-year-old Medicaid children who are potentially eligible for transition to PeachCare? If we ignore the 6-year-old Medicaid children who retained Medicaid coverage (and hence eligibility) then those potentially eligible for transition to PeachCare are the remaining children $(34,856 - 28,762 = 6,094)$. Our estimate of the attrition rate above the base for this transitional population is then 53 percent (3,240/ 6,094). In contrast, PeachCare enrolled children reaching age 6 face no programmatic transition but face the imposition of a premium. We note that total attrition among the 6-year-old PeachCare children is 19 percent. Further, within PeachCare, the attrition rate among those facing the newly imposed premium is 13 percentage points higher than the attrition rate among 9-year-olds, all of whom had already been paying the premium. Our measure of a 13 percentage point disenrollment above the base because of imposing a premium on S-CHIP children is consistent with findings of other researchers (Kenney et al. 2006/2007; Marton 2007) although these studies suggest that the price sensitivity of the lower income Medicaid children is greater than that

of S-CHIP children. We compare 53 percent with 13 percent attrition above the baseline for children facing a transition and a premium (Medicaid enrolled) to children facing a new premium (PeachCare enrolled). We conclude that some, but not all of the high attrition rate among the RSM children reaching age 6 is attributable to the imposition of a premium, but that programmatic transition also causes some attrition, apart from the premium effect.

In analyses not shown, we estimate the effect of prior claims experience on the likelihood of reenrollment using a hazard rate model. We find that among droppers, those with higher prior claims are more likely to reenroll. We also compare the claims experience of 6-year-olds who reenroll with those who were continuously enrolled (at ages $6\frac{1}{2}$–$7\frac{1}{2}$) to test for reenrollment due to some level of pent-up demand for services.[7] Among those enrolled in Medicaid before their sixth birthday, annual expenditures are 54 percent lower for returning enrollees than among those children who remained publicly covered. There are no differences among reenrolled children with prior PeachCare eligibility and those remaining covered. Thus we believe that the observed expenditure levels for those returning to Medicaid and PeachCare represent an upper bound on the likely per member per year cost of those children who could be retained in the program with targeted outreach.

DISCUSSION AND POLICY IMPLICATIONS

Approximately two-thirds of Georgia's uninsured children are eligible for public coverage. Our results indicate that the high attrition rate among publicly covered children occurring after transitional birthdays contributes to this problem. When compared with 9-year-olds and annualized, we estimate excess disenrollment among 6-year-olds of over 3,000 children; almost 2,000 RSM Medicaid and 1,5000 PeachCare children who might be targeted for retention. A key concern is what happens to children who drop coverage. A survey of children disenrolled from S-CHIP for nonpayment of premium in 2005 found that only 7 percent gained private coverage through a working parent (Landers and Ketsche 2006). This supports the notion that many of the 6-year-olds dropping out of public coverage remain uninsured. Therefore, avoiding the excess attrition related to the transitional birthday could be an effective strategy for reducing the number of uninsured children. If these children could be retained from age 6 to 18, we estimate that the total number

of uninsured children in Georgia would decline by almost 40,000, or over 12 percent.

The relationship between disenrollment and prior expenditures suggests that lower-cost enrollees are dropping coverage, particularly among Peach-Care children. Using prior expenditures to predict future expenditures, the results imply that outreach to retain children at transitional birthdays would keep a low-cost cohort of children in the program. We estimate the annual costs of retaining these children to be no more than $997 ($298 in state dollars at the current S-CHIP matching rate) per child. Furthermore, focusing efforts on retention among children already enrolled is much less likely to encourage crowd out among privately insured children. This may be one of the most cost effective ways of reducing the number of uninsured children in Georgia. We note that Georgia, like other states, is required to screen applicants to PeachCare and transfer those who appear to qualify to the Medicaid program. However, no such reverse screen and transfer require-ment applies and the low transfer rates from Medicaid into PeachCare demonstrate administrative opportunity to improve retention through imple-mentation of such a program or through incentives for caseworkers to facilitate PeachCare enrollment.

LIMITATIONS AND FUTURE RESEARCH

The data used in this study are from 2000 through 2002. Early in 2003, the claims and eligibility administrator for Georgia's public programs changed, making it difficult to track children longitudinally beyond 2002. This high-lights the need to consider linkages between old and new data systems for program evaluation when such changes are made. It may be possible to repeat this analysis with more recent data as the new administrative systems mature.

Our data do not include family income or information on the disposition of the income recertification for Medicaid eligibility. Anecdotal evidence from Medicaid staff suggests that most of the enrollees are dropped from coverage for failure to complete the application process, rather than from supplying information that makes them ineligible. Additional information on those who drop at transition birthdays drawn from disenrollee surveys would signifi-cantly strengthen administrative data. Furthermore, our data do not link re-cords from children in the same family. To the extent that sibling enrollment is an important determinant of enrollment and eligibility verification processes, we note this missing variable is a limitation to the analysis. Finally, we are

unable to control for the language spoken in the home which may relate to the ability of a family to navigate complicated administrative processes.

While we provide a simple analysis of claims experience for those dropping and returning to coverage, additional analysis of the effect of prior public coverage experience on utilization can provide the state with estimates of the potential costs of improving continuity of coverage. To better differentiate the transitional from the premium effect, we need a measure of price elasticity for this particular population. Future research to isolate the effect of premium changes among this low-income population will be important in order to disaggregate the two effects.

NOTES

1. Dependents of workers eligible for the State Health Benefit Plan are not eligible for PeachCare, although if family income is sufficiently low they are eligible for Medicaid.
2. For example, the Kaiser Family Foundation classifies 16 states as having a Medicaid expansion, 20 as having separate programs, and 15 as having combined approaches, compared with 16, 15, and 20, respectively, in Rosenbaum, Markus, and Sonosky (2004).
3. Premiums were $7.50 per child per month for one child or $15 per family per month for two or more children during the study period.
4. We also measured transitions out of coverage at the first birthday and reenrollment trends for those children. Results of that analysis are available upon request.

5. Comparisons of droppers for 6-year-olds by program (PeachCare and RSM Medicaid) are available upon request.

6. We have a substantial share of enrollees whose race is missing from the eligibility file. We test all findings for the sensitivity of including or excluding these observations and find no material difference in our estimates of the effect of the sixth year transition birthday.

7. Data available upon request.

REFERENCES

Aiken, K. D., G. L. Freed, and M. M. Davis. 2004. "When Insurance Status Is Not Static: Insurance Transitions of Low-Income Children and Implications for Health and Health Care." *Ambulatory Pediatrics* 4 (3): 237–43.

Cunningham, P. 2003. "SCHIP Making Progress: Increased Take-up Contributes to Coverage Gains." *Health Affairs* 22 (4): 163–72.

Ellwood, D., and E. K. Adams. 1990. "Medicaid Mysteries: Medicaid and Welfare Dynamics." *Health Care Financing Review* (Annual Supplement): 119–31.

Kenney, G., R. A. Allison, J. F. Costich, J. Marton, and J. McFeeters. 2006/2007. "Effects of Premium Increases on Enrollment in SCHIP: Findings from Three States." *Inquiry* 43 (4): 378–92.

Kenney, G., and D. I. Chang. 2004. "The State Children's Health Insurance Program: Successes, Shortcomings, and Challenges." *Health Affairs* 23 (5): 51–63.

Ketsche, P., E. K. Adams, K. Minyard, and R. Kellenberg. 2007. "The Stigma of Public Programs: Does a Separate S-CHIP Program Reduce It?" *Journal of Policy Analysis and Management* 26 (4): 775–90.

Kronebusch, K., and B. Elbel. 2004. "Simplifying Children's Medicaid and SCHIP." *Health Affairs* 23 (1): 233–46.

Landers, G., and P. Ketsche. 2006. "Georgia's PeachCare for Kids: Results from a Disenrollee Survey." Working Paper. Georgia Health Policy Center.

Marton, J. 2007. "The Impact of the Introduction of Premiums into a SCHIP Program." *Journal of Policy Analysis and Management* 26 (2): 237–55.

Olson, L. M., S.-F. S. Tang, and P. W. Newacheck. 2005. "Children in the United States with Discontinuous Health Insurance Coverage." *New England Journal of Medicine* 353 (4): 382–91.

Rosenbaum, S., A. Markus, and C. Sonosky. 2004. "Public Health Insurance Design for Children: The Evolution from Medicaid to SCHIP." *Journal of Health and Biomedical Law* 19 (1): 1–47.

Schoen, C., and C. DesRoches. 2000. "Uninsured and Unstably Insured: The Importance of Continuous Coverage." *Health Services Research* 35 (1): 187–206.

Selden, T., J. L. Hudson, and J. S. Banthin. 2004. "Tracking Changes in Eligibility and Coverage among Children, 1996–2002." *Health Affairs* 23 (5): 39–50.

Short, P. F., and D. R. Graefe. 2003. "Battery-Powered Health Insurance? Stability in Coverage of the Uninsured." *Health Affairs* 22 (6): 244–55.

Sommers, B. D. 2005. "The Impact of Program Structure on Children's Disenrollment from Medicaid and SCHIP." *Health Affairs* 24 (6): 1611–8.

———. 2007. "Why Millions of Children Eligible for Medicaid and SCHIP are Uninsured: Poor Retention versus Poor Up-Take." *Health Affairs* 26 (5): w560–7.

Wolfe, B., and S. Scrivner. 2005. "The Devil May Be in the Details: How the Characteristics of SCHIP Programs Affect Take-up." *Journal of Policy Analysis and Management* 24 (3): 499–522.