Medicaid and SCHIP Coverage: Findings from California and North Carolina

Genevieve Kenney, Ph.D., Jamie Rubenstein, Anna Sommers, Ph.D., Stephen Zuckerman, Ph.D., and Fredric Blavin

This article examines experiences under Medicaid and the State Children's Health Insurance Program (SCHIP), drawing on surveys of over 3,000 enrollees in California and North Carolina in 2002. In both States, Medicaid enrollees were less likely than SCHIP enrollees to have parents who were covered by employer-sponsored insurance (ESI). With the exception of dental care and provider perceptions, access experiences were fairly comparable across the two programs, despite differences in the characteristics of the children served by the two programs. Relative to being uninsured, Medicaid enrollment was found to improve access to care along a number of different dimensions, controlling for other factors. Furthermore, this study emphasizes the need for continued evaluation of access to care for both programs.

INTRODUCTION

A number of recent studies have examined access and use experiences of children enrolled in SCHIP. These studies consistently show that SCHIP enrollment improves access to and receipt of care for children who enroll in SCHIP. Other studies have examined the extent to which SCHIP is substituting for ESI (Allison et al., 2003; Hughes, Angeles, and Stilling, 2002; Sommers et al., 2007), finding that a small percentage of children transfer directly from private coverage to SCHIP.

In contrast, less research has been conducted recently on Medicaid Programs for children. It is important to examine access issues under Medicaid, which covers 25 million children (Kaiser Commission on Medicaid and the Uninsured, 2006). Medicaid is also the most important source of coverage to poor children in this country, insuring close to 60 percent living below the Federal poverty level (FPL).

There have been ongoing concerns about access to care under Medicaid related to low payment to providers and other factors. However, past studies have found that Medicaid enrollees fare better than their uninsured counterparts and that they enjoy better access than low-income children with private coverage in some service areas because of the broader benefits and narrower cost-sharing requirements in Medicaid.

Historically, substitution of public for private coverage has been far less of a concern within the Medicaid Program than within SCHIP. While SCHIP legislation mandates that States implement policies to discourage substitution at enrollment, no such mandate exists for Medicaid. For example, children eligible for Medicaid and covered by employer insurance are not required to fulfill waiting periods before enrollment.[1] Previous research has found some evidence of

NOTE: Additional information on research studies mentioned throughout this article is available on request from the author.

Genevieve Kenney, Anna Sommers, and Stephen Zukerman are with the Urban Institute. Jamie Rubenstein is with Cornell University. Fredric Blavin is with the University of Pennsylvania. The research in this article was supported by the U.S. Department of Health and Human Services under Contract Number HHS-100-01-0002. The statements expressed in this article are those of the authors and do not necessarily reflect the views or policies of the Urban Institute, Cornell University, University of Pennsylvania, U.S. Department of Health and Human Services, or the Centers for Medicare & Medicaid Services (CMS).

[1] Children with employer coverage may enroll in Medicaid without giving up their employer coverage.

Table 1

Program Characteristics of Medicaid and SCHIP: California and North Carolina, 2002

Characteristic	California		North Carolina	
	Medicaid	SCHIP	Medicaid	SCHIP
Program	Medi-Cal	Healthy Families	Medicaid	Healthy Choice
		Percent		
Income Eligibility				
Under 1 Year	Up to 200	200 to 250	Up to 185	185 to 200
1-5 Years	Up to 133	133 to 250	Up to 133	133 to 200
6-18 Years	Up to 100	100 to 250	Up to 100	100 to 200
Total Enrollment[1]	3,243,667	475,795	701,500	60,211
Proportion in Risk-Based Managed Care	Nearly 100	52	None	None

[1] SCHIP numbers from State administrative data; point-in-time data for September 2001.

NOTE: SCHIP is State Children's Health Insurance Program.

SOURCE: Hill, I., Harrington, M., and Hawkes, C.: *Final Cross-Cutting Report on the Findings from Ten State Site Visits: Congressionally Mandated Evaluation of SCHIP*. Mathematica Policy Research, Inc. Princeton, NJ. 2004. Kaiser Family Foundation, State Health Facts Online: *Children's Programs Under Title XIX*. Children Ever Enrolled During Fiscal 2000. Centers for Medicare & Medicaid Services: MSIS Statistical Reports for Federal Fiscal Years 1999, 2000, and 2001.

substitution for private coverage by the Medicaid Program—referred to as crowd-out (Blumberg, Dubay, and Norton, 2000; Cutler and Gruber, 1997; Dubay and Kenney, 1996).

Here we examine parental coverage patterns and access to care for children enrolled in Medicaid and SCHIP, and we assess impacts of Medicaid enrollment for children in California and North Carolina.[2] This analysis was done as part of a congressionally mandated evaluation of SCHIP that examined 10 States that included supplemental analysis of Medicaid Programs for children in 2 States. California and North Carolina were selected for the supplemental Medicaid study because they each have a major separate SCHIP component, which provides a contrast between the programs, and because they both had enrollment files that could support the study.[3,4]

Table 1 shows how SCHIP differs from Medicaid along several programmatic dimensions in these two States. As mentioned previously, both States have separate non-Medicaid SCHIPs under Title XXI: Healthy Families (California) and Healthy Choice (North Carolina). In both States, children's enrollment in Medicaid far exceeds enrollment in SCHIP.[5]

Medicaid has more generous income eligibility thresholds for infants and children under age 6 than for school-age children. For example, Medicaid income eligibility thresholds for infants are 200 percent of the FPL in California, and 185 percent in North Carolina, 133 percent for age 1-5, and 100 percent for age 6-18 (under Medicaid, States must cover children under 6 up to 133 percent of the FPL and children 6-18 up to 100 percent of the FPL). In contrast, SCHIP income eligibility thresholds are 250 and 200 percent for children of all ages in California and North Carolina, respectively. In both States, Medicaid and SCHIP service delivery systems are different from one another—in North Carolina, SCHIP relies on a Blue Cross®/Blue Shield® network which

[2] Refer to Kenney (2007a) for analyses of SCHIP impacts in these two States.

[3] At the time of the survey, North Carolina did not have a Medicaid component to SCHIP, and California had only 81,089 enrolled in its Medicaid component compared to 775,905 in the separate component.

[4] In 2006, North Carolina implemented a Medicaid expansion for children ages 1 to 6 with incomes below 200 percent of the FPL under SCHIP.

[5] California's enrollment is about 7 times higher and North Carolina's enrollment is more than 11 times larger in Medicaid than SCHIP.

includes different providers than under Medicaid, and in California, Medicaid and SCHIP contract with different managed care plans (Hawkes and Howell, 2002; Hill and Hawkes, 2002; Hill, Harrington, and Hawkes, 2004). In California, both SCHIP and Medicaid rely on capitated managed care arrangements, but SCHIP has managed care in more counties than Medicaid (Hill, Harrington, and Hawkes, 2004).[6]

DATA AND METHODS

The data for this analysis were drawn from surveys of Medicaid and SCHIP enrollees fielded in California and North Carolina in 2002.[7] The survey was conducted in English and Spanish, using computer-assisted-telephone interviewing. Field followup was used to locate families who could not be reached by telephone, and cellular phones were used to conduct these interviews. Interviews were conducted with the person most knowledgeable about the health care needs and services for the sampled child.

Data from State Medicaid and SCHIP eligibility and enrollment files were used to construct the State-representative sample frames for each program for two analytic subgroups:[8]

- Recent Enrollees—Children enrolled in the given program for at least 1 month, but less than 3 months at the time of sample frame construction and who had had at least 2 months without coverage in the program prior to enrollment—were asked about their access and use experiences during the 6 months prior to enrolling in Medicaid or SCHIP.
- Established Enrollees—Children who were enrolled in the program for 5 or more months at the time of sample frame construction—were asked about their access and use experiences while enrolled in Medicaid or SCHIP during the 6 months prior to the time of the survey.

To create samples that were comparable between the SCHIP and Medicaid Programs, several exclusions were made to the Medicaid enrollment files, based on children's reason for eligibility. Major exclusions included the blind/disabled (Supplementary Security Income) and medically needy categories. Our analysis focuses on children enrolled in Medicaid through the poverty-related expansions and the Temporary Assistance to Needy Families/Aid to Families with Dependent Children provisions (Trenholm et al., 2005).

The response rates on the Medicaid component of the survey were lower than those achieved on SCHIP. The response rate for the established enrollee samples (on which most of this analysis is drawn) in California were 41 and 78 percent in Medicaid and SCHIP, respectively, and 60 and 77 percent, respectively, in North Carolina. Low Medicaid response rates also have been found in previous studies (Ciemnecki et al., 2002; Edwards, Bronstein, and Rein, 2002), reflecting inadequate contact information available in administrative records (Ghosh et al., 2001). The relatively low Medicaid response rate on the California survey raises the possibility that estimates made for the Medicaid population and comparisons with the SCHIP population are biased, but the weighting strategy should have addressed this potential bias to an extent (Trenholm et al., 2005). The sampling weights and standard errors used in this analysis were developed to reflect the sample design. Standard errors are

[6] Neither State had a premium assistance program in place over this timeframe.

[7] Refer to Trenholm et al. (2005), for more information on the survey and the larger evaluation.

[8] Enrollees who had been enrolled between 3 and 5 months were excluded from the study because of concerns about their ability to provide reliable responses to the survey questions.

calculated based on the Taylor series linearization approach.

Parental Insurance Coverage

We assess patterns of parental coverage using data on the established Medicaid and SCHIP enrollees samples. This analysis draws on an analytic sample of over 2,000 established enrollees, including subsamples ranging from a low of 394 in the Medicaid sample in California to a high of 614 in the SCHIP sample in North Carolina. Parents were asked about their insurance status, e.g., Medicaid, ESI, non-group, etc. Those with ESI were asked whether the employer contributed some, none, or all of the premium for own coverage, but they were not asked about the availability of family or dependent ESI coverage or about how much of a contribution would be required to obtain ESI. Since previous research indicates that only about 6 percent of employers offer insurance to their employees, but do not provide dependent coverage, we assume that a parent with ESI can also enroll their children (Fronstein, Helman, and Greenwald, 2003).

We use the information on ESI coverage among the parents as an indication of the extent to which the child could be covered under ESI. However, clearly, not all parents with ESI would have enrolled their child in their employer plan if Medicaid or SCHIP were not available, since some parents would leave their child uninsured rather than pay the premium associated with dependent coverage, which can be considerable. In addition, we consider whether the child has elevated health care needs because some States take a child's health status into account when they implement their anti-crowd-out provisions.[9] For example, some States, including North Carolina, take into account whether a child has significant health care needs when determining whether a child needs to satisfy a waiting period before enrolling in SCHIP.

We present multiple estimates of the availability of ESI: (1) the extent to which at least one parent has ESI; (2) the extent to which at least one parent has ESI and the employer pays at least something toward the premium; and (3) the extent to which at least one parent has ESI, the employer pays at least something toward the premium and the child does not have elevated medical needs.

Access to Care

We compare the health care access and use experiences of established Medicaid and SCHIP enrollees in the same State for five different types of indicators—(1) service use, (2) unmet needs, (3) perceptions about ability to meet child's health care needs, (4) presence and type of usual source of care, and (5) provider communication and accessibility. These outcomes were chosen to portray a broad range of different aspects of access and use.

As demonstrated in Table 2, in both States, SCHIP enrollees tend to be older and are more likely to come from higher income, two-parent, and working families compared to Medicaid enrollees. In North Carolina, there are also striking differences in the race/ethnic distributions and in the educational attainment levels of the parents. Since these characteristics are also correlated with health care access and use, we calculate regression-adjusted means that control for differences in the demographic, health, and socioeconomic characteristics of the two groups in each State. However, even after controlling for these observed differences

[9] Elevated health needs are defined as being in fair/poor health or having other health problems, such as a functional limitation, a behavioral/mental health problem requiring medications or injections, or an asthma diagnosis.

Table 2

Characteristics of Established Medicaid and SCHIP Enrollees and Their Parents: California and North Carolina, 2002

Characteristic	California		North Carolina	
	Medicaid	SCHIP	Medicaid	SCHIP
	Percent			
Age				
0-5 Years	36.9	24.1**	42.5	17.3**
6-12 Years	39.5	50.1**	33.7	47.2**
13-20 Years	23.6	25.8	23.8	35.5**
Health Status				
Elevated Need	13.5	11.1	23.0	23.6
Fair or Poor	10.4	8.9	10.0	6.9
Asthma	15.6	12.7	17.9	16.4
Mental Health Condition	7.7	5.4	13.1	10.1
Household Income, by FPL Range[1]				
<150%	92.5	65.8**	89.2	71.2**
150 to 199%	3.8	25.9**	5.6	23.3**
>200%	3.7	8.3**	5.2	5.5
Household Structure				
Two Parents	45.0	73.3**	23.3	43.4**
One Parent	43.5	23.9**	58.8	47.1**
One Parent and Step/Other Guardian	8.0	2.8**	7.8	8.4
Other	3.5	0.0**	10.1	1.0**
At Least One Parent Employed in Past Year	76.3	96.1	72.0	90.1**
Highest Education Level of Parents				
No GED or High School Diploma	36.8	39.0	26.4	11.9**
GED or High School Diploma	34.3	27.2*	44.6	44.7
Some College or College Degree[2]	28.9	33.7	29.1	43.4**
Race				
Hispanic/Latino	64.0	70.2	12.1	8.3
White	13.3	15.4	37.6	52.5**
Black	10.2	3.1**	41.9	31.6**
All Other Races	12.5	11.3	8.5	7.6
Birthplace of Parents				
At Least One Parent Foreign-Born	63.3	73.3*	11.8	10.1
Main Language Spoken in Household				
English	49.2	41.9	90.7	93.1
Spanish	44.4	50.8	7.5	5.0
Other	6.4	7.3	1.8	1.9
Metropolitan Statistical Area	96.0	95.9	64.6	62.8
Sample Size	394	574	528	614

* p-value <0.05.

** p-value <0.01 (based on two-tailed t-tests of Medicaid versus SCHIP within each State).

[1] Household income has a missing rate of 11 percent, which is considerably higher than other variables cited.

[2] Includes 2-year associate's degree and trade school.

NOTES: SCHIP is State Children's Health Insurance Program. FPL is Federal poverty level. GED is General Equivalency Diploma. Size of enrollee sample varies across estimates due to item nonresponse. The data for this table was obtained from the 2002 congressionally mandated survey of SCHIP enrollees in 10 States and Medicaid enrollees in 2 States.

SOURCE: Kenney, Genevieve, Ph.D., Sommers, Anna, Ph.D., Zuckerman, Stephen, Ph.D., Urban Institute, Rubenstein, Jamie, Cornell University, and Blavin, Fredric, University of Pennsylvania, 2007.

between the two groups, we cannot necessarily attribute any differences in access to the design features of the two programs since there may be unobserved factors that contribute to any access differentials that are found.

Impacts of Medicaid Enrollment

We also explore the extent to which Medicaid improves children's access to, and receipt of, care beyond what they would otherwise have experienced. We

expect that Medicaid will lead to better access to care, especially relative to being uninsured. To estimate impacts, we use a quasi-experimental separate sample pre- and post-test design (Campbell and Stanley, 1963; Singleton, Straits, and Straits, 1993). The experience of established enrollees while on the program (i.e., children who have been enrolled for at least 5 months)—the treatment group—is compared to the pre-Medicaid experiences of newly enrolling children—the comparison group. Thus, the pre-Medicaid experiences of the recent enrollee sample serves as a counterfactual for the Medicaid experiences of the established enrollee sample. Because of concerns about the validity of this approach, we estimate several alternative model specifications to assess the robustness of the estimated impacts, following the strategy employed in Kenney (2007a).[10]

A total of 1,162 cases are used to estimate impacts—830 established Medicaid enrollees and 332 recent Medicaid enrollees.[11] Because of the small samples of recent enrollees who provided information on their access and use experiences before enrolling in Medicaid, we estimate impacts based on a model that combines information for California and North Carolina.

The control variables in the multivariate impact models include (1) the child's age, sex, and race/ethnicity interacted with the interview language; (2) the health status of the child (i.e., general health status and presence of an elevated health care need); (3) household income (defined as a percentage of the FPL) and the number of children in the household; (4) the educational attainment and work status of the parents; and (5) the parent's attitudes regarding the efficacy of medical care (defined as the extent to which the parent believes that he/she can overcome most illnesses without help from a doctor and that home remedies are often better than prescribed drugs). We also include a dummy variable that indicates the State in which the child resides. In addition to estimating models that compare differences in access and use between all established and recent enrollees, separate estimates are presented for recent enrollees who were uninsured for all 6 months preceding their enrollment in Medicaid and for those who were covered for some or all of the 6 months preceding their enrollment in Medicaid.[12]

FINDINGS

Parental Insurance Coverage

Parental coverage among Medicaid enrollees differs markedly from that of SCHIP enrollees (Table 3). Many parents of Medicaid-covered children also are enrolled in Medicaid. Fifty-one percent of Medicaid enrollees in California and 43 percent in North Carolina live with a parent who is also enrolled in Medicaid. Many fewer Medicaid enrollees had parents with ESI. Only 10 percent of Medicaid children in California, and 18 percent in North Carolina had parents with ESI. In contrast, 43 percent of SCHIP children in California, and 51 percent in North Carolina had parents with ESI. In both States, few Medicaid enrollees live with a parent who has private non-group coverage.

[10] We find that the results reported in Table 6 hold up under these alternative specifications, which are available on request of the authors.

[11] The analytic sample of recent Medicaid enrollees is small in part because roughly one-third of the total sample was enrolled at birth and thus, could not provide information on access to care prior to enrolling (Trenholm et al., 2005).

[12] Of the group with some coverage in the 6 months prior to SCHIP enrollment, 65 percent had some type of insurance coverage for all of the 6 months prior to enrolling.

Table 3

Parental Coverage Among Established Enrollees: Comparison Across Established Medicaid and SCHIP Enrollees: California and North Carolina, 2002

Parental Coverage[1]	California		North Carolina	
	Medicaid	SCHIP	Medicaid	SCHIP
	Percent			
Public	51.8	6.6**	45.6	9.3**
Medicaid	50.7	5.4**	43.1	4.8**
SCHIP	0.0	0.0	0.0	0.0
Other Public	1.7	1.5	2.9	5.0
Any Private	10.7	48.9**	19.0	57.8**
Employer Sponsored	10.4	42.5**	17.8	51.1**
Individual	2.5	7.0**	1.7	7.2**
No Parent Insured	36.9	46.3*	35.7	34.4
Sample Size	317	489	443	474

*** p-value <0.01.

** p-value <0.05.

* p-value<0.10 (based on two-tailed t-tests of Medicaid versus SCHIP within each State).

[1] At least one parent has coverage.

NOTES: SCHIP is State Children's Health Insurance Program. The data for this table was obtained from the 2002 congressionally mandated survey of SCHIP enrollees in 10 States and Medicaid enrollees in 2 States.

SOURCE: Kenney, Genevieve, Ph.D., Sommers, Anna, Ph.D., Zuckerman, Stephen, Ph.D., Urban Institute, Rubenstein, Jamie, Cornell University, and Blavin, Fredric, University of Pennsylvania, 2007.

Table 4

Access to Employer-Sponsored Coverage and Comparison Across Established Medicaid and SCHIP Enrollees: California and North Carolina, 2002

Parent's Employer Coverage and Children's Needs	California		North Carolina	
	Medicaid	SCHIP	Medicaid	SCHIP
	Percent			
Any Parent Has Employer Coverage.	10.4	42.5	17.8	51.1
Employer Pays None of Premium.	-0.0	-2.9	-2.8	-5.3
Any Parent has Employer Coverage and Employer Pays Some or All of Premium	10.4	39.6	15	45.8
Employer Pays Some or All of Premium and Child has Elevated Health Care Needs	-2.5	-5.7	-4.2	-11.3
Any Parent has Employer Coverage, Employer Pays Some or All of Premium and Child Does Not Have Elevated Health Care Needs	7.9	33.9	10.8	34.5

NOTES: SCHIP is State Children's Health Insurance Program. The data for this table was obtained from the 2002 congressionally mandated survey of SCHIP enrollees in 10 States and Medicaid enrollees in 2 States.

SOURCE: Kenney, Genevieve, Ph.D., Sommers, Anna, Ph.D., Zuckerman, Stephen, Ph.D., Urban Institute, Rubenstein, Jamie, Cornell University, and Blavin, Fredric, University of Pennsylvania, 2007.

Over one-third of the Medicaid and SCHIP enrollees sampled in California and North Carolina are living in families in which no parent has insurance coverage. Moreover, in California almost one-half (46 percent) of all SCHIP enrollees had uninsured parents compared to 37 percent for Medicaid enrollees.

As mentioned previously, we use information on employer premium contributions and children's health care needs to estimate the proportion of established enrollees who have access to subsidized ESI that covers their parents. Table 4 presents the distribution of enrollees among families with parents whose employers pay none, some, or all of the premium. It seems

unlikely that low-income parents whose employer makes no contribution toward the premium would choose to cover their child in the absence of Medicaid—only 10 percent have access to subsidized employer coverage in California, and 15 percent in North Carolina. When the child's health status is factored in, we find that only 8 and 11 percent of Medicaid enrollees in California and North Carolina, respectively, do not have elevated health care needs, and have access to subsidized ESI.[13]

This analysis suggests that few Medicaid enrollees in California and North Carolina (between 8 and 10 percent in California, and 11 and 15 percent in North Carolina) may have had the option of enrolling in an employer plan covering their parent, but remained in Medicaid instead. These proportions are much lower than the estimates for each State's SCHIP enrollees, where between 34 and 40 percent in California, and 35 and 46 percent in North Carolina may have access to ESI. In contrast, data on recent SCHIP enrollees suggest that in the absence of SCHIP, at most, 15 percent could have kept private coverage in California, and 12 percent in North Carolina, which suggests that the ESI that is available is not affordable to families (Sommers et al., 2007).

Access to Care

Overall, the access and use experiences of SCHIP and Medicaid enrollees in California and North Carolina are fairly similar, controlling for observed differences in their characteristics (Table 5). For example, in both States, there was no difference between the two programs in receipt of doctor visits, checkups, and specialist visits; stress and worry levels; and presence and type of a usual source of medical care. However, two areas where SCHIP and Medicaid-established enrollees fared differently in both States are dental care and parental perceptions of coverage under SCHIP/Medicaid. In addition, in California, there were differences between Medicaid and SCHIP enrollees in emergency room (ER) visits and in several provider accessibility measures.[14]

In both States, children enrolled in Medicaid are less likely than SCHIP enrollees to receive a dental checkup and less likely to have a usual source for dental care. Controlling for observed differences in the characteristics of the children and their families, SCHIP enrollees in California were 7 percentage points more likely than Medicaid enrollees to have received a preventive dental visit and 12 percentage points more likely to have a usual source of dental care. In North Carolina, SCHIP enrollees were 13 percentage points more likely to have received a preventive dental visit, and 6 percentage points more likely to have a usual source of dental care (Table 5). The picture with respect to unmet dental needs is mixed. In California, unmet needs for dental care were 5 percentage points lower for Medicaid enrollees than for SCHIP enrollees, which may be due to the access problems with respect to dental care within the Healthy Families Program. In North Carolina, however, we observe the reverse pattern: unmet needs for dental care were 6 percentage points higher among Medicaid enrollees than among SCHIP enrollees.

The parents of children covered by Medicaid are less likely than parents of SCHIP enrollees in these two States

[13] Because so few children in the some and all premium categories have severe health care needs, we only present a single estimate that excludes both children with severe and elevated health care needs.

[14] Some other differences were apparent between the two programs in one State and not the other. These are not noted, however, since they are less likely to generalize more broadly.

Table 5

Access to Care and Use of Services Among Established SCHIP and Medicaid Enrollees: California and North Carolina, 2002

Access and Use	California		North Carolina	
	Medicaid	SCHIP	Medicaid	SCHIP
	Percent			
Service Use in 6-Month Period Based on Parent's Report				
Any Doctor/Other Health Professional Visit	57.8	59.7	68.4	70.
Any Preventive Care or Checkup Visit	42.0	43.8	52.9	48.2
Dental Visit for Checkup/Cleaning[1]	55.5	62.9*	50.2	63.6***
Any Specialist Visit	12.0	12.8	18.4	19.3
Any Mental Health Visit	4.7	5.0	8.4	3.7**
Any Specialist or Mental Health Visit	15.8	16.3	24.5	22.7
Any Emergency Room Visit	20.8	13.3**	30.7	28.8
Any Hospital Stay	3.3	3.0	5.8	7.0
Unmet Needs in 6-Month Period Based on Parent's Assessment				
Doctor/Health Professional Care	1.4	3.6**	2.6	2.9
Prescription Drugs	5.4	4.1	4.9	4.2
Dental Care[1]	7.8	12.7*	12.2	5.8*
Specialist	5.7	2.3*	2.6	2.6
Hospital Care	1.6	2.8	2.3	1.5
Hospital, Specialist, Doctor, Drug	11.6	10.7	9.2	8.9
Hospital, Specialist, Doctor, Drug, Dentist[1]	17.1	19.5	17.2	13.1
More than 1 Unmet Need	2.9	4.1	3.1	1.0
Parental Perceptions of Ability to Meet Child's Health Care Needs				
Very Confident	74.0	80.4*	82.0	85.3
Never or Not Very Often Stressed	73.6	76.0	80.8	83.7
Never or Rarely Worried	48.4	48.4	58.9	56.5
Never or Rarely Causes Financial Difficulties	76.7	83.0*	88.4	83.9*
Children on Medicaid/SCHIP Get Better Health Care	71.7	82.9***	69.2	77.5*
Doctors and Nurses Look Down Medicaid/SCHIP	32.4	19.2***	34.1	18.8***
Usual Source of Care Based on Parent's Report				
Health Care in Past 6 Months	92.4	94.1	94.7	93.2
Private Doctor's Office/Group Practice	47.4	46.6	66.7	65.7
Usually Saw Same Provider	70.8	73.2	66.5	59.8*
Dental Care in Past 6 Months[1]	78.9	90.8***	75.9	82.1*
Provider Communication and Accessibility Based on Parent's Report				
Would Recommend Usual Source of Care	88.7	89.2	94.8	94.1
Could Reach Doctor After Hours	62.6	71.4*	79.1	81.0
Provider Explains in Understandable Ways	84.7	82.7	93.0	94.9
Provider Treats with Courtesy/Respect	89.4	92.3	94.6	96.8
Provider Talks About How Child Feeling	80.3	83.7	90.4	95.8*
Rated Ease of Getting Care Excellent or Very Good	36.2	38.9	54.7	56.1
Wait Time for Care Less than 30 Minutes	39.0	49.6**	67.8	63.2
Travel Time to Usual Source of Care Less than 30 Minutes	82.1	88.8*	81.9	82.1
Sample Size	343	548	487	570

* p-value <0.10 (based on two-tailed t-tests of Medicaid versus SCHIP within each State).

** p-value <0.05.

*** p-value <0.01.

[1] Applies to children age 3 or over.

NOTES: Established enrollees defined as those who have been enrolled in SCHIP or Medicaid for 5 months or longer. The reference period for these measures is the 6 months prior to the interview. Estimates based on regression adjusted means for established SCHIP and Medicaid enrollees that control for the child's age; health status; race/ethnicity; sex; interview language; family's income and metropolitan statistical area status; the parents' education and work status; and the number of children in the family. SCHIP is State Children's Health Insurance Program. The data for this table was obtained from the 2002 congressionally mandated survey of SCHIP enrollees in 10 States and Medicaid enrollees in 2 States.

SOURCE: Kenney, Genevieve, Ph.D., Sommers, Anna, Ph.D., Zuckerman, Stephen, Ph.D., Urban Institute, Rubenstein, Jamie, Cornell University, and Blavin, Fredric, University of Pennsylvania, 2007.

to believe that children enrolled in the Medicaid and SCHIP programs, respectively, get better health care than the uninsured. For example, other things equal, in both California and North Carolina, parents of SCHIP enrollees were 11 and 8 percentage points more likely than parents of Medicaid enrollees to believe that

children enrolled in Medicaid/SCHIP get better health care. Likewise, in California and North Carolina, respectively, parents of SCHIP enrollees were 13 and 15 percentage points less likely than the parents of Medicaid children to believe that providers look down on the people who participate in their public health insurance program.

Medicaid enrollees in California are 7 percentage points more likely than SCHIP enrollees to have visited the ER in the 6 months before the survey. It also appears that Medicaid enrollees in California are less likely than SCHIP enrollees to have a usual source of care where doctors can be reached after hours and where wait and travel times are short. This suggests that the greater use of the ER among Medicaid enrollees compared to SCHIP enrollees may result from access problems associated with the usual source of care for children covered by Medicaid.

The multivariate analyses also indicate that selected child and family characteristics are associated with the different outcome measures presented here (data not shown). For example, it appears that children with elevated health care needs have higher unmet needs, across the different domains that are studied. It also appears that service use patterns vary with the age of the child; relative to children age 6-12, preschool-age children in both States were more likely to receive preventive visits, but less likely to receive mental health visits.

Impacts of Medicaid Enrollment

On average, established Medicaid enrollees had better access experiences while they were covered by Medicaid compared to the experiences that recent enrollees had in the 6 months before enrolling in Medicaid (Table 6). Moreover, the impact estimates are extremely robust: they vary little under the alternative specifications that were estimated (results available on request of the authors).

Established Medicaid enrollees were less likely than recent Medicaid enrollees to have unmet needs for doctor care and dental care and less likely to have more than one unmet need. For example, established Medicaid enrollees were 9 percentage points less likely than recent Medicaid enrollees to have an unmet dental need, 3 percentage points less likely to have an unmet need for doctor/other professional care, 2 percentage points less likely to have an unmet need for hospital care, and 5 percentage points less likely to have more than one unmet need for care. Established Medicaid enrollees were more likely to have received a dental checkup and more likely than recent enrollees to have had an ER visit. This latter finding bears further study, since it may indicate that Medicaid enrollees are experiencing difficulties obtaining care outside the ER.

Established enrollees were more likely to have a usual source for both health and dental care, to receive dental checkups, to rely on a private doctor's office or group practice as their usual source of care, and they were more likely to see the same provider at their usual source of care. Parents of established enrollees reported that they had shorter travel times to reach their child's usual source of care, were more likely to rate their ease of getting care as excellent or very good, and were more likely to say that their provider asked them about how their child was feeling, but were less likely to say that their provider treated them with courtesy and respect. This latter finding, combined with the statistics provided on Table 5 about parental perceptions that doctors and nurses look down on Medicaid patients, indicate that provider attitudes and behavior toward Medicaid patients may bear further study.

Table 6

Multivariate Estimates of Access and Use Impacts of Medicaid Enrollment, by Previous Insurance Status of Recent Enrollees: California and North Carolina, 2002

Access and Use Impact	Comparison of Percentage Difference Between Established Medicaid Enrollees		
	All Recent Enrollees	Previously Uninsured[1]	Previously Insured[2]
Service Use in 6-Month Period Based on Parent's Report			
Any Doctor/Other Health Professional Visit	0.02	0.08	-0.06*
Any Preventive Care or Checkup Visit	0.00	0.08*	-0.09*
Dental Visit for Checkup/Cleaning[3]	0.12**	0.16**	0.05
Any Specialist Visit	0.02	0.03	-0.01
Any Mental Health Visit	0.02	0.02	0.01
Any Specialist or Mental Health Visit	0.03	0.05	0.00
Any Emergency Room Visit	0.05*	0.04	0.07
Any Hospital Stay	-0.03*	-0.03	-0.03
Unmet Needs in 6-Month Period Based on Parent's Assessment			
Doctor/Health Professional Care	-0.03**	-0.06**	0.01
Prescription Drugs	-0.01	-0.03	0.03
Dental Care[3]	-0.09***	-0.11**	-0.06
Specialist	-0.02	-0.03	0.00
Hospital Care	-0.02*	-0.04*	-0.01
Hospital, Specialist, Doctor, Drug	-0.04	-0.07*	0.01
Hospital, Specialist, Doctor, Drug, Dentist[3]	-0.08**	-0.13**	-0.01
More than 1 Unmet Need	-0.05**	-0.07**	-0.02
Parental Perceptions of Ability to Meet Child's Health Care Needs			
Very Confident	0.23***	0.32***	0.12
Never or Not Very Often Stressed	0.18***	0.25***	0.09
Never or Rarely Worried	0.15***	0.23***	0.06
Never or Rarely Causes Financial Difficulties	0.25***	0.27***	0.23***
Usual Source of Care Based on Parent's Report			
Health Care in Past 6 Months	0.18***	0.29***	0.05
Private Doctor's Office/Group Practice	0.11***	0.19***	0.05
Usually Saw Same Provider	0.16***	0.31***	-0.01
Dental Care in Past 6 Months[3]	0.16***	0.22***	0.08
Provider Communication and Accessibility Based on Parent's Report			
Would Recommend Usual Source of Care	0.04	0.07	0.02
Could Reach Doctor After Hours	-0.02	0.05	-0.08
Provider Explains in Understandable Ways	0.03	0.07	0.00
Provider Treats with Courtesy/Respect	-0.04*	-0.07	-0.02
Provider Talks About How Child Feeling	0.08*	0.11*	0.05
Rated Ease of Getting Care Excellent or Very Good	0.08*	0.11*	0.05
Wait Time for Care Less than 30 Minutes	0.03	0.12**	-0.06
Travel Time to Usual Source of Care Less than 30 Minutes	0.06*	0.12**	0.01
Sample Size	1,162	963	1,029

*p-value <0.10.

**p-value <0.05.

***p-value <0.01.

[1] Includes those uninsured all 6 months before enrolling.

[2] Includes those insured some or all of the past 6 months before enrolling.

[3] Applies to children age 3 or over.

NOTES: Estimates based on samples of recent and established enrollees. Estimates are based on a linear probability model, which controls for characteristics of Medicaid enrollees and their parents and includes state dummy variables. The data for this table was obtained from the 2002 congressionally mandated survey of State Children's Health Insurance Program enrollees in 10 States and Medicaid enrollees in 2 States.

SOURCE: Kenney, Genevieve, Ph.D., Sommers, Anna, Ph.D., Zuckerman, Stephen, Ph.D., Urban Institute, Rubenstein, Jamie, Cornell University, and Blavin, Fredric, University of Pennsylvania, 2007.

The parents of established Medicaid enrollees reported higher levels of confidence, less stress and worry, and less financial difficulty associated with meeting their child's health care needs than did parents reporting on the pre-enrollment

experiences. For example, parents of established Medicaid enrollees were more than 20 percentage points more likely than the parents of recent Medicaid enrollees to say they were very confident about being able to meet their child's health care needs and that meeting these needs never or rarely caused financial difficulties.

When we look separately at the impact estimates relative to children who had been uninsured for all 6 months before enrolling, we find more statistically significant differences and larger differences than for the insured group. This pattern is consistent with the SCHIP impacts reported in Kenney (2007a).

Established Medicaid enrollees are more likely than recent enrollees who had been uninsured before enrolling to receive dental and well-child checkups, to have a usual source of both health and dental care, and to see the same provider at their usual source of care. They report shorter travel and wait times, and are more likely to rate the ease of getting care as excellent or very good, and to report that their provider asks them about how their child is feeling. Established Medicaid enrollees are less likely than uninsured children to have an unmet need for physician's services, dental care, and hospital care, and they also are less likely to have at least one unmet need or to have more than one unmet need. For example, Medicaid-covered children were 29 percentage points more likely than uninsured children to have a usual source of health care, and 22 percentage points more likely to have a usual source of dental care. Compared to parents whose children had been uninsured, parents of established Medicaid enrollees have greater confidence and less worry, stress, and financial difficulties associated with meeting their child's needs, and are more likely to rate the ease of getting care as excellent.

In addition, the direction of the Medicaid impact estimates is positive, but not statistically significant for many other outcomes (including receipt of physician visits, reductions in other unmet needs, and many indicators of provider accessibility and communication), owing in part to the small sample size available for this analysis—across the two States, only 168 recent enrollees had been uninsured for the 6 months before enrolling in Medicaid. The pattern of these findings suggests that, relative to being uninsured, Medicaid improves access along several additional dimensions.

There were only three outcomes for which there was a statistically significant difference between established Medicaid enrollees and recent enrollees who had been insured for some or all of the 6 months before enrolling in Medicaid. Established Medicaid enrollees were less likely than recent enrollees who had been insured before enrolling to have received any doctor or preventive visits, which suggests that Medicaid-covered children may face more access barriers for some services than children with other insurance. In contrast, the parents of established Medicaid enrollees were 23 percentage points less likely to say that meeting their child's health care needs caused financial difficulties, which indicates that the lower cost-sharing provisions in Medicaid, relative to private coverage, may be relieving financial burdens on families.

SUMMARY

This analysis shows that children in California and North Carolina experience improved access to care when they enroll in Medicaid, particularly relative to being uninsured. These access findings point to the importance of enrolling more of the millions of uninsured

children who are eligible for Medicaid and SCHIP (Holahan, Kenney, and Cook, 2007). Comparable access to care was found between Medicaid and SCHIP along many dimensions, but there were several areas where SCHIP enrollees seemed to fare better than Medicaid enrollees. This suggests that both programs are having positive results despite serving different target populations and using different service delivery systems, but that new policies may be needed to address the access problems identified in Medicaid.

We find that Medicaid enrollees have less access to ESI than SCHIP enrollees in these two States. This analysis shows that in both California and North Carolina, Medicaid enrollees have little access to ESI as a potential alternative to enrolling in the program. Moreover, the high uninsured rates found among the parents of both Medicaid and SCHIP enrollees in these States may have adverse effects not only on the parents but on the children as well. Over one-third of the Medicaid and SCHIP enrollees in both States live in families where neither parent has health insurance coverage, and close to one-half (46 percent) of SCHIP enrollees in California live in families where no parent has health insurance coverage. Other research suggests that parents who lack health insurance coverage are more likely than parents with health insurance coverage to have unmet health needs and less likely to receive health care (Kenney, 2007a,b). One particular area of concern is that uninsured parents suffering from depression will not receive treatment, which in turn could have negative effects on the health and well being of the child (Olfson et al., 2003; Fairbrother et al., 2005). In addition, there is evidence that when parents lack health insurance coverage, their children are less likely to receive preventive care (Davidoff et al., 2003).

More analysis is needed to understand the sources and potential consequences of some of the apparent access problems that were found for Medicaid enrollees related to reliance on ER and provider accessibility. In particular, given that Medicaid enrollees in California were much more likely than SCHIP enrollees to have had a visit to the ER and to have unmet need for specialty care, and that they were less likely to be able to reach their usual provider after hours and to have short wait and travel times, there is an indication that access to health care services may be problematic for some Medicaid enrollees in California.

In both California and North Carolina, relative to Medicaid it appears that separate SCHIPs are providing better access to dental checkups and to a usual source for dental care, and that they seem to be rated higher in terms of the value of the coverage and in how providers view the families that participate. This is consistent with past research comparing access to dental care between Medicaid and SCHIP (Almeida, Hill, and Kenney, 2001) and with focus groups done in other States in which parents of SCHIP enrollees said they felt that providers were more accepting of them than they were of families with Medicaid enrollees (Bronstein, Adams, and Florence, 2006). This is also consistent with reports in some States of greater provider resistance to participating in Medicaid than in SCHIP (Hill, Harrington, and Hawkes, 2004). Given the lack of other insurance options for most children covered by Medicaid and the fact that they represent some of the poorest, most vulnerable children in this country, it will be important for States to work to address provider availability and related issues in order to improve access to care for these children. It will also be important to continue tracking how well Medicaid

Programs are meeting the needs of the children they serve in the face of potential changes to cost sharing and benefits within the program that may result from the 2005 Deficit Reduction Act of 2005 or other related policy changes.

Moreover, analyses (Edwards, Bronstein, and Rein, 2002; Bronstein, Adams, and Florence, 2006) comparing Medicaid and SCHIP enrollees in Georgia, a State that used the same service delivery system for both Medicaid and SCHIP—found utilization differences between Medicaid and SCHIP enrollees as well. This suggests that it may also be important to gain a better understanding of the care-seeking behaviors of Medicaid and SCHIP enrollees and the barriers they may face seeking care, since gaps seem to exist even in settings where the service delivery systems are the same for the two programs. In addition, States with separate programs that use different delivery systems under SCHIP than under Medicaid may want to examine provider networks and payment policies (including reimbursement levels and reliance on managed care) under the two programs to assess whether policies used in SCHIP could be carried over successfully to Medicaid to close these gaps. This study points to the need for ongoing monitoring of access to care for children with both Medicaid and SCHIP coverage.

ACKNOWLEDGMENTS

We would like to thank Jennifer Babcock, Robert Stewart, and Judith Wooldridge for their comments and suggestions.

REFERENCES

Allison, R.A., St. Peter, R.F., Huang, C., et al.: *Do Children Enrolling in Public Health Insurance Have Other Options?* Kansas Health Institute. Topeka, KS. 2003.

Almeida, R.A., Hill, I., and Kenney, G.: *Does SCHIP Spell Better Dental Care Access for Children? An Early Look at New Initiatives.* Assessing the New Federalism Occasional Paper Number 50. Urban Institute. Washington, DC. 2001.

Blumberg, L.J., Dubay, L., and Norton, S.A.: Did the Medicaid Expansions for Children Displace Private Insurance? An Analysis Using the SIPP. *Journal of Health Economics* 19(1):33-60, January 2000.

Bronstein, J., Adams, E.K., and Florence, C.S.: SCHIP Structure and Children's Use of Care. *Health Care Financing Review* 27(4):41-51, Summer 2006.

Campbell, D.T. and Stanley, J.C.: Experimental and Quasi-Experimental Designs for Research on Teaching. In: Gage, N.L. (ed.): *Handbook of Research on Teaching*. Rand McNally. Chicago, IL. 1963.

Centers for Medicare & Medicaid Services: *Fiscal Year 2002 Number of Children Ever Enrolled in SCHIP—Preliminary Data Summary.* Baltimore, MD, 2003. Internet address: www.cms.hhs.gov/NationalSCHIPPolicy/SCHIPER/list.asp (Accessed 2007.)

Ciemnecki, A.B., CyBulski, K.A., Wooldridge, J., et al.: *Opportunity Costs of Bad Administrative Data: Lessons from the Field*. Mathematica Policy Research, Inc. Princeton, NJ. 2002.

Cutler, D.M. and Gruber, J.: Medicaid and Private Insurance: Evidence and Implications. *Health Affairs* 16(1):194-200, January-February 1997.

Davidoff, A., Dubay, L., Kenney, G., et al.: The Effect of Parents' Insurance Coverage on Access to Care for Low-Income Children. *Inquiry* 40(3):254-268, Fall 2003.

Dubay, L. and Kenney, G.: The Effects of Medicaid Expansions on Insurance Coverage of Children. *The Future of Children* 6(1):152-161, Spring 1996.

Edwards, J.N., Bronstein, J., and Rein, D.B.: Do Enrollees in Look-Alike Medicaid and SCHIP Programs Really Look Alike? *Health Affairs* 21(3):240-248, May/June 2002.

Fairbrother, G., Kenney, G., Hanson K., et al.: How do Stressful Family Environments Relate to Reported Access and Use of Health Care by Low-income Children? *Medical Care Research and Review* 62(2):205-230, 2005.

Fronstein, P., Helman, R., and Greenwald, M.: *Small Employers and Health Benefits: Findings from the 2002 Small Employer Health Benefits Survey.* Employee Benefit Research Institute, Issue Brief Number 253, January 2003. Internet address: http://www.ebri.org/publications/ib/index.cfm?fa=ibDisp&content_id=171 (Accessed 2007.)

Ghosh, B., Ciemnecki, A., Sinclair, M., et al.: Notes on a Composite Measure for Self-Weighting Samples in Multiple Domains. In: *Proceedings of the American Statistical Association, Section on Survey Research Methods*, American Statistical Association. Washington, DC. 2001.

Hawkes, C. and Howell, E.: *Congressionally Mandated Evaluation of the State Children's Health Insurance Program: Site Visit Report for The State of North Carolina's Health Choice for Children Program*. Urban Institute. Washington, DC. 2002.

Hill, I. and Hawkes, C.: *The State of California's Healthy Families Program: Site Visit Report from the Congressionally Mandated Evaluation of the State Children's Health Insurance Program.* Mathematica Policy Research, Inc. Princeton, NJ. 2002.

Hill, I., Harrington, M., and Hawkes, C.: *Final Cross-Cutting Report on the Findings from Ten State Site Visits: Congressionally Mandated Evaluation of SCHIP.* Mathematica Policy Research, Inc. Princeton, NJ. 2004.

Holahan, J., Kenney, G., and Cook, A.: *Expanding Coverage Through Medicaid and SCHIP: What Would it Cost?* Kaiser Commission on Medicaid and the Uninsured. Washington, DC. 2007.

Hughes, D., Angeles, J., and Stilling, E.: *Crowd-Out in the Healthy Families Program: Does It Exist?* University of California, San Francisco, Institute for Health Policy Studies. San Francisco, CA. 2002. Internet address: http://www.mrmib.ca.gov/MRMIB/HFP/HFP_Crowd-Out_Study_Dana_Huges_2002.pdf (Accessed 2007.)

Kaiser Commission on Medicaid and the Uninsured: *Health Insurance Coverage in America, 2004 Data Update*. The Henry J. Kaiser Family Foundation. Washington, DC. 2005. Internet address: http://www.kff.org/uninsured/7415.cfm (Accessed 2007.)

Kaiser Commission on Medicaid and the Uninsured: *Health Coverage For Low-Income Populations: A Comparison of Medicaid and SCHIP*. The Henry J. Kaiser Foundation.Washington, DC. April 2006. Internet address: http://www.kff.org/medicaid/upload/7488.pdf (Accessed 2007.)

Kenney, G.: The Impact of SCHIP on Children Who Enroll: Findings from 10 States. *Health Services Research*. 42(4):1520-1543, August 2007a.

Kenney, G. *The Children's Health Insurance Program in Action: A State's Perspective on CHIP Statement before the U.S. Senate Committee on Finance*. Urban Institute. Washington, DC. 2007b. Internet address: http://www.urban.org/url.cfm?ID=901067 (Accessed 2007.)

Kenney, G. *Should Parents be Covered by SCHIP?* Presentation at Thursday's Child Event. Urban Institute and the Chapin Hall Center for Children. Washington, DC, April 12, 2007c.

Olfson, M., Marcus S.C., Druss, B., et al.: Parental Depression, Child Mental Health Problems, and Health Care Utilization. *Medical Care* 41(6): 716-721, 2003.

Singleton, R.A., Straits, B.C., and Straits, M.M.: *Approaches to Social Research*. Oxford University Press. New York, NY. 1993.

Sommers, A., Zuckerman, S., Dubay, L., et al.: Substitution of SCHIP For Private Coverage: Results From a 2002 Evaluation in Ten States. *Health Affairs* 26(2):529-537, March/April 2007.

Trenholm, C., Kenney, G., van Kammen, W., et al.: *The Experiences of SCHIP Enrollees and Disenrollees in 10 States: Findings from the Congressionally Mandated SCHIP Evaluation: Appendixes*. Mathematica Policy Research, Inc. Princeton, NJ. 2005.

Reprint Requests: Genevieve Kenney, Ph.D., Urban Institute, 2100 M Street, NW, Washington, DC 20037. E-mail: jkenney@ui.urban.org