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# Is There Differential Retention of Children With Special Health Care Needs in the State Children's Health Insurance Program?

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## ABSTRACT

**OBJECTIVE.** The purpose of this work was to determine whether children with special health care needs in New Jersey's State Children's Health Insurance Program are less likely to become uninsured than children without special health care needs.

**PATIENTS AND METHODS.** We used the 2003 New Jersey FamilyCare Supplement to the New Jersey Family Health Survey. Children were randomly selected from the universe of children enrolled in New Jersey FamilyCare as of May 2002, and their families were surveyed during 2003 ( $N = 675$ ). The Children With Special Health Care Needs Screener was used to identify 5 types of special health care needs. We estimated multinomial logistic regression models of final enrollment status according to the presence of  $\geq 1$  special health care need, controlling for demographic characteristics.

**RESULTS.** Roughly 1 of every 5 children in New Jersey FamilyCare had  $\geq 1$  special health care need. Older children and boys had greater odds of having special health care needs than others. Children with special health care needs had only one fourth the odds of becoming disenrolled and uninsured compared with children without special health care needs, even when controlling for age, gender, race/ethnicity, and insurance plan level. There was no difference in likelihood of finding other health insurance according to children with special health care needs status.

**CONCLUSIONS.** Children with special health care needs were more likely than children without such needs to be covered by health insurance at the time of the survey, either by retaining State Children's Health Insurance Program coverage or by finding other insurance. The higher retention of children with special health care needs in New Jersey FamilyCare is good news for families of these children and their advocates. However, higher health care costs for these children should be considered in federal and state budget planning for the State Children's Health Insurance Program.

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### Key Words

children with special health care needs, chronic health conditions, health insurance, State Children's Health Insurance Program, uninsured

### Abbreviations

SCHIP—State Children's Health Insurance Program  
 CSHCN—children with special health care needs  
 SHCN—special health care need  
 NJFCS—New Jersey FamilyCare Supplement  
 NJFC—New Jersey FamilyCare  
 FPL—federal poverty level  
 OR—odds ratio  
 CI—confidence interval

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A DECADE AGO, the US government enacted one of the most successful pieces of legislation to reduce uninsurance among children, the State Children's Health Insurance Program (SCHIP), which was created in 1997 under the Social Security Act to provide insurance to children from poor families who do not qualify for Medicaid.<sup>1</sup> States welcomed SCHIP from the beginning, with >6 million children insured by the program as of 2005.<sup>2</sup> Although rates of enrollment are useful to determine overall coverage rates, disenrollment patterns are equally critical because they capture which children are staying in the program. As Congress debates the reauthorization in 2007, it is important to know the health status and other characteristics of the SCHIP-insured population that might affect costs.<sup>3</sup>

Ensuring continuity of coverage in publicly funded programs such as SCHIP is critical for all children, but especially for those with special needs, such as asthma or diabetes, because these children require more and more frequent health care services. Children with special health care needs (CSHCN) are a special population defined by the Maternal and Child Health Bureau as "those who have or are at increased risk for a chronic, physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally."<sup>4</sup> A recent study of 5 SCHIPs found that children with special needs were more likely than children without special needs to use the emergency department, mental health care, specialty care, and acute care.<sup>5</sup>

According to the 2001 National Survey on Children With Special Health Care Needs, ~9.5 million children in the United States have special health care needs (SHCNs).<sup>6</sup> The CSHCN screener is a noncategorical, outcome-based approach to identifying children with special needs.<sup>7</sup> Rather than asking about specific childhood chronic conditions (which overlooks many of the less common chronic conditions), this approach asks parents about their children's need for or use of health care services beyond those typical of healthy children. Consequently, the measure captures children who have rare conditions or special needs, such as cerebral palsy or cystic fibrosis, as well as those afflicted by common chronic conditions, such as asthma or diabetes. This attribute is of special import for policy-makers and researchers who need to monitor the quality of care for all CSHCN who enroll in public health insurance programs.

CSHCN are defined as having more chronic health conditions than the general population of children; therefore, adverse differential selection and retention are of concern in terms of determining adequate funding levels for the SCHIP. Those selection processes imply that sicker people are more likely to enroll and remain enrolled than healthy people, causing the overall health of those in the SCHIP to be worse than those in the SCHIP-eligible population. It is important to note that

differential selection and retention concern parents' choices and actions related to SCHIP enrollment and renewal, not selectivity into SCHIP based on eligibility criteria for the program. Title XXI of the Social Security Act specifically forbids such "cherry-picking" in that states "may not deny eligibility based on a child having a preexisting medical condition."<sup>8</sup>

Differential selection has been suggested by evidence from SCHIP initiatives in other states. An analysis of New York, Florida, and Kansas found that CSHCN make up between 17% and 25% of the total enrolled population,<sup>9</sup> higher than the estimates of 13% CSHCN in the general population based on the National Survey on Children With Special Health Care Needs,<sup>6</sup> and 17% among low-income uninsured children from a recent study by Newacheck et al.<sup>10</sup> In addition, a study of Florida's SCHIP using the Questionnaire for Identifying Children with Chronic Conditions found that enrolled children were twice as likely to have chronic conditions as children in the income-restricted national subsample.<sup>11</sup>

Because CSHCN are more concentrated in the SCHIP than in the SCHIP-eligible population, it seems that parents selectively choose to enroll their child based on health status. Moreover, a study of parental attitudes about the need for health insurance showed that parents of CSHCN were least likely to report that their child does not need insurance (2.8% vs 7.1% for non-CSHCN).<sup>12</sup> An analysis of the Healthy Kids program in Florida showed that children with physical health needs were less likely to disenroll from the program and more likely to reenroll.<sup>13</sup> Taken together, these studies suggest that parents of children with special needs recognize the greater incentive to keep their children enrolled in SCHIP.

This study extends previous analyses of differential retention of CSHCN by contrasting 3 possible health insurance outcomes, controlling for demographic characteristics and SCHIP plan (which controls for family income) level: (1) remaining enrolled in the SCHIP, (2) disenrolling from the SCHIP but finding other health insurance, and (3) becoming uninsured on disenrollment. By investigating transitions out of the SCHIP according to SHCN status, we complement studies that compare static (snapshot) CSHCN prevalence between SCHIP enrollees and children who are SCHIP-eligible but not enrolled.

## METHODS

### Data Source and Study Sample

We used data from the 2003 New Jersey FamilyCare Supplement (NJFCS), a telephone survey of families with children enrolled in New Jersey's SCHIP as of May 2002. The NJFCS collected information about health status, access to care, insurance coverage, and health care use, as well as experiences with enrollment, renewal, disenrollment, and satisfaction with New Jersey

FamilyCare (NJFC; New Jersey's SCHIP initiative) and the CSHCN screener (see below).<sup>14</sup> The survey protocol and questionnaire were approved by the human subjects review board at the researchers' university.

The NJFCS was conducted between May and September 2003, and the respondents were the adults most knowledgeable about the child in the program, who were asked to grant oral consent for the study at the start of the telephone interview. Families were randomly selected to participate if  $\geq 1$  of their children had been enrolled in the NJFC program in the previous year. To ensure adequate representation of both enrolled and disenrolled children, the sample was stratified according to enrollment status as of January 2003 based on administrative records. Children who were still enrolled and the majority of disenrolled children had been in the program for  $\geq 1$  year; disenrolled children left the plan between 1 and 12 months before their interview. The sample was also stratified by SCHIP plan level (defined below) and whether parents were also enrolled in NJFC, yielding 10 strata from which children were selected (see Appendix for a diagram of the strata).

A total of 679 families participated in the study, yielding an overall response rate of 52%. The response rate was  $\sim 10$  percentage points lower among those who had disenrolled than among those who remained enrolled and  $\sim 5$  percentage points lower among those without parents enrolled. Comparison against administrative records of all of the children enrolled in NJFC between 2000 and 2002 show that girls, non-Hispanic black children, and those  $< 5$  years old were underrepresented among survey respondents.

Children were chosen at random from among the universe of case subjects enrolled in NJFC as of May 2002 as the "index" children. If 2 children were chosen from the same family, the first chosen was selected as the index child before the telephone interview. Children who disenrolled and were no longer qualified for the NJFC program because of income or age requirements or who were missing data on final enrollment status were excluded from this analysis ( $n = 4$ ), resulting in a final analytic sample of 675 index children. All of the estimates presented are weighted to reflect the universe of children enrolled in NJFC as of May 31, 2002, taking into account differential sampling probabilities for the strata shown in the Appendix.<sup>14</sup>

## Measures

### Identification of CSHCN

Children were identified as having special needs according to the CSHCN screener developed by the Child and Adolescent Health Measurement Initiative of the Foundation for Accountability.<sup>7,15</sup> Based on the Maternal and Child Health Bureau's definition of CSHCN, the screener includes the following questions to identify children ex-

periencing health-related consequences that have lasted or are expected to last  $\geq 12$  months: (1) Do any of your children under 18 currently need or use medicine prescribed by a doctor (other than vitamins) because of any medical, behavioral, or other health condition? (2) Do any of your children under 18 need or use more medical care, mental health, or educational services than is usual for most children of the same age because of any medical, behavioral, or other health condition? (3) Are any of your children under 18 limited or prevented in any way in their ability to do the things most children of the same age can do because of any medical, behavioral, or other health condition? (4) Do any of your children under 18 need or get any special therapy, such as physical, occupational, or speech therapy because of any medical, behavioral, or other health condition? (5) Do any of your children under 18 have any kind of emotional, developmental, or behavioral problem for which he or she needs or gets treatment or counseling? To be classified as having a SHCN, the child must have been classified "yes" for  $\geq 1$  of the 5 questions about the different areas of need and the associated follow-up question on the condition lasting  $\geq 12$  months.

### Final Enrollment Status in NJFC

Final enrollment status was based on survey responses verified against NJFC administrative records. Initial classification was determined from survey questions on whether the index child remained enrolled in the SCHIP at the time of the survey in 2003 and, if not, the presence of other health insurance, and family income (to assess continued eligibility). Comparison of the survey-based classification against NJFC administrative records revealed a few case subjects with short gaps in enrollment who were reclassified as "enrolled"; 18 case subjects enrolled in Medicaid who had reported themselves "not in SCHIP" were also classified as enrolled. These steps resulted in final enrollment status classified into 1 of 3 categories: (1) currently enrolled in the NJFC or Medicaid; (2) disenrolled from NJFC but still insured (either through parents' employment or other insurance); and (3) disenrolled from NJFC, uninsured, but still eligible for the program. Two children who had disenrolled and were no longer eligible because of age or income requirements were excluded.

### SCHIP Plan Level

The NJFC program has 1 of the highest income eligibility levels of all states, covering otherwise uninsured children from families with incomes  $\leq 350\%$  of the federal poverty level (FPL). The NJFC program is divided into 4 plan levels labeled A through D. Plan A is a Medicaid expansion program, which covers children in families up to 133% of the FPL, plans B and C cover those with family incomes between 133% and 200% of the FPL, and plan D provides coverage to children with family

incomes between 201% and 350% of the FPL. In 2003, 350% of the FPL was approximately \$65 300 for a family of 2 adults and 2 children.<sup>16</sup> Plans C and D involve cost sharing in the form of monthly premiums and copayments on a sliding scale based on family income. The survey combined plans B and C for sampling purposes because of the narrow range of incomes covered in each plan.

### Health Measures

To validate the CSHCN screener, we compared it against 2 other health measures from the survey: parent's rating of the child's health (classified "excellent," "very good," "good," "fair," and "poor") and an asthma indicator (yes or no).

### Control Variables

To control for potential confounding, several demographic characteristics were also considered, including age, gender, and race/ethnicity coded as shown in Table 1.

### Data Analyses

$\chi^2$  tests were conducted to determine associations between demographic and plan factors and the prevalence of SHCN. Multinomial logistic regression models were used to assess differential retention of CSHCN by comparing the odds of being (1) disenrolled and insured and (2) disenrolled and uninsured compared with children who were still enrolled in NJFC, controlling for demographic factors. All of the statistics were weighted to the state level population of children enrolled in NJFC as of May 31, 2002, using sampling weights provided for the NJFC survey.<sup>14</sup>

### RESULTS

Table 1 presents the demographic and health characteristics of the study sample, as well as the prevalence of CSHCN according to those characteristics. Prevalence of SHCN was higher among older children and boys ( $P < .01$ ). Prevalence of SHCN among children aged 6 to 12

**TABLE 1 Demographic and Health Characteristics of Children in the 2003 NJFC Sample**

Characteristic	Sample Composition		Prevalence of CSHCN <sup>a</sup>	
	Unweighted N	Weighted % of Sample <sup>a</sup>	Weighted %	$\chi^2$ Value
Whole sample	675	100.0	21.1	
Demographic characteristics				
Age groups				11.65 <sup>b</sup>
0- to 5-y-olds	113	15.6	9.4	
6- to 12-y-olds	332	44.2	25.2	
13- to 18-y-olds	230	40.1	21.0	
Gender of child				5.69 <sup>b</sup>
Girl	321	40.2	16.6	
Boy	354	59.8	24.3	
Race/ethnicity				3.45
Non-Hispanic white	290	39.9	22.2	
Non-Hispanic black	104	15.8	26.2	
Hispanic	220	36.5	17.8	
Other race	61	7.7	21.2	
SCHIP characteristics				
NJFC plan level				0.59
Plan A ( $\leq$ 133% of FPL)	185	37.5	21.3	
Plans B and C (133%–200% of FPL)	244	45.0	22.0	
Plan D (201%–350% of FPL)	246	17.5	18.6	
Health status				
Parent-rated health				48.34 <sup>c</sup>
Excellent	260	39.3	10.5	
Very good	169	23.8	21.3	
Good	194	29.3	27.9	
Fair	38	6.4	46.5	
Poor	14	1.2	62.5	
Asthma				193.94 <sup>c</sup>
No	574	86.3	12.4	
Yes	101	13.7	76.1	
Final enrollment status				4.77
Enrolled in NJFC or Medicaid	444	87.5	22.0	
Disenrolled but insured	145	6.6	20.5	
Disenrolled and uninsured	86	5.9	7.5	

Data were weighted to the universe of all of the children enrolled in the NJFC program as of May 2002.

<sup>a</sup>Data show the percentage of children with  $\geq 1$  SHCN as identified by CSHCN screener.<sup>7</sup>

<sup>b</sup> $P < .01$ .

<sup>c</sup> $P < .001$ .

and 13 to 18 years was twice as high as among those aged 1 to 5 years (25% and 20% vs 9%). Boys had ~1.5 times the odds of having special needs as girls (24% and 16%, respectively). The prevalence of children with health care needs was roughly equal in the different SCHIP plans (across incomes  $\leq 350\%$  of the FPL), with ~1 in 5 children at each plan level having  $\geq 1$  SHCN.

Overall, the prevalence of SHCN was 21% of the SCHIP sample, and the mean number of SHCN was 0.45. The most common type of SHCN was medication use (15.1% of enrolled children), followed by greater health services than most children (10.3%), activity limitations (8.1%), emotional problems (7.0%), and need for special therapy (4.3%; data not shown). Prevalence of SHCNs increased markedly with worsening parent-rated health, from 10.5% of children whose health was rated "excellent" to 62.5% of those whose health was rated "poor." The fact that CSHCN by definition excludes acute health conditions (capturing only those lasting  $\geq 12$  months) may explain why one third of children in poor parent-rated health did not have any SHCN. Asthma was associated with a sixfold greater risk of SHCN.

The vast majority (88%) of children remained enrolled in NJFC at the time of the survey, with ~7% disenrolled but with other health insurance and 6% disenrolled and uninsured. CSHCN were more likely than non-CSHCN to remain enrolled in SCHIP (91.5% and 86.5%, respectively) and less likely to become uninsured (2% of CSHCN vs 7% of non-CSHCN). Approximately the same share of each group found other health insurance (6.3% and 6.6%).

Table 2 presents odds ratios (ORs) and 95% confidence intervals (CIs) from multinomial logit models of children's final enrollment status (either disenrolled but

still insured, or disenrolled and uninsured when each is compared with remaining enrolled in NJFC), controlling for age, gender, race/ethnicity, and NJFC plan level. CSHCN had only one fourth the odds of being disenrolled and uninsured compared with non-CSHCN. Hispanic children were  $>3$  times as likely as non-Hispanic white children to become uninsured. Children rated in fair or poor parent-rated health had 4 times the odds of being disenrolled and uninsured (data not shown), suggesting that those with acute health problems not captured by the SHCN screener had very different patterns than those with chronic conditions.

CSHCN status, age, gender, and race/ethnicity were not associated with chances of being disenrolled from SCHIP but having other health insurance. Only children in plan D (201%–350% of the FPL) were more likely to find other insurance once disenrolled than children in plan A.

## DISCUSSION

Our analysis of survey data of children from New Jersey's SCHIP suggests that children with chronic health conditions seem to remain in SCHIP longer than healthy children. The data provide evidence of differential retention, with a considerably lower chance of becoming disenrolled and uninsured among CSHCN than among their healthier counterparts. CSHCN had only one fourth the chances of being disenrolled from NJFC and uninsured as children without such needs, even when demographic characteristics and NJFC plan level were taken into account. However, CSHCN had similar odds of disenrolling from the NJFC program and obtaining other insurance as children without special needs. Consequently, CSHCN were more likely than non-CSHCN to

**TABLE 2** Estimated Odds Ratios and 95% Confidence Intervals of Children's Final Enrollment Status in the NJFC From a Multinomial Logistic Regression Model, 2003 NJFC Survey

Variable	Disenrolled But With Other Health Insurance	Disenrolled and Uninsured
Any SHCN, OR (95% CI)	0.82 (0.38–1.77)	0.25 (0.07–0.90)
Age groups, OR (95% CI)		
0- to 5-y-olds	1.00	1.00
6- to 12-y-olds	2.09 (0.76–5.81)	1.66 (0.57–4.80)
13- to 18-y-olds	1.41 (0.48–4.12)	1.27 (0.42–3.80)
Gender, OR (95% CI)		
Girl	1.00	1.00
Boy	1.33 (0.69–2.56)	1.58 (0.77–3.22)
Race/ethnicity, OR (95% CI)		
Non-Hispanic white	1.00	1.00
Non-Hispanic black	1.26 (0.54–2.85)	1.62 (0.53–4.95)
Hispanic	0.64 (0.30–1.37)	3.10 (1.40–6.91)
Other race	0.40 (0.09–1.73)	0.93 (0.18–4.80)
NJFC plan level, OR (95% CI)		
Plan A ( $\leq 133\%$ FPL)	1.00	1.00
Plan B/C (133%–200% FPL)	1.69 (0.78–3.67)	0.88 (0.40–1.95)
Plan D (201%–350% FPL)	2.63 (1.11–6.22)	1.16 (0.45–2.99)
–2 log-likelihood	283.71	283.71

Children still enrolled in NJFC are the reference group for all of the models. Data were weighted to the universe of all of the children enrolled in the NJFC program as of May 2002.

remain covered either by SCHIP or other health insurance at the time of the survey (98% of CSHCN and 93% of non-CSHCN). To our knowledge, ours is the first study to analyze patterns of subsequent insurance status among CSHCN who disenroll from SCHIP.

A previous analysis of administrative data from New Jersey's SCHIP initiative showed that reasons for disenrollment included failure to renew at the time of redetermination of eligibility, nonpayment of premium, and moving away.<sup>17</sup> Disenrollment does not seem to be because of dissatisfaction with the program, because most respondents were satisfied with the NJFC program, with >82% rating the program "excellent," "very good," or "good," regardless of their final enrollment status.

The prevalence of CSHCN in NJFC, ~1 in 5 children, was higher than the 13% prevalence rates in the general child population at both state and national levels based on the 2001 National Survey of Children With Special Health Care Needs.<sup>6,18</sup> However, the prevalence of CSHCN in NJFC was within the range found in studies of SCHIP programs in other states that used the same approach to measuring CSHCN.<sup>9,11,13</sup>

A variety of approaches have been used to identify CSHCN,<sup>19,20</sup> causing some confusion in the use of that terminology and acronym, as well as associated variation in prevalence estimates. The current study and others compared above use a survey approach, asking the child's parents  $\geq 1$  question from the CSHCN screener<sup>7,15</sup> or the Questionnaire for Identifying Children With Chronic Conditions,<sup>21</sup> both noncategorical approaches to classifying SHCNs. For example, an Urban Institute study compared several states, each of which used different variants of the screener approach on SCHIP applications or relied on health care providers to identify CSHCN.<sup>20</sup> They report CSHCN prevalence rates ranging from 1% to 8% of enrolled children but also conclude that "states are dissatisfied with the ability of their systems to identify CSHCN," particularly with a single-question screener approach on the application.

Other studies use *International Classification of Diseases, Ninth Revision (ICD-9)*, codes on administrative claims or encounter data to identify minor, moderate, and major chronic conditions, which they classify as SHCN, often yielding lower estimates of CSHCN prevalence than those using the CSHCN screener. For instance, 1 study that measured disabilities and chronic health conditions using clinical risk groups based on the ICD-9, codes from claims and encounter records found that <10% of children enrolled in Medicaid or SCHIP had SHCN.<sup>22</sup>

Consistent with patterns observed in the general population and in SCHIPs in New York, Kansas, and other states, we found that older children and boys were more likely to have a SHCN but that there was no significant variation in prevalence by family income.<sup>6,18</sup> SHCNs were more common among children with asthma and with poor parent-rated health, helping to validate the

CSHCN screener as an indicator of chronic health problems.<sup>5,6</sup> The NJFC program has different levels of coverage for different income levels, and the coverage at higher income levels does not provide the same number and range of benefits as the Medicaid expansion plan. We found that children in the highest plan level, which covers families from 201% to 350% of the FPL, were more likely to obtain other insurance than those from lower-income families on disenrolling from NJFC, perhaps because families in higher-income ranges are more likely to transition to employer-based health insurance.

This study has several notable advantages for the analysis of differential health retention in SCHIP. First is the validity of the indicators of SHCNs, which was highly correlated with other health measures. The CSHCN screener captures a wider range of chronic conditions than surveys that ask only about specific health conditions.<sup>6</sup> Second, the availability of 2 sources to verify enrollment status at the time of the survey allowed the survey responses to be checked against NJFC administrative records to determine whether the index child remained enrolled. Third, using the combined survey and administrative data allowed us to determine whether those who disenrolled found other health insurance and to assess continued eligibility for the NJFC program among those disenrolled based on family income and age composition.

A limitation of the study is its cross-sectional design, which means that we cannot determine SHCN status at the time the child enrolled. However, the chronic nature of the health conditions screened for suggests that those needs are relatively unlikely to change during the year between enrollment and the survey. Second, this study was limited to 1 state with comparatively generous SCHIP eligibility. Finally, the survey response rate was 52%, typical for a telephone survey of low-income families,<sup>23</sup> but raising the possibility that the sample was not representative of all NJFC enrollees. The lower response rate among families that had disenrolled by the time of the survey suggests that we may have underestimated overall disenrollment rates, but there is no evidence to suggest that our estimates of differential retention of CSHCN would have been biased.

### Implications for Policy

The policy implications of these results can be viewed from several perspectives, including the families of CSHCN, children's health advocates, clinicians, and SCHIP administrators. First, families who have children with special needs seem to understand the importance of coverage for their children. It is reassuring that most CSHCN are insured, either publicly or privately<sup>18</sup>; however, more research is needed to understand the mechanisms underlying the higher retention of CSHCN in SCHIP, including satisfaction with the program, use of health care services, and experiences with the renewal

process. Second, child health advocates and clinicians will be pleased that children with special needs have much lower odds of being disenrolled from SCHIP and uninsured, which increases the likelihood of coordinated, comprehensive care for these children. Finally, SCHIP administrators will also be heartened to know that this vulnerable population remains insured, because the goal of SCHIP is to provide coverage for children who would not otherwise have health insurance.

However, because CSHCN, by definition, use more health services than children without special needs, the higher retention of CSHCN in SCHIP implies greater costs associated with serving this unhealthier population of children. Although CSHCN constitute only a small proportion of enrolled children, they generate a disproportionate amount of expenses incurred.<sup>24</sup> One study of 2 states' SCHIP plans suggests that CSHCN made up ~15% of the total enrollment but accounted for ~60% of program expenditures.<sup>19</sup>

As part of the federal reauthorization of SCHIP in 2007, Congress has the opportunity to reward states for maintaining high retention levels of CSHCN by adjusting the allotment of funds to account for states with higher proportions of children with special needs. States use a variety of strategies for financing care for CSHCN, including adjusting risk for demographic factors and health status, using carve-outs for specific health conditions, and reinsurance for children whose annual expenses exceed some threshold. A recent study of these strategies by the National Center on Financing for CSHCN concluded that reinsurance combined with risk adjustment for health status seemed to be the best strategy for aligning costs and payments for CSHCN.<sup>25</sup> These strategies acknowledge the higher cost of caring for children who remain covered over time and reward plans for assuring that they are well served. Unfortunately, the anticipated federal shortfall for SCHIP funding of \$10 billion to \$12 billion for 2008–2012 raises substantial concerns about the program's ability to meet these needs.<sup>26</sup>

### Directions for Future Research

We found that the majority of CSHCN enrolled in SCHIP retain that coverage; it would be useful to extend that research to investigate how well the program satisfies continuity and adequacy of coverage, the other 2 components of the health insurance core outcome developed by the Maternal and Child Health Bureau.<sup>4,27</sup> Reaching the health insurance core outcome is crucial for children with special needs, because they use more health services than other children. Determining the health care use, unmet needs, and financial burden on families with CSHCN enrolled SCHIP will provide a more detailed evaluation of how well the program is serving this vulnerable population.

Future research should also investigate the prevalence and costs of the 5 types of health care needs

encompassed in the SHCN screener (medication use, greater than average health service use, activity limitations, emotional problems, and need for special therapy). More detailed estimates of the components of costs associated with providing care for CSHCN within SCHIP would help ensure the long-term financial sustainability of SCHIP.

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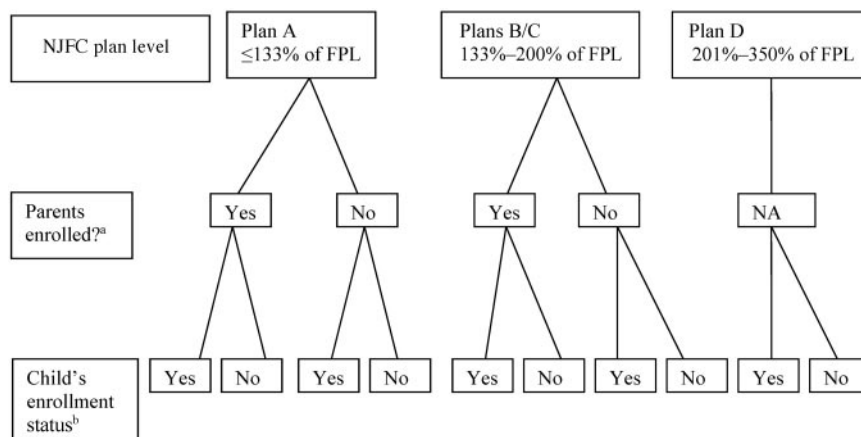
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APPENDIX.

Sampling plan: 2003 NJFCS. NA indicates not applicable.

<sup>a</sup> Parental eligibility includes plans A, B, and C only.

<sup>b</sup> Enrollment status is as of December 31, 2002.



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