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OF POLICY STUDIES

**DIFFERENTIAL CARE EXPERIENCES FOR S-CHIP AND MEDICAID ENROLLED
CHILDREN: DEMOGRAPHIC & PROGRAMMATIC DETERMINANTS**

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Introduction

The State Children's Health Insurance Program (S-CHIP) was created in 1997 to expand health insurance to uninsured low-income children. Nationally, almost 4 million children were covered through this program during the last month of 2003, and almost 6 million children at some point during the 2003 fiscal year. Most of these children live in low to moderate income families, although specific eligibility limits vary from state to state.

States have great latitude in the design of their program not only with regards to establishing eligibility levels for coverage but also in the administration and delivery of services. Some states have opted to integrate their S-CHIP programs into the existing Medicaid program, while others have developed separate programs. Among states that have developed separate S-CHIP programs, some have elected to use a private sector vendor for administration and delivery of coverage and care, while others have established a second publicly administered coverage program built upon existing administrative and delivery capabilities. The implications of some of these design variations for enrollment, continuity of coverage, access to and satisfaction with care are just beginning to become apparent.

This study contributes to the existing literature through an analysis of the satisfaction of a unique group of children in Georgia who are enrolled in Medicaid but, because the application process was initiated through Georgia's S-CHIP program, carry a card that is similar to the S-CHIP enrollee card. Therefore, both the enrollee and provider may believe that the child is enrolled in S-CHIP, despite the fact that reimbursement is through Georgia's Medicaid system. By comparing survey results for these Medicaid eligible children to other Medicaid enrollees and to

the S-CHIP enrollees who carry a similar program enrollment card, we may be able to identify the extent to which different experiences of care and access for Medicaid and S-CHIP enrollees are due to underlying demographic differences (primarily income) or to perceived programmatic stigma associated with one program more than the other. These results are relevant to policy makers seeking to structure or modify existing public programs so as to expand access to coverage and appropriate care while containing costs. Indeed, many state governors are actively considering changes to Medicaid that will may it look more like private insurance.

We start with a description of the structure of the S-CHIP program (PeachCare for Kids) and comparative data on the children enrolled in each of the three programs in Georgia: Medicaid, PeachCare, and the unique group for this study, PeachCare Plus. We then review several related lines of literature regarding differential satisfaction with S-CHIP and Medicaid, stigma associated with public programs, and the implications of various programmatic specifications on enrollment and access to care, each of which have implications for the relative satisfaction with public provision of coverage for these three groups of children. We describe the survey that was administered to each of these groups and compare in a bi- and multi-variate context the access and satisfaction reported by each of the groups. The results of this analysis are discussed along with the policy implications and the limitations of this study.

Background of S-CHIP in Georgia

While 12 states have completely integrated their S-CHIP and Medicaid programs and 21 states have partially integrated (combination) programs, Georgia is among the 18 states with distinct Medicaid and S-CHIP programs. However, both the Medicaid and S-CHIP programs in Georgia

are administered by the same agency and enrollees utilize the same network of providers who receive the same level of reimbursement for care provided, regardless of the program in which the child is enrolled. Georgia's S-CHIP program, known as PeachCare for Kids, enrolled over 250 thousand children in 2003 and has been among the most successful in the country in reaching and enrolling eligible children.

One of the by-products of a broad outreach campaign was that many children applying for coverage through the PeachCare process were found to be eligible for Medicaid. From 2000 until 2002 these children were designated "PeachCare Plus". These children received a card that looked like the PeachCare card and carried the PeachCare label, but in the event of a claim, the category of service channeled the claim into the Medicaid system for appropriate payment.¹ This aspect of the Georgia PeachCare program provided a 'natural experiment' for our analysis in that children who are similar in income and who would otherwise qualify for the traditional Medicaid program are 'treated' as if they were enrolled in the PeachCare program.

This large group of children (over 100,000 children continuously enrolled during the first 6 months of 2003) is demographically slightly different than either the PeachCare or the Medicaid children who were similarly enrolled. The table below compares these three groups of continuously enrolled children from whom the sample for the satisfaction survey used in this study was drawn.

¹ The use of the "PeachCare Plus" designation for new enrollees was discontinued as of January 2003. Those children already classified as PeachCare Plus continue with that designation, but all new enrollees found to be eligible for Medicaid have been enrolled in Medicaid and provided with a Medicaid card since that time.

Table 1: Comparison of PeachCare, PeachCare Plus and Medicaid Enrollees

	PeachCare	PeachCare Plus	Medicaid
Total Continuously Enrolled January-May, 2003	152,575	100,960	544,340
Child's Age	%	%	%
0-1	0	2	15
2-5	25	33	28
6-12	44	39	34
13-18	30	26	23
Child's location			
Atlanta	46	51	37
Rural Georgia	42	37	44
Other Metro	12	12	19
Child's race			
White	58	45	39
Black	30	43	59
Hispanic	8	9	0
Other	3	2	2

Although the PeachCare Plus children live in families with incomes that qualify them for Medicaid, these data indicate that they are dissimilar from other Medicaid enrolled children along several dimensions. They are much more likely to live in Atlanta and hence, less likely to live in rural or other metropolitan areas of the state. While there are age differences seen in Table 1, these are consistent with program income eligibility limits that mean a larger proportion of the under 6 year olds who apply for PeachCare will be found eligible for Medicaid and hence, more likely to be in PeachCare Plus .

The enrollment data also indicate that PeachCare Plus children are more likely to be white or of Hispanic descent than Medicaid enrollees. However, it is important to note that the different mode of collecting enrollment information across the programs can affect the validity of this comparison. Race and ethnicity are voluntarily self-reported in the application for PeachCare, for example, while case workers complete the application for Medicaid. Staff members from the

Department of Community Health note a concern with the reliability of the data collected to indicate race and ethnicity. In particular, the demand for information and assistance in Spanish is inconsistent with enrollment files that indicate almost no Hispanic enrollment in Medicaid. We note that the racial and ethnic variables used in comparing these groups in our data analysis are captured in the same manner for each group as part of the CAHPS survey used for this analysis.

We know that demographic differences may contribute to some of the differential experiences in accessing care for these different enrollees. Furthermore, some of the demographic differences could influence the enrollment mode and therefore be determinative of whether a child is enrolled in Medicaid or PeachCare Plus. Therefore, it is necessary to compare the experiences of these groups in a multivariate context that controls for these and other demographic differences.

Literature Review

There is a large body of evidence that demographic factors such as race and ethnicity, family income, geographical location, and coverage (Andersen et al, 1983; Dubay and Kenney, 2001) are important determinants of access to care. One of the purposes of S-CHIP is to expand access to coverage for low to moderate-income uninsured children so as to improve access to care. Given that this group of children are often in families that have participated in private plans on an intermittent basis, their prior coverage experiences will shape their expectations of the plan and the provider network.

Despite some shortcomings, the S-CHIP program has been largely successful at reducing the number of children lacking coverage, increasing access to care, reducing the disparity in eligibility for public coverage between states, and providing an example for federal state partnerships that allows for innovation and flexibility (Kenny and Chang, 2004). However, it is this very flexibility that creates an urgent need for research on the implications of various programmatic choices to guide policy makers. 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 whether to administer a single program, a combination S-CHIP and Medicaid program, or two separate programs.

Administratively, there is little doubt that a Medicaid expansion is less cumbersome than a separate program. Of particular concern are the administrative complexities in managing coverage for children in families with incomes that fluctuate such that eligibility shifts between the programs. Kronebusch and Elbel (2004) and Sommers (2005) study the implications of a single, combination or separate program and find evidence that the single program results in higher total public enrollment. However, these results are not consistent with findings from Wolfe and Scrivner (2005) who find a separate program to be associated with a reduced likelihood of being uninsured. The Wolfe and Scrivner findings are consistent with concerns that stigma associated with Medicaid could be reduced through a separate program, and the authors note the potential for either parents or providers to be more accepting of separate coverage.

These conflicting studies point to the need for additional research regarding the experiences of children enrolled in each program type so that states can make fully informed policy decisions. Furthermore, neither of these studies examined the effect of differing program structures on access or satisfaction.

There is also conflicting evidence about how enrollees in public programs experience health care interactions with providers that are different than the experience of privately covered individuals. For example, Wang et al (2004) found that publicly covered children in California had substantially lower access to surgical specialty care than do children with private coverage. Tang, Yudkowsky and Davis (2003) find that Medicaid children were disproportionately served by the safety net providers compared to privately insured children and Berman et al (2002) find that low payment, capitation, and the burden of administrative complexity contribute to restricted access to private physicians for Medicaid enrolled children.

On the other hand, a multi-state study comparing Medicaid children to similarly low-income privately insured children found no significant differences in terms of unmet needs except for prescription drugs and confidence; Medicaid children were more likely to postpone getting drugs and families were less confident about obtaining needed care than privately insured (Dubay and Kenney, 2001). In fact, publicly covered children fared better than privately covered children on several access measures within this low-income strata. These findings support the notion that at least some of the differences between publicly and privately covered children in their experiences with the health care system may relate to differences in income rather than programmatic differences.

In addition to the broad distinction between publicly and privately covered children, there is a growing body of research that suggests that the experiences of children enrolled in S-CHIP programs may be different than the experiences of children enrolled in Medicaid. A survey of children enrolled in Georgia's S-CHIP and Medicaid programs in 2000 found that parents of S-CHIP children report utilizing more services and experience slightly higher levels of satisfaction with their care than do parents of Medicaid children, despite the fact that the programs utilize the same network of providers. (Edwards, Rein and Bronstein, 2002). In this case, administrative complexity and reimbursement levels can not explain the different level of satisfaction. In fact, the differential "branding" of PeachCare may appeal to these families, many of whom have had prior exposure to private sector plans.

These results are consistent with those reported by Zuvekas and Taliaferro (2003) who find that coverage status, provider network characteristics, and family income and education did not fully explain the different levels of access experienced by different racial and ethnic groups. The findings are also supported by analysis of claims data for primary care services from the state that were compared to claims for S-CHIP and Medicaid children in Alabama, a demographically similar but programmatically different state. That analysis found that the use of a single provider network for Medicaid and S-CHIP children resulted in some reduction in access for the Medicaid children, particularly in urban areas (Bronstein, Adams and Florence, 2004). When children's utilization was analyzed, PeachCare children with no prior Medicaid enrollment were no more/less likely to use primary care than Medicaid SOBRA children but less likely to use any well child care or non-urgent emergency (ER) (Bronstein, Adams and Florence, 2005). PeachCare children with prior Medicaid enrollment however, were significantly more likely to

receive primary care than SOBRA children indicating perhaps, selection of sicker children among those who age out of Medicaid, into PeachCare coverage. The lower use of non-urgent ER services by PeachCare children is consistent with their ‘crowding’ out of Medicaid children in office-based settings.

Taken together, these studies suggest that enrollees in S-CHIP and Medicaid utilizing a single network of providers may perceive the health care interaction differently, although it is unclear to what extent the differences result from provider perceptions of the program and its enrollees versus differences in the demographics of those enrolled in the respective programs.

Understanding the sources of the differences in access and satisfaction is important if policy makers seek to expand enrollment and encourage retention in public programs as a means of ensuring that children have adequate access to care.

Cook and Barrett (1992) put forth a theory that stigma associated with public provision of health insurance coverage is substantially less than the stigma associated with other means tested programs because the benefit is perceived to be less susceptible to abuse. If true, stigma is unlikely to contribute significantly to low take-up rates for public coverage programs. However, stigma is often differentiated into identity and treatment stigma, where identity stigma refers to the concerns an individual has about the perception of public assistance recipients and treatment stigma is a measure of how others view and treat the recipient of public assistance (Stuber and Kronebusch, 2004). On the one hand, identity stigma may be the primary concern for those who favor a separate S-CHIP program to expand enrollment. On the other hand, if treatment stigma differs between Medicaid and S-CHIP, then there could be a differential impact of this type of

stigma on the ability of covered individuals to access appropriate care. In this case, stigma would affect not just the likelihood of enrolling in coverage, but the effectiveness of that coverage in facilitating access to care.

This literature suggests the following research questions:

- Do the unmeasured demographic differences (primarily income) between PeachCare and PeachCare Plus children result in differential experiences with care received under the same program? Is access and satisfaction with care higher for PeachCare than for PeachCare Plus children after controlling for the known non-income related demographic differences between the enrolled populations?
- Does the provider or enrollee perception of the different programs (PeachCare Plus and Medicaid) translate into differential treatment or perceived treatment of similarly situated children? If treatment stigma is different between the two public coverage programs, access and satisfaction with care will be higher for PeachCare Plus enrollees than for Medicaid enrollees.

In order to assess the extent to which income and programmatic differences between children are associated with differential care experiences we use the results from a satisfaction survey administered to enrollees in Georgia during 2003. To answer the first question, we compare access and satisfaction for children in PeachCare and PeachCare Plus who are enrolled in the same program but are in different income categories while adjusting for known demographic characteristics. To answer the second question, we compare access and satisfaction for PeachCare Plus and Medicaid children while adjusting for known demographic characteristics.

Survey Design and Administration

In order to assess the satisfaction of parents and guardians of children enrolled in the PeachCare for Kids, PeachCare Plus and Medicaid programs, a nationally recognized survey instrument called the Consumer Assessment of Health Plans (CAHPS) was fielded in late 2003 and early 2004. The CAHPS survey instrument has been widely used across a variety of populations, settings, and health plan types. For the populations surveyed as part of this project, the CAHPS standard survey assesses the perceived satisfaction among parents of those enrolled in Georgia's public coverage programs based on their experience in accessing primary, specialty, emergency, and dental care for their children. The survey instrument gathers information about the demographics of the enrolled child and then asks the respondent about the frequency with which they have attempted to obtain services and the characteristics of those services once obtained.

The potential respondents for the 2003 survey were selected from a file of children continuously enrolled in the PeachCare, PeachCare Plus and Medicaid programs for six months prior to May 2003. A random sample of about 10,000 children was drawn from the PeachCare and PeachCare Plus enrollees, and an additional sample of 5,000 children from the Medicaid participants. From these original samples, a mail-back survey form was sent to parents of 3,000 children in each of the three program groups. Once surveys were returned, non-respondents and parents of other children from the original samples were contacted by phone to reach the target number of 1,000 completed surveys for each enrollee group. A nationally recognized survey firm² that specializes in health care related research administered both the mail and phone survey and processed all returns.

² Pegasus Research of Salt Lake City, UT

Table 2 (below) describes the response rate for each of the three program groups.

Table 2: Response rates by program

	PeachCare	PeachCare Plus	Medicaid
Total Attempts	3,504	3,834	3,370
Total Responses	1,003	1,001	1,086
Mail Responses	706	590	608
Phone Responses	297	411	478
Response Rate (Total)	28.6%	26.1%	32.2%

While the response rate is somewhat lower than for the previous round of surveys used in the study by Edwards et al (2002), we note that this was driven by a change in methodology that was designed to facilitate rapid completion of the requisite number of surveys. Furthermore, the relative newness of the PeachCare program and high degree of participant enthusiasm at the time of the first survey may have contributed to the high response rate. However, the response rates between programs are fairly consistent, which suggests that satisfaction differences between the groups of respondents are unlikely to be attributable to non-response bias.

Given the response rate achieved, we compared the survey respondents with the continuously enrolled populations in each program to assess their representation of the underlying population.

Data are shown in Table 3 below.

Table 3: Demographics of Respondents versus Enrollees:

	PeachCare		PeachCare Plus		Medicaid	
	Respondents	Enrollees	Respondents	Enrollees	Respondents	Enrollees
Child's Age	%	%	%	%	%	%
0-1	2	0	5	2	13	15
2-5	26	25	37	33	27	28
6-12	42	44	33	39	36	34
13-18	30	30	25	26	24	23

	PeachCare		PeachCare Plus		Medicaid	
	Respondents	Enrollees	Respondents	Enrollees	Respondents	Enrollees
Child's location						
Atlanta	41	46	42	51	35	37
Rural Georgia	45	42	44	37	49	44
Other Metro	14	12	14	12	16	19
Child's race						
White	64	58	52	45	39	39
African American	27	30	39	43	50	59
Hispanic	5	8	7	9	10	0
Other	4	3	2	2	1	2

We find small but statistically significant (at $p = .10$ or below) differences between the demographics of the survey respondents and total enrollees when comparing age and location. Although the differences in race/ethnicity of respondents compared to enrollees are substantial, particularly among Medicaid respondents, these are at least partially attributable to the inconsistency in collecting information on race and ethnicity in the enrollment file noted above.

These differences could suggest weighting to control for the likelihood of responding to the questionnaire. However, we have concerns about the accuracy of some of the information in the enrollment file regarding race and ethnicity (noted above) and there is a debate about the use of population weights to correct for a sample design or response differences that generate an analysis file with disproportionate number of individuals with certain characteristics. Magee, Robb and Burbridge (1998) find that including weights in estimation procedures may worsen heteroscedasticity. Korn and Graubard (1995) note that simply including those variables related to the probability an individual responded may reduce the bias associated with the uneven sampling design. They also note that weighting is more important in adjusting for population means than for estimations of association, and that the use of weights tends to reduce efficiency (increase variance) as it reduces bias. Given a probabilistic model in which heteroscedasticity is

associated with bias and a small sample with a concern for maintaining efficiency, we estimate models that include variables that relate to response probability but make no additional weighting adjustments.

Data

We have survey data from a total of 3,090 individuals with a child enrolled in one of the three Georgia public coverage options. The respondent characteristics are shown below.

Table 4: Comparison of Respondents by Coverage Type

	Sig. different from PeachCare Plus	Share (%) of PeachCare	Share (%) of PeachCare Plus	Share (%) of Medicaid	Sig. different from PeachCare Plus
Average age of child (in years)	***	9.35	8.11	7.9	
Living in Atlanta		41.2	41.5	34.6	***
Living in Rural GA		45	44.5	49.5	**
African American	***	29.4	40.9	49.5	***
Hispanic		5.7	7.4	10.6	***
Children speaking other than English at home		4.7	5.9	7.7	***
with Respondent other than parent	***	2.7	7.4	14.7	***
with Respondent <18		6.7	8.33	14	***
with Respondent with < High School Education	**	13.1	16	28.1	***
reporting child with fair or poor health		2.4	2.3	5	***
reporting child with developmental or psycho/social disability		10.8	9.4	15.9	***

* Difference is significant at the $p \leq 0.1$ level.

** Difference is significant at the $p \leq 0.05$ level.

*** Difference is significant at the $p \leq 0.01$ level.

These results suggest that enrollment in Medicaid through the PeachCare application process is not random. Those Medicaid eligible children who are enrolled in PeachCare Plus are systematically different from other Medicaid survey respondents. They are substantially less likely to live in rural and more likely to live in Atlanta locations, more likely to be white non-Hispanic, and less likely to speak a language other than English at home. They are only 50

percent as likely as Medicaid participants to have a respondent who is not a parent and are also substantially less likely than Medicaid participants to live with a parent or guardian who is under 18 years of age and who has less than a high school education, to be in fair or poor health or to report a developmental or psycho/social disability. PeachCare Plus children are not significantly different from PeachCare children with respect to location and health status, although they are significantly more likely to have minority status, live with younger or less educated guardians, and to speak a language other than English at home.

Bi-variate Analysis

Table 5 shows key results for each of the three groups of enrollees on key measures of access and satisfaction from the CAHPS. Highlights are discussed below.

Table 5: Comparison of responses by program

	Sig. different from PeachCare Plus	Share (%) of PeachCare	Share (%) of PeachCare Plus	Share (%) of Medicaid	Sig. different from PeachCare Plus
Child obtained a new provider at some time since joining the health plan.		30	34	31	
Share reporting problem finding a provider with which they are happy		13	12	12	
Has one person they consider their primary care provider	**	80	76	77	
Report problem getting a referral for specialty care	***	14	26	25	
Report always getting assistance needed when calling doctor's office		77	80	69	***
Made appointment for routine or regular care	*	60	64	65	
Got an appointment as quickly as wanted		70	71	65	*
Needed urgent or emergency care	***	41	35	34	
Excluding emergencies, had 3 or more visits to office or clinic		28	29	33	**
Experienced problem obtaining necessary care		6	9	10	
Experienced delay in obtaining required approval for care		6	6	9	**
Provider does not always explains things in a manner the child can understand	***	10	27	28	

	Sig. different from PeachCare Plus	Share (%) of PeachCare Plus	Share (%) of PeachCare Plus	Share (%) of Medicaid	Sig. different from PeachCare Plus
Provider does not always spend sufficient time with child		29	30	33	
Enrolled in plan 1 year or less	***	18	31	23	***
Any problem understanding information in written materials		11	14	22	***
Any problem obtaining assistance from customer service	*	26	28	29	
Rate primary care provider 8 or less (scale 0 to 10)		32	32	31	
Rate overall healthcare 8 or less (scale 0 to 10)	**	26	31	34	
Rate overall health plan 8 or less (scale 0 to 10)		16	18	27	***

* Difference is significant at the $p \leq 0.1$ level.
** Difference is significant at the $p \leq 0.05$ level.
*** Difference is significant at the $p \leq 0.01$ level.

There is a consistent pattern within these results. On some measures (obtaining a needed referral, having an identified primary care provider, having providers explain things in a manner that the patient can understand and spend time with the patient, overall satisfaction with care) parents of PeachCare children report significantly higher levels of satisfaction than do parents of PeachCare Plus or Medicaid children. On other measures (obtaining assistance when calling the physician, appointment scheduling, obtaining timely approval for care, understanding written materials, overall satisfaction with plan) parents of PeachCare Plus children report significantly higher levels of satisfaction than do parents of Medicaid children. Moreover, there is no measure on which PeachCare parents report significantly lower satisfaction than do PeachCare Plus parents, and no measure on which Medicaid parents report significantly higher satisfaction than PeachCare Plus parents. In terms of access, while PeachCare children are more likely to report needing urgent or immediate care, Medicaid children are significantly more likely to have a high number of visits than are PeachCare Plus children.

Multivariate Analysis

The systematic selection of demographically different children into PeachCare Plus compared to PeachCare means that we must test the significance of the differences in the summary measures of plan and care satisfaction in a multivariate context. We use a logistic regression to estimate the likelihood that an individual rates their overall satisfaction with their care or their plan at 8 or below. We control for residence (rural and non-Atlanta MSA), age of the child, sex, race, and health status of the child, ethnicity and language spoken at home, education of the parent, mail response mode, and length of time in the program. PeachCare Plus children are the omitted group in our dummy variable indicating program type. By including an indicator variable for PeachCare children, we estimate the impact of the unmeasured demographic differences (primarily income) on access and satisfaction. We estimate the impact of programmatic stigma through an indicator variable for Medicaid children. Despite our best efforts to control for measurable differences between these groups, there may be unmeasured differences that contribute to selection into the relevant program and that are also related to access and satisfaction with care. As we are not able to control for these unmeasured differences through any instrumental variable, we must interpret the observed differences between Medicaid and PeachCare Plus with care. Table 6 shows the estimated parameters, significance levels and odds ratios for all covariates.

Table 6 Logistic Regression for the probability satisfaction rated 8 or lower

	Satisfaction with Health Plan			Satisfaction with Health Care		
	Parameter	Significance	Odds Ratio	Parameter	Significance	Odds Ratio
Medicaid Indicator	0.663	<.0001	1.94	0.239	0.037	1.27
PeachCare Indicator	-0.190	0.138	0.83	-0.268	0.026	0.77
Rural	-0.449	<.0001	0.64	-0.124	0.234	0.88

Table 6 Logistic Regression for the probability satisfaction rated 8 or lower

	Satisfaction with Health Plan			Satisfaction with Health Care		
	Parameter	Significance	Odds Ratio	Parameter	Significance	Odds Ratio
Non-Atlanta MSA	-0.444	0.0028	0.64	-0.454	0.003	0.64
Age (in years)	0.032	0.0008	1.03	0.008	0.368	1.01
Health Status good or better	-0.569	0.0192	0.57	-0.323	0.200	0.72
Male	0.039	0.6798	1.04	0.019	0.836	1.02
Hispanic	0.053	0.8098	1.06	-0.205	0.340	0.81
Non-White race	0.198	0.0479	1.22	0.001	0.989	1.00
English spoken at home	0.548	0.0206	1.73	0.237	0.302	1.27
Time in program	0.504	<.0001	1.65	0.333	0.001	1.40
Mail Response	-0.093	0.0323	0.91	-0.076	0.084	0.93
Parent/guardian with less than high school education	0.085	0.5442	1.09	-0.137	0.317	0.87
Parent / guardian with some college or more	0.510	<.0001	1.67	0.169	0.102	1.19

We find that rural residents are less likely to be dissatisfied with their plan and non-Atlanta residents are less likely to be dissatisfied with their plan or their care than are Atlanta residents. Older participants, participants who are non-whites and do not speak English in their homes, and participants whose parents have at least some education beyond high school are more likely to rate their satisfaction with care 8 or below, mail respondents are less likely to rate their satisfaction with their care or the plan 8 or lower, and participants who have been enrolled longer are more likely to rate their care or their plan 8 or below on a 10 point scale.

After adjusting for key demographic differences, the above results indicate that Medicaid enrollees are significantly more likely to rate their satisfaction with their health plan and their care at 8 or lower compared to enrollees in PeachCare Plus. While PeachCare enrollees are not

more or less likely than PeachCare Plus enrollees to rate their plan satisfaction below 8 they are significantly less likely to report satisfaction with their actual health care below 8 than are PeachCare Plus enrollees. Thus the significant differences between the groups in global satisfaction identified in the bi-variate analysis persist in the multivariate context.

For all other measures from Table 5 where the bi-variate analysis demonstrates significant differences between PeachCare Plus and Medicaid enrollees or between PeachCare Plus and PeachCare enrollees, we repeat the analysis in a multivariate context using logistic regression. We again estimate the impact of the unmeasured demographic differences on satisfaction by comparing PeachCare to PeachCare Plus children and the impact of programmatic stigma by comparing the Medicaid to PeachCare Plus children.

Measured effects of control variables are consistent in sign with the results shown in Table 6. Rural and non-Atlanta MSA residents, those enrolled in the plans longer, and enrollees in good or better health had generally higher levels of access and satisfaction, while non-white, Hispanic, non-English speaking and older enrollees had generally lower levels of access and satisfaction where measured effects were significant. We find that the significant differences between PeachCare Plus and PeachCare or PeachCare Plus and Medicaid enrollees persist for most of the access and satisfaction measures. Full logistic regression results for each of the variables shown below are available upon request. Table 7 (below) shows the odds ratio for PeachCare and for Medicaid children compared to the omitted category (PeachCare Plus).

Table 7: Odds ratio for Programmatic Effects (PeachCare Plus is Omitted Category)	Odds Ratio Estimate for PeachCare (relative to PeachCare Plus)	Odds Ratio Estimate for Medicaid (relative to PeachCare Plus)
Has one person they consider their primary care provider	1.28**	1.11
Report any problem getting a referral for specialty care	0.57 **	0.96
Report always getting assistance needed when calling doctor's office	0.82	0.55***
Experienced delay in obtaining required approval for care	1.17	2.04***
Made appointment for routine or regular care	1.07	0.997
Got an appointment as quickly as wanted	0.992	0.879
Provider does not always explains things in a manner the child can understand	0.951	0.883
Report any problem understanding information in written materials	0.93	2.04***
Rate primary care provider 8 or less (scale 0 to 10)	1.022	1.017
Rate overall healthcare 8 or less (scale 0 to 10)	0.79**	1.26 **
Rate overall health plan 8 or less (scale 0 to 10)	0.83	1.92***

* Difference is significant at the $p \leq 0.1$ level.

** Difference is significant at the $p \leq 0.05$ level.

*** Difference is significant at the $p \leq .01$ level.

The multivariate analysis suggests that some of the differences in satisfaction identified in the bi-variate analysis (making and getting an appointment for routine care, getting an appointment as quickly as wanted, provider explaining things in a manner the child understands) are actually associated with observable demographic differences among enrollees in each of the three programs, as the coefficients measuring the program specific effects are not significant in the multivariate analysis. Those ratings on which significant differences between Medicaid and PeachCare Plus or PeachCare and PeachCare Plus children persist are consistent in direction with the bi-variate results. On some measures (having a primary care provider, obtaining a needed referral, overall satisfaction with care) parents of PeachCare children report significantly higher levels of access or satisfaction than do parents of PeachCare Plus children. On other

measures (obtaining assistance when calling the physician, obtaining timely approval for care, and understanding written materials, overall satisfaction with care and with the plan) parents of PeachCare Plus children report significantly higher levels of satisfaction than do parents of Medicaid children.

One way to measure the ‘programmatic effect’ on access or satisfaction for those enrolled in the various programs is to model what the response of children with the same characteristics would be if they were in another program. To do this, we first use the estimated equations to predict the relevant response given the program the in which the child is actually enrolled, and then re-estimate this probability ‘as if’ the child were enrolled in PeachCare Plus. The results are shown below. We only complete the table for those measures of satisfaction/access where the relevant coefficient for PeachCare/ Medicaid was significantly different from zero and the odds ratio significantly different from one (see Table 7 above).

Table 8: Changes in probability associated with switching programs

	PeachCare		Medicaid		PeachCare Plus Probability
	Baseline Probability	"As if" PeachCare Plus	Baseline Probability	"As if" PeachCare Plus	
Has one person they consider their primary care provider	81%	77%	77%		77%
Report any problem getting a referral for specialty care	15%	25%	26%		24%
Report always getting assistance needed when calling doctor's office	77%		69%	80%	80%
Experienced delay in obtaining required approval for care	5%		7%	4%	4%
Report any problem understanding information in written materials	12%		22%	13%	14%

Rate overall healthcare 8 or less (scale 0 to 10)	26%	31%	34%	29%	31%
Rate overall health plan 8 or less (scale 0 to 10)	16%		27%	16%	18%

When we model outcomes for PeachCare enrollees ‘as if’ they were enrolled in PeachCare Plus (columns 1 and 2), we are estimating the income effect for children enrolled in the same program, holding all other demographic variables constant. When we model outcomes for Medicaid children ‘as if’ they were enrolled in PeachCare Plus (columns 3 and 4) we are estimating the program effect for children of similar income but enrolled in different programs. The results in this table can therefore be interpreted as a ‘decomposition’ of the total observed differences between S-CHIP and Medicaid enrollee satisfaction into a component that is reflective of the unmeasured demographic differences (primarily income) between enrollees in the two programs, and a component that is attributable to the differential perception of the public programs. Considering the overall difference between PeachCare and Medicaid enrollees in the likelihood of rating satisfaction with care at 8 or lower (26% PeachCare and 34% Medicaid) approximately half of this difference could be eliminated by enrolling Medicaid children in the PeachCare “brand” (~5 percentage point reduction), while about half of the difference appears to be related to income differences between the groups that are not affected by programmatic brand (~ 5 percentage point increase when PeachCare enrollees modeled as if PeachCare Plus)

Discussion

First and foremost, we note the overall high levels of satisfaction reported by enrollees in all three programs. Between two thirds and three fourths of respondents in each program rate overall satisfaction with their care very highly, and an even greater share in each program rates

satisfaction with their plan very highly. On specific measures of satisfaction, the share of respondents reporting any problem is generally very small. However, the systematic differences in responses from enrollees in three different programs are used to answer the two hypotheses suggested by the literature review. We find that:

- The same network of providers treat or are perceived to treat enrollees in the different programs (PeachCare Plus and Medicaid) differently. This results in satisfaction with several specific measures (office assistance, approval process, written materials) and with the overall plan and care that is significantly higher for PeachCare Plus enrollees than for Medicaid enrollees. This result is consistent with a hypothesis that stigma associated with the S-CHIP program is less than stigma associated with Medicaid.
- Unmeasured demographic differences (primarily income) between PeachCare and PeachCare Plus children results in differential experiences with care received under the same program. Thus, the likelihood of having a primary care provider, the satisfaction with care in general and with the referral process is higher for PeachCare than for PeachCare Plus children.

The first result suggests that policy makers must consider the potential for program reputation to influence not just the enrollment rate, but the experience of care at the level of the individual provider – patient interaction. These results are consistent with data from focus groups carried out in the CHIRI project noted earlier (Bronstein, Adams and Florence, 2005) that reveal that S-CHIP coverage was not viewed by parents as carrying the same ‘social stigma’ as Medicaid coverage; parents with Medicaid coverage in the two states studied (Alabama and Georgia) felt that they were treated more rudely and made to wait longer for care, and parents with children

covered by S-CHIP who had previous Medicaid experience were most vocal about the difference in the way they felt they were treated in health care settings.

While it is unclear whether the differences in satisfaction between enrollees in S-CHIP and Medicaid result from objective or perceived differences in treatment, it is true that lower levels of satisfaction will reduce the likelihood of remaining covered and accessing care in the future. Thus, provider education regarding ways to improve the care experiences for all public enrollees could enhance the effectiveness of public coverage in achieving the goal of expanding access to care.

The second result implies that some of the differences in experience may relate more to socio-demographic characteristics or prior coverage experiences that could correlate with attitudinal differences. For example, if higher income PeachCare enrollees have participated in private health plans, they may have been exposed to financial disincentives to inappropriate ER utilization and financial incentives to coordinate care through a primary care physician. This is also consistent with the CHIRI project research that found different views of the value of a continuous relationship with a primary care provider, with Medicaid parents more noncommittal about the value of consistently using the same physician, parents of children with Medicaid coverage reported being more likely to seek physician or emergency department care the same day their children become ill.

States evaluating the efficiency and effectiveness of combined versus separate S-CHIP programs in expanding access to care for children must consider the potential for that programmatic

decision to affect the experiences of enrolled children when obtaining care. Understanding the source of this differential level of satisfaction is important if policy makers seek to expand enrollment and encourage retention in public programs as a means of ensuring that children have adequate access to care.

Limitations of the Study

It is impossible to differentiate between real and perceived differences in access to care, provider communications, or treatment by office staff through a satisfaction survey. There may be unmeasured characteristics of families who opt to enroll their children through the PeachCare application process despite having low incomes that make them Medicaid-eligible. If these individuals have a systematically different perception of enrollment in public programs that is related to the way they perceive health care interactions, the measured differences may be more attributable to individual's perceptions than to actual programmatic stigma. However, other studies of programmatic stigma, some of which rely on data from claims, support the notion that the measured differences reflect actual experiences rather than systematically different perceptions of experiences (Skaggs et al, 2001). Also it appears that the effect of stigma on dissatisfaction is more from problems in getting information and delay in getting approval for care than with some more traditional measures of access such as getting referrals.

While significant differences in satisfaction and experiences between the three groups studied persist, we note that overall satisfaction is quite high. Even on those measures where some enrollees experience a problem, the number of respondents rating their experiences as anything

less than acceptable is quite small, and simulation of moving Medicaid children into PeachCare Plus results in small improvements in satisfaction.

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