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National Evaluation of the State Children's Health Insurance Program: A Decade of Expanding Coverage and Improving Access

### **Final Report**

September 2007

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### **EXECUTIVE SUMMARY**

The State Children's Health Insurance Program (SCHIP) was enacted at a time when the number and rate of uninsured children were growing, especially among those just above the poverty threshold, who were too poor to purchase private health insurance coverage but not poor enough to qualify for Medicaid. Moreover, there was growing public recognition of the large number of uninsured children eligible for Medicaid but not enrolled. Congress enacted SCHIP under the Balanced Budget Act of 1997, and created Title XXI of the Social Security Act. Title XXI gave states considerable flexibility in designing programs to expand health insurance coverage for low-income children under age 19 who are uninsured. States could expand coverage through their Medicaid program (M-SCHIP), by creating a separate child health program (S-SCHIP), or by combining the two approaches. SCHIP represents the largest expansion of publicly sponsored health insurance coverage since Medicare and Medicaid were established more than four decades ago.

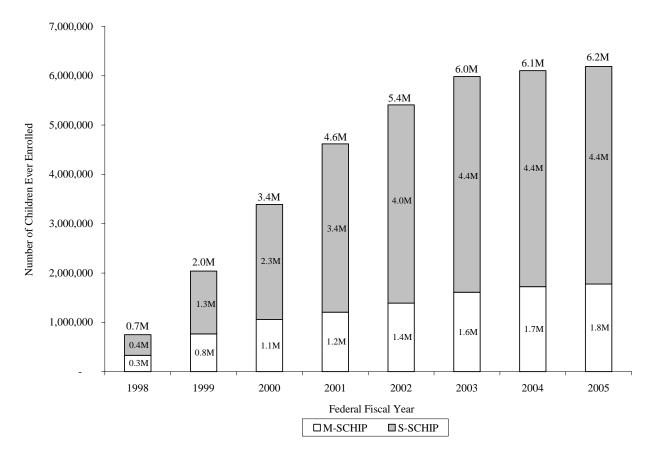
Congress mandated that states evaluate the effectiveness of their SCHIP programs. States were required to submit (1) an initial state evaluation report to the Centers for Medicare & Medicaid Services (CMS) by March 31, 2000; and (2) annual reports tracking their progress in implementing SCHIP. CMS contracted with Mathematica Policy Research, Inc. (MPR) to conduct a national evaluation of SCHIP. In addition to assisting CMS with its report to Congress, the national evaluation of SCHIP contained seven other components: (1) analysis of SCHIP enrollment, disenrollment, and reenrollment patterns based on the SCHIP Enrollment Data System (SEDS) and the Medicaid Statistical Information System (MSIS); (2) analysis of trends in the number and rate of uninsured children based on the Current Population Survey (CPS); (3) synthesis of published and unpublished literature about retention, substitution (also referred to as "crowd out"), and access to care in SCHIP; (4) special studies on outreach and access to care based on the state SCHIP annual reports; (5) analysis of outreach and enrollment effectiveness using quantitative and qualitative methods; (6) case study of program implementation in eight states; and (7) analysis of SCHIP performance measures. Several states have recently proposed or implemented new strategies to expand health insurance coverage for children beyond SCHIP. The CMS national evaluation of SCHIP does not examine these initiatives because it was beyond the scope of the project. This executive summary synthesizes the main evaluation findings.

#### A. OUTREACH, ENROLLMENT, AND RETENTION IN SCHIP

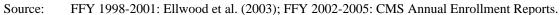
# States embraced the flexibility that SCHIP offered, and enrollment grew rapidly in the early years.

During the early years of SCHIP, considerable attention focused on states' progress in enrolling children in SCHIP. When SCHIP was implemented in October 1997, just three months after Title XXI was enacted in July 1997, states had little time to design and obtain approval for their programs. Not surprisingly, enrollment during the first year (federal fiscal year [FFY] 1998) was modest (Figure 1). States gained significant momentum in FFY 1999, and SCHIP enrollment increased rapidly through FFY 2001. Enrollment plateaued at 6 million children ever

#### FIGURE 1



#### TRENDS IN SCHIP ENROLLMENT BY PROGRAM TYPE, FFY 1998-2005



Note: Estimates of SCHIP ever enrolled have been adjusted for missing or inconsistent data. See Appendix B of Ellwood et al. (2003) for methods.

M-SCHIP = Medicaid expansion SCHIP program.

S-SCHIP = Separate child health program.

enrolled during FFY 2003 and increased modestly after that. By FFY 2006, SCHIP enrollment reached 6.6 million children. As the program matured, the share of total SCHIP enrollment in S-SCHIP programs increased, while the share in M-SCHIP programs declined. Three main factors accounted for this shift: (1) the gradual phase-in of coverage for adolescents below 100 percent of the federal poverty level (FPL) through traditional Medicaid,<sup>1</sup> (2) the later implementation and "ramp-up" of S-SCHIP programs, and (3) broader expansion of income eligibility thresholds through S-SCHIP program components. The number of states with eligibility thresholds at or above 200 percent of the FPL increased from 25 as of September 1999, to 36 as of September 2001, to 39 as of July 2005.

# Much of the enrollment growth during the early years of SCHIP was attributed to states' multifaceted, and evolving, outreach efforts.

States have shown creativity and adaptability in developing a wide range of strategies to promote SCHIP. As the program has matured and the fiscal environment has tightened, states have learned what is successful and have tailored their approaches accordingly. States initially focused their outreach efforts on the general population to create broad awareness of SCHIP, but they gradually began to target those who were eligible but not enrolled (such as minorities, immigrants, working families, and rural residents). States used feedback from many sourcessuch as local outreach workers, SCHIP helpline data, and survey data-to identify vulnerable populations and geographic areas. Consistent with their early efforts to build broad awareness of SCHIP, most states initially mounted mass media campaigns and partnered with a wide range of state and local organizations. Over time, most states focused on building partnerships with the community-based organizations that had access to "hard-to-reach" populations. In addition, they shifted resources from mass media campaigns to local in-person outreach, including the use of mini-grants and application assistance fees to stimulate outreach and enrollment at the local level. Promoting SCHIP at the local level allowed communities to tailor activities to high priority populations. Without empirical evidence about the effectiveness of specific outreach activities, state efforts were characterized by "learning by doing."

# Surveillance of SCHIP "enrollment outbreaks" identified state and local initiatives that were associated with spikes in enrollment at the state and local levels.

To fill the gap resulting from the lack of systematic data on outreach effectiveness, we developed an approach to assess the link between outreach and enrollment, building on a public health surveillance model for disease outbreaks. Using quantitative methods, we identified enrollment outbreaks at the state and local levels and explored the potential causes using qualitative methods. At the state level, enrollment simplifications (such as implementation of a web-based application) and statewide campaigns (such as annual Back-to-School initiatives) were frequently associated with large gains in enrollment. At the local level, the initiatives were diverse and included comprehensive, multifaceted, and well-focused strategies. These strategies

<sup>&</sup>lt;sup>1</sup> The Omnibus Budget Reconciliation Act of 1990 included a mandate that Medicaid coverage be phased in for children with family incomes less than 100 percent of the FPL who were born after September 30, 1983.

were implemented by a variety of organizations, including health care providers, county social service agencies, community-based organizations, and faith-based groups. The analysis also pointed to the important role of funding mechanisms designed to leverage community resources, including the Covering Kids and Families program administered by the Robert Wood Johnson Foundation; the Community Access to Child Health (CATCH) grants administered by the American Academy of Pediatrics; and state mini-grant programs to distribute state and federal outreach funds to communities. Although this analysis identified promising practices retrospectively, using this method as a "real-time" surveillance system could help states set priorities and allocate resources, especially given states' recent budget constraints.

# SCHIP outreach and enrollment initiatives had a "spillover effect" on traditional Medicaid enrollment, although the precise magnitude of the effect is unknown.

Before SCHIP was enacted in 1997, states did little to actively market Medicaid or other public coverage to children or adults. SCHIP brought a new emphasis to reaching out to enroll uninsured children in public insurance coverage. Using joint applications for SCHIP and traditional Medicaid, and creating a new "brand identity" for SCHIP and Medicaid (such as a new name and/or logo), contributed to the enhanced marketing of Medicaid in conjunction with SCHIP. In addition, SCHIP regulations required that states implement procedures to screen and enroll eligible children in traditional Medicaid, to facilitate enrollment in the appropriate program. States concur that traditional Medicaid enrollment increased as a result of SCHIP outreach and enrollment initiatives. Some states offered concrete evidence of the number of children who applied to SCHIP but were found eligible for traditional Medicaid coverage. Others offered evidence of the change in the Medicaid enrollment trend that was observed after SCHIP was implemented-for example, some states had experienced steady declines in traditional Medicaid enrollment that were reversed when SCHIP was implemented. While the magnitude of the spillover effect is unknown, individual state estimates provide strong evidence that traditional Medicaid enrollment expanded because of SCHIP outreach and enrollment initiatives; in many states, the effect on traditional Medicaid enrollment substantially exceeded the number of children enrolled in SCHIP.

# Retention in SCHIP exceeds 75 percent in most states, similar to the experience in the individual market and traditional Medicaid.

This evaluation sought to fill a gap resulting from the lack of national- or state-level estimates of retention. Retention is defined as the proportion of children who stay enrolled among children who remain eligible for SCHIP. To estimate retention, data are required on the eligibility status of children who are subject to renewal; however, the eligibility status is unknown for children who disenroll without an eligibility determination. Surveys of disenrollees have examined reasons for disenrollment (voluntary versus involuntary) to estimate what proportion of disenrollees would have been eligible for continued participation in SCHIP. To estimate retention rates, we combined this information with SCHIP disenrollment rates for 19 states. Our results suggest that retention in SCHIP ranged between 31 and 98 percent among states but that most estimates exceeded 75 percent, similar to the rate of retention in the individual insurance market and traditional Medicaid.

# State administrative policies may account for some of the variation in retention rates among states.

Among the factors found to facilitate retention were 12-month continuous coverage policies, renewal simplifications, and passive renewal. Although premiums and lockout provisions for nonpayment of premiums were found to reduce retention among children subject to premiums, the extension of grace periods for premium nonpayment appeared to prolong enrollment spans. The effects of state retention efforts are demonstrated in an analysis of the continuity of public insurance coverage in six states from April 1999 through September 2001, when many states implemented simplifications to the renewal process and other policy changes. Children who enrolled in SCHIP during the second half of the study period (July 2000 or later) were more likely to remain enrolled in public insurance (including traditional Medicaid) through the annual renewal in four out of six states, each of which had implemented programmatic changes to facilitate retention. We observed no change in the likelihood of remaining enrolled in the one state that made no changes in renewal procedures. Finally, one state exhibited lower retention over time, which may have been associated with the reversal of renewal simplifications (shifting from a mail-in renewal form to an in-person interview at renewal).

Most states implemented strategies to discourage families from voluntarily dropping private coverage by screening for other coverage during the eligibility determination process and by utilizing such mechanisms as waiting periods, premiums, and benefit limits. Nevertheless, the evidence suggests that substitution of SCHIP for private coverage (crowd out) does occur, with the magnitude ranging from less than 10 percent to 56 percent, depending on how substitution is defined and measured. Since this study was completed, the Congressional Budget Office estimated the rate of substitution under SCHIP and Medicaid to be approximately 33 percent; Congress and the Administration will be using this crowd-out percentage as they evaluate policies in the reauthorization of SCHIP.

Substitution of coverage is difficult to measure. Existing data sources and methods yield wide-ranging estimates, with the magnitude varying depending on how substitution is defined and measured. The CMS national evaluation of SCHIP looked at evidence from three kinds of studies: population-based, enrollee-based, and applicant-based.<sup>2</sup>

• Population-based studies estimate that substitution of SCHIP for private coverage ranges from 10 to 56 percent. Most of these studies estimate substitution among children who were simulated to be eligible for SCHIP and who were below 300 percent of the FPL. These studies do not estimate substitution that would occur in higher income groups. These studies define substitution as *any* decline in private coverage within the population of low-income children who were eligible for SCHIP (regardless of the reason for loss of coverage). These studies use multivariate

<sup>&</sup>lt;sup>2</sup> These three kinds of studies are designed to serve different purposes. Enrollee- and applicant-based studies support states' real-time monitoring of the effectiveness of their anti-substitution efforts, while population-based studies provide retrospective national estimates of the targeting of SCHIP to uninsured low-income children, without regard for variations in states' substitution policies.

methods to estimate substitution by simulating eligibility for SCHIP and comparing changes in private coverage among SCHIP-eligible children versus a comparison group. The methodology is designed to capture foregone opportunities for taking up private coverage after a child is enrolled in SCHIP. However, study limitations, as acknowledged by the authors, include the instability of estimates based on the choice of comparison group or multivariate methodology, error in self-reported insurance status, issues with imputing SCHIP eligibility, and limited ability to account for state-specific anti-substitution rules.

- Enrollee-based studies estimate that substitution is between 0.7 and 15 percent, based on descriptive analysis of pre-SCHIP insurance status and access to employer coverage among children who recently enrolled in SCHIP. These studies take into account reasons for loss of coverage, and do not count involuntary loss of coverage as substitution (such as job loss, divorce, death of a parent). However, these studies may underestimate the extent of substitution because they generally do not account for the likelihood that families had access to private coverage before or after their children enrolled in SCHIP (also known as "foregone opportunities").
- Estimates from applicant-based studies are typically below 10 percent. These studies estimate substitution among those who applied for SCHIP based on state administrative data. These studies apply state-specific anti-substitution rules to their estimates of substitution (including waiting periods and reasons for dropping coverage). Like the enrollee-based studies, these studies focus on children's availability of private insurance coverage at the time of SCHIP application or enrollment, and do not account for foregone opportunities for taking up private coverage after a child is enrolled in SCHIP.

This study suggests that some amount of substitution is unavoidable, regardless of how substitution is defined and measured. The salient policy questions include "how much" and "what kind of" substitution is acceptable. On one hand, the population-based studies consider any reason for declines in private coverage as substitution, whereas the enrollee- and applicant-based studies take into account state-specific reasons for loss of private coverage (such as job loss, divorce, death of a parent, or in some cases, unaffordability of private coverage). Thus, conclusions about the extent of substitution in SCHIP will depend not only on how substitution is defined and measured, but also on perspectives on the circumstances under which substitution may be acceptable.

# **B. PROGRESS TOWARD REDUCING THE NUMBER AND RATE OF UNINSURED LOW-INCOME CHILDREN**

# SCHIP contributed to improvements in children's health insurance coverage, including substantial reductions in both the number and rate of uninsured children.

Using a consistent time series of data from the CPS, we found that, between 1997 and 2003, the proportion of children under age 19 who were uninsured decreased from 15.5 to 12.8 percent, and the number of uninsured children fell from 11.7 to 9.9 million. The uninsured rate among

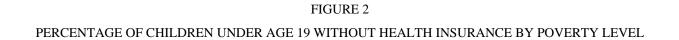
low-income children (below 200 percent of the FPL) declined by an even greater margin, falling from 25.2 to 20.1 percent (Figure 2). SCHIP contributed to this success in several ways. First, all the declines in uninsured rates by poverty level were limited to children below 250 percent of the FPL, the population that SCHIP specifically targeted. Second, children between 100 and 150 percent of the FPL had the highest uninsured rate in 1997, but, by 2003, their uninsured rate had fallen into line with those of the surrounding income groups. Third, adolescents had the largest gains in coverage, compensating for their lower rates of coverage before SCHIP.

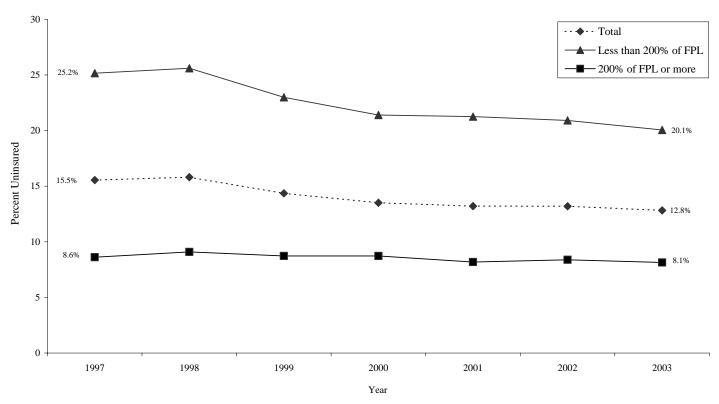
# SCHIP served as a safety net for low-income children during the recession and economic slowdown of the early 2000s—a protection that their parents and other nonelderly adults did not have.

Three-quarters of the decline in children's uninsured rates occurred between 1997 and 2000, when the nation was in the final years of a prolonged economic expansion. The continuing declines between 2000 and 2003, when the economy was in a slowdown, were perhaps even more striking, because nonelderly adults—including the parents of these same children— experienced a sharp rise in their uninsured rates. After 2000, SCHIP provided a safety net for children whose families lost employer-sponsored coverage during the economic downturn. While children and nonelderly adults experienced similar losses of private coverage between 2000 and 2003, children were able to sustain their earlier gains through a continued growth of public coverage, which was largely attributable to SCHIP. Nonelderly adults, including parents, lacked access to much of this public coverage and, as a result, incurred a significant increase in their uninsured rate. At the same time that children's uninsured rates were falling, nonelderly adults experienced a significant 2 percentage point increase in their overall uninsured rate (from 19.8 to 21.7 percent); low-income nonelderly adults had an even greater increase, at nearly 3 percentage points (from 39.5 to 42.2 percent), and low-income parents of children under age 19 had a 4 percentage point increase (from 34.2 to 38.3 percent).

# If SCHIP did not exist, we estimate that the number and rate of uninsured children would have risen substantially, rather than fallen.

Our results can be extrapolated to estimate how much the uninsured rate would have risen between 2000 and 2003 in the absence of SCHIP. If public coverage rates among children had grown by no more than the increases we observed among parents, while private coverage rates still declined by the amounts that we observed among children, the uninsured rate for children would have risen by 3.3 percentage points, instead of declining by 0.7 percentage points, and the number of uninsured children would have grown by 2.7 million, rather than declining by 0.4 million. This provides a direct measure of how much the higher growth rates of public coverage among children affected the trends in children's coverage between 2000 and 2003.





Source: Mathematica Policy Research, Inc. analysis of CPS March supplement, 1998 through 2001, and ASEC Supplement, 2002 through 2004.

### C. ACCESS TO HEALTH CARE IN SCHIP

# Access to care has improved for children enrolled in SCHIP, although some gaps remain.

The recent literature provides compelling evidence that access to care has improved for children enrolled in SCHIP. Evidence from the literature and state monitoring efforts suggests that SCHIP increased the likelihood of having a usual source of care, reduced the level of unmet need, and improved access to dental care. Ten studies, for example, reported on changes in unmet need associated with enrollment in SCHIP, providing the most systematic evidence of improved access across any of the measures in the literature synthesis. The magnitude of reductions in unmet need was large, with all but one state achieving a decrease of 50 percent or more. Fewer studies examined the effects of SCHIP on provider visits and preventive care. Among those that did, however, there is some positive evidence that SCHIP expanded access to these services. With the expansion of access through a usual source of care, there is evidence that access gains were accompanied by reductions in emergency department use in several states. There is little indication, however, of changes in access to specialty care.

Two subgroups—the long-term uninsured (that is, those without coverage for more than six months before SCHIP) and adolescents—experienced the greatest gains in access under SCHIP. Two other subgroups—children with special health care needs and children of minority race/ethnicity—were less likely to experience consistent gains. Although disparities have been reduced for children with special health care needs and those of minority race/ethnicity, substantial gaps still remain as measured by higher levels of unmet need.

# Access to care for children enrolled in SCHIP varies among states, although the source of variation is unclear.

Across all the measures and studies of access to care, substantial variation was observed among states. For example, states varied in their progress toward meeting national Healthy People 2010 goals on such indicators as unmet need, usual source of care, and dental care. Ten states reported the percent of SCHIP children who had a usual *person* from whom they received care, with results ranging from 67 to 96 percent. Six of the 10 states exceeded the Healthy People 2010 goal that 85 percent of all people should have a usual primary care provider. Seventeen states reported 12-month dental visit rates, ranging from 17 to 76 percent. Seven of the 17 states surpassed the Healthy People 2010 goal of 57 percent of low-income children reporting at least one dental visit each year. Similarly, state performance on CMS's four core child health performance measures was wide-ranging, both across states and, in some cases, compared to commercial and Medicaid benchmarks. The lack of consistent methods to measure SCHIP performance across states may account for some of this variation, but the magnitude and direction are unknown.

### D. LESSONS FROM THE FIELD

### States tailored their SCHIP programs to their unique context, resources, and needs. The flexibility under Title XXI allowed states to design and modify their programs, building on their own lessons, as well as on the experiences of other states.

The SCHIP program is dynamic and has evolved continuously over the past decade. The case study of eight states—Georgia, Kansas, Kentucky, Maryland, Ohio, Pennsylvania, South Carolina, and Utah—demonstrate how states used the flexibility under Title XXI to design and modify their programs. Each state's experience "tells a story" about how they structured SCHIP to fill the gaps in their public and private insurance systems.

- Ohio and South Carolina implemented Medicaid expansion SCHIP programs. Through SCHIP, they "reinvented" their Medicaid programs to be more user friendly and to decrease the stigma associated with public assistance programs.
- Georgia and Kansas both implemented separate child health programs and hired an enrollment broker to handle SCHIP enrollment and renewals. They created more seamless public insurance systems by aligning the enrollment and renewal processes for low-income children who were eligible for SCHIP and the traditional Medicaid-poverty program.
- Pennsylvania's separate child health program modeled SCHIP after private insurance. The state created a partnership with private health plans and the plans carried out most administrative functions, including outreach, eligibility determinations, renewals, and member services.
- Utah's separate child health program initially gained buy-in from the state legislature because of the nonentitlement nature of the program. The state implemented an enrollment cap and adapted its outreach, application, and renewal processes to accommodate periodic open enrollment periods.
- Maryland's combination program attempted to coordinate SCHIP coverage more closely with private insurance coverage, by creating a premium assistance program. Faced with low enrollment and high administrative costs, the program ended after a couple of years.
- Kentucky simplified its enrollment and renewal processes and then reversed many of the simplifications, including reinstitution of a face-to-face interview at time of initial application. The state sought to control program costs, improve program integrity, and educate families about the program.

SCHIP remains a very popular program at the state level. As SCHIP approaches the end of its first decade, states have learned many lessons from their own and other states' experiences. These lessons are relevant to the future structure of the SCHIP program, as Congress considers reauthorization of the program. In addition, the lessons may be instructive for states as they seek to implement broader health care reforms to expand insurance coverage to uninsured people in

their states. Drawing on the lessons of the past, states are well positioned to meet future challenges.

### E. IMPLICATIONS OF THE EVALUATION

The SCHIP program has operated within a culture of "continuous quality improvement." This culture is characterized by ongoing discussions of implementation challenges, review of emerging evidence, and sharing of promising strategies. As SCHIP approaches its 10-year anniversary, it is timely to reflect on the program's implementation and suggest opportunities for continuing to improve the performance of the program. The results of the CMS national evaluation of SCHIP have implications for ongoing monitoring of program performance, future research, and reauthorization of SCHIP.

### 1. Implications for Ongoing Monitoring of Program Performance

The SCHIP program has made great strides in implementing a performance measurement system to track access to, and quality of, care among SCHIP enrollees. Specifically, the completeness and quality of the data for CMS's four core child health performance measures have improved dramatically during the past three years. As a result, CMS now plans to use the information to formulate strategies for performance improvement in the SCHIP program. However, to support performance improvement initiatives at the national level, it may be necessary to pay more attention to the consistency of the data across states. In addition, over the longer term, CMS-in consultation and collaboration with its state partners-may wish to consider incorporating additional measures that reflect populations or services that the four current core measures do not capture. Examples include a measure of adolescent well-child visits to parallel the measures for younger children and an annual dental visit measure to parallel the annual primary care visit measure. Another longer-term initiative may be the development of reports on the status of access and quality in the SCHIP program, including the core performance measures and selected state-specific performance measures. Finally, the experience with performance measurement in SCHIP may serve as a model for performance measurement in the Medicaid program, which covers the vast majority of low-income children. The four core child health measures can be constructed based on the claims-level data in CMS's Medicaid Analytic eXtract (MAX) files. The main caveat is that encounter data often are not available for services provided by Medicaid managed care plans, restricting the measures to Medicaid children enrolled in fee-for-service (FFS) or primary care case management (PCCM) programs. Many states, however, already require their managed care contractors to report these measures. Developing parallel measures for children in Medicaid FFS or PCCM programs would be an important step in advancing CMS's efforts to assess performance in the Medicaid program.

### 2. Implications for Future Research

Four main topics emerged for future research. First, a key unanswered question relates to health outcomes in SCHIP. While this evaluation clearly demonstrates the link between expanded coverage and improved access to care, the link between improved access and improved health outcomes is less clearly demonstrated. To more fully demonstrate the "return on

investment" from SCHIP requires going beyond measures of access and examining the effects of SCHIP on measures of health and functional status. Second, this evaluation found overall improvements in access associated with enrollment in SCHIP, but it identified remaining disparities in access between children with and without special health care needs and between minority and nonminority children. Thus, future research should explore the factors that underlie disparities in access within the SCHIP population-including structural and cultural barriersand the extent to which disparities in utilization, costs, and quality of care also exist. Third, future research should focus on positioning states to prioritize their outreach efforts because of budget constraints. Using a "real-time" outreach surveillance tool, such as that developed in this evaluation, may help states detect communities experiencing "enrollment outbreaks" and identify promising approaches that other communities could adopt. By blending quantitative and qualitative information, states and communities can proactively design better outreach strategies, prioritize and allocate funds, and, ultimately, cover more children. Fourth, future research should produce more rigorous estimates of the magnitude and "drivers" of the Medicaid spillover effect. To what extent are these trends a function of state SCHIP program design versus factors unrelated to SCHIP (such as rising unemployment)? How do these trends vary by state program design? Data from CMS's MAX files would be ideally suited to support this type of research. The results would have important implications for broadening the discussion about SCHIP's role in expanding coverage for low-income children.

### 3. Considerations for the Reauthorization of SCHIP

This evaluation also has implications for the reauthorization of SCHIP and the future structure of the program. The following key themes emerged from the evaluation: (1) maintain the option of M-SCHIP and S-SCHIP program models; (2) maintain the nonentitlement option of S-SCHIP plans; (3) maintain the flexibility of S-SCHIP benefit packages; (4) provide more flexibility to states in developing premium assistance components; (5) enhance coordination with Medicaid, especially at renewal; and (6) strengthen performance-monitoring capabilities through submission of detailed enrollment and utilization data. These themes highlight the delicate balance in designing SCHIP as a national program by standardizing certain components across states, while at the same time preserving flexibility within states to make program choices consistent with their political, economic, and social environment.

### F. CONCLUDING REMARKS

The CMS national evaluation of SCHIP has assessed states' progress in implementing SCHIP. As SCHIP approaches its 10-year anniversary, much has been accomplished. Among the important milestones are the following:

- SCHIP enrollment increased dramatically each year, reaching 6.2 million children ever enrolled in FFY 2005.
- SCHIP outreach and enrollment initiatives reversed declines in traditional Medicaid enrollment levels by reaching and enrolling many children who were eligible for Medicaid but previously uninsured.

- The number and rate of uninsured, low-income children declined significantly, particularly during the economic slowdown of the early 2000s. If SCHIP did not exist, we project that uninsured rates would have risen, rather than fallen, during this period.
- Access to care has improved significantly under SCHIP, although certain gaps remain for children with special health care needs and children of minority race/ethnicity.

Reauthorization of the SCHIP program will provide states with continued opportunities to cover low-income children who would otherwise be uninsured and to enhance their access to health care through the SCHIP program.

#### I. INTRODUCTION

The State Children's Health Insurance Program (SCHIP) was enacted at a time when the number and rate of uninsured children were growing, especially among those just above the poverty threshold, who were too poor to purchase private health insurance coverage but not poor enough to qualify for Medicaid. Moreover, there was growing public recognition of the large number of uninsured children eligible for Medicaid but not enrolled. Congress enacted SCHIP under the Balanced Budget Act of 1997, and created Title XXI of the Social Security Act. Title XXI gave states considerable flexibility in designing programs to expand health insurance coverage for low-income children under age 19 who are uninsured. States could expand coverage through their Medicaid program (M-SCHIP), by creating a separate child health program (S-SCHIP), or by combining the two approaches. SCHIP represents the largest expansion of publicly sponsored health insurance coverage since Medicare and Medicaid were established more than four decades ago.

Congress mandated that states evaluate the effectiveness of their SCHIP programs. States had to submit an initial state evaluation report to the Centers for Medicare & Medicaid Services (CMS) by March 31, 2000. In addition, they had to submit annual reports tracking their progress in implementing SCHIP. CMS contracted with Mathematica Policy Research, Inc. (MPR) to conduct a national evaluation of SCHIP and assist CMS with its report to Congress (Rosenbach et al. 2003). The report described the early implementation and progress of SCHIP programs in reaching and enrolling eligible children and reducing the number of low-income children who are uninsured. The report integrated information from the initial state evaluations, providing a snapshot of SCHIP as of March 2000. Appendix A contains the executive summary of that report.

The CMS national evaluation of SCHIP contained seven other components: (1) analysis of SCHIP enrollment, disenrollment, and reenrollment patterns based on the SCHIP Statistical Enrollment Data System (SEDS) and the Medicaid Statistical Information System (MSIS); (2) analysis of trends in the number and rate of uninsured children based on the Current Population Survey (CPS); (3) synthesis of published and unpublished literature about retention, substitution (also referred to as "crowd out"), and access to care in SCHIP; (4) special studies on outreach and access to care based on the state SCHIP annual reports; (5) analysis of outreach and enrollment effectiveness using quantitative and qualitative methods; (6) a case study of program implementation in eight states; and (7) analysis of SCHIP performance measures. Several states have recently proposed or implemented new strategies to expand health insurance coverage for children beyond SCHIP. The CMS national evaluation of SCHIP does not examine these initiatives because it was beyond the scope of the project.

MPR produced more than a dozen reports as part of the CMS national evaluation of SCHIP. (Exhibit I.1 lists these reports.) This final report summarizes the main evaluation findings. The individual reports contain additional information on study methods, as well as detailed results. This chapter provides an overview of the evaluation framework, outcome measures, and data sources.

#### EXHIBIT I.1

#### PUBLICATIONS PRODUCED BY THE CMS NATIONAL EVALUATION OF SCHIP

- "SCHIP at 10: A Synthesis of the Evidence on Substitution of SCHIP for Other Coverage." So Sasigant Limpa-Amara, Angela Merrill, and Margo Rosenbach. September 2007.
- "SCHIP at 10: A Synthesis of the Evidence on Access to Care." Shanna Shulman and Margo Rosenbach. January 2007.
- "Detecting Enrollment Outbreaks in Three States: The Link Between Program Enrollment and Outreach." Carol Irvin, Christopher Trenholm, and Margo Rosenbach. December 2006.
- "SCHIP at 10: A Synthesis of the Evidence on Retention." Shanna Shulman, Margo Rosenbach, and Sylvia Kuo. November 2006.
- "SCHIP and Medicaid: Working Together to Keep Low-Income Children Insured." Angela Merrill and Margo Rosenbach. November 2006.
- "Continued Progress in Performance Measurement Reporting by SCHIP." Margo Rosenbach, Anna Katz, and Sibyl Day. September 2006.
- "Beyond Coverage: SCHIP Makes Strides Toward Providing a Usual Source of Care to Low-Income Children." Amy Quinn and Margo Rosenbach. December 2005.
- "Improving Performance Measurement in the State Children's Health Insurance Program." Sibyl Day, Anna Katz, and Margo Rosenbach. July 2005.
- "Learning by Doing: The Evolution of State Outreach Efforts Under SCHIP." Susan Williams and Margo Rosenbach. February 2005.
- "SCHIP Takes a Bite Out of the Dental Access Gap for Low-Income Children." Shanna Shulman, Megan Kell, and Margo Rosenbach. November 2004.
- "SCHIP in Ohio: Evolution and Outlook for the Future." Carol Irvin, Nancy Fasciano, and Margo Rosenbach. March 2004.
- "SCHIP's Steady Enrollment Growth Continues." Marilyn Ellwood, Angela Merrill, and Wendy Conroy. May 2003.
- "Implementation of the State Children's Health Insurance Program: Synthesis of State Evaluations: Background for the Report to Congress." Margo Rosenbach, Marilyn Ellwood, Carol Irvin, Cheryl Young, Wendy Conroy, Brian Quinn, and Megan Kell. March 2003.
- "Characteristics of SCHIP Eligibility and Enrollment Data Systems: Feasibility for Supporting Research on SCHIP." Angela Merrill, Wendy Conroy, and Brian Quinn. June 2002.
- "Implementation of the State Children's Health Insurance Program: Momentum Is Increasing After a Modest Start." Margo Rosenbach, Marilyn Ellwood, John Czajka, Carol Irvin, Wendy Coupe, and Brian Quinn. November 2000.

### A. FRAMEWORK FOR THE SCHIP EVALUATION

This evaluation relied on a framework for assessing states' implementation of SCHIP and their progress toward achieving program outcomes (Figure I.1). The framework demonstrates that SCHIP is implemented within a state context, which determines the program features both initially and as they may evolve (as signified by the dotted line). The expansion of coverage through SCHIP is hypothesized to lead to intermediate outcomes related to enrollment and retention, access to health care, quality of care and satisfaction, and, ultimately, health outcomes. As Figure I.1 shows, we hypothesize that SCHIP will improve access to care along three dimensions. "Potential access" refers to factors (such as having a usual source of care) that may make it easier to obtain health care when it is needed. "Realized access" reflects utilization outcomes, such as increased preventive care use, increased provider or specialist visits, and decreased emergency department use. "Perceived access" refers to experiences or observations that may signal the adequacy of access (such as the level of unmet need or delays in receiving Enhanced access to health care is expected to lead to increased quality of care and care). satisfaction through improved continuity of care, improved preventive care practices, a decline in preventable hospitalizations, and greater parent satisfaction. Finally, increased coverage may eventually lead to improved health and functional status.

This framework guided the design of our evaluation, including the outcomes measured in the qualitative and quantitative components (Table I.1). The first set of outcomes pertains to program design and implementation, a primary focus of the report to Congress, as mandated under Title XXI. In addition, the case study offers "lessons from the field" about selected state outreach, enrollment, and renewal initiatives. The next set of outcomes relates to state progress with outreach, enrollment, retention, prevention of substitution, and reduction of uninsurance. These outcomes are multifaceted and draw on a variety of data sources in the evaluation. The final set of outcomes relates to access to care, including a comprehensive synthesis of the evidence on changes in access to care, special studies on the availability of a usual source of care and access to dental care in SCHIP, and analysis of SCHIP performance measures. Measurement of the effects of SCHIP on quality of care and health outcomes was beyond the scope of this study, and, indeed, few studies in the literature have examined these outcomes. It is likely that increasing evidence on these two outcomes will be available in the future.

### **B. OVERVIEW OF EVALUATION DATA SOURCES**

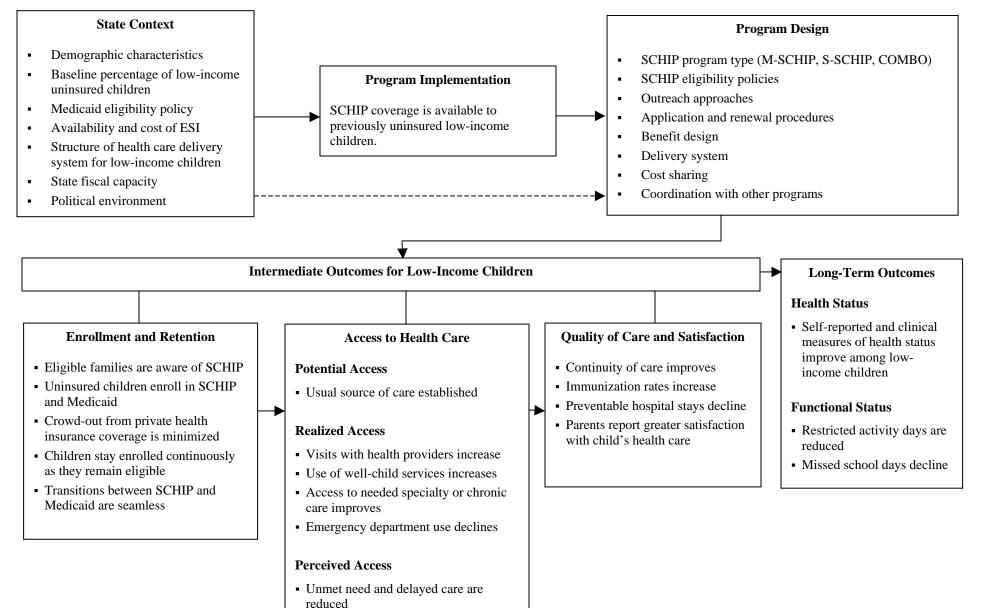
This evaluation integrated findings from eight data sources, as shown in Table I.1. Here, we provide a brief overview of the data sources.

#### 1. State Evaluations

Title XXI mandated that each state submit an initial state evaluation by March 31, 2000. The legislation was explicit about the content of the evaluation and the report to Congress that would be produced from the synthesis of state evaluations. To increase the comparability of evaluations across the states, MPR worked with CMS, the states, and the National Academy for State Health Policy to develop a framework that states could use to compile and report the required information. The state evaluations provided extensive information on program design, eligibility criteria, benefits, service delivery systems, anti-substitution provisions, outreach

#### FIGURE I.1

### CONCEPTUAL FRAMEWORK FOR EVALUATING THE STATE CHILDREN'S HEALTH INSURANCE PROGRAM (SCHIP)



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## TABLE I.1

## OUTCOME MEASURES AND DATA SOURCES IN THE CMS NATIONAL EVALUATION OF SCHIP

| Outcome Measures   | State<br>Evaluations | State<br>Annual<br>Reports   | External<br>Studies | Case<br>Studies<br>in Eight<br>States | SCHIP<br>Enrollment<br>Data System | Medicaid<br>Statistical<br>Information<br>System | Current<br>Population<br>Survey | SCHIP<br>Performance<br>Measures |
|--|----------------------|------------------------------|---------------------|---------------------------------------|------------------------------------|--|---------------------------------|----------------------------------|
| Program Design and Implementation<br>Description of SCHIP program features<br>Lessons from the field   | √<br>√               | $\checkmark$                 |                     | ✓<br>✓                                |                                    |  |                                 |                                  |
| <ul> <li>Enrollment and Retention</li> <li>Evolution and effectiveness of SCHIP outreach activities</li> <li>Trends in SCHIP enrollment</li> <li>Rates of SCHIP retention</li> <li>Extent of substitution of SCHIP for private coverage (crowd out)</li> <li>Effect of SCHIP on the number and rate of uninsured children</li> </ul> | ~                    | √                            | ✓<br>✓              | $\checkmark$                          | ~                                  | ~  | ✓<br>✓                          |                                  |
| Access to Care<br>Changes in access to care in SCHIP<br>Availability of a usual source of care in SCHIP<br>Access to dental care in SCHIP<br>Monitoring of program performance   |                      | $\checkmark$<br>$\checkmark$ | √<br>√<br>√         | √<br>√                                |                                    |  |                                 | $\checkmark$                     |

strategies, progress in reducing the number or rate of uninsured children, and recommendations for improving Title XXI. Data from the state evaluations were used primarily in CMS's report to Congress (Rosenbach et al. 2003).

## 2. State Annual Reports

Title XXI also required states to submit annual reports documenting their progress toward meeting their state-specific performance objectives. CMS adapted the state evaluation framework to create an annual report template that states could use to report on their progress beginning in federal fiscal year (FFY) 2000. Although most of the information was provided in a narrative format, the annual reports provided a wealth of information on the evolution of SCHIP programs and state monitoring of their performance. As part of the CMS national evaluation of SCHIP, we abstracted selected data elements for studies on the evolution of state outreach activities, the level of access to dental care in SCHIP, and availability of a usual source of care in SCHIP. In addition, the state annual reports provided evidence for the literature synthesis on the magnitude of substitution of SCHIP for other coverage. The state annual reports for FFY 2002 through 2005 are available online at [http://www.cms.hhs.gov/NationalSCHIPPolicy/06\_SCHIPAnnualReports.asp#TopOfPage].

## 3. External Studies

The CMS national evaluation of SCHIP involved three comprehensive literature syntheses related to retention, substitution (also referred to as "crowd out"), and access to care in SCHIP. Each synthesis involved establishing criteria for study selection, and then conducting a thorough search of the published and unpublished literature to identify appropriate studies. The selected studies, in essence, formed the data source for each synthesis. Where possible, findings were arrayed across many studies to build an "evidence base" that was stronger than each individual study alone.

## 4. SCHIP Statistical Enrollment Data System

CMS requires states to report aggregate data on SCHIP enrollment through the internet. States must submit unduplicated counts of the number ever enrolled in the quarter and the number ever enrolled in the year, as well as the actual number enrolled on the last day of each quarter. CMS collects enrollment counts by SCHIP program type (M-SCHIP and S-SCHIP), age group, income group, and type of service delivery system. CMS uses SEDS data to track aggregate SCHIP enrollment trends, although missing or inconsistent data limit its reliability for detailed analyses. CMS's enrollment reports based on SEDS (from FFY 1999 to the present) are available at [http://www.cms.hhs.gov/NationalSCHIPPolicy/SCHIPER/list.asp#TopOfPage]. For more detail on SEDS data quality, see Ellwood et al. (2003).

#### 5. Medicaid Statistical Information System

State Medicaid programs must submit detailed, automated eligibility and claims data in the MSIS. They were required to do this beginning January 1, 1999 (although two-thirds of the states were participating in the MSIS before that date). States must include all Medicaid enrollees in

their MSIS data—including children enrolled in M-SCHIP programs—and they have the option of including children enrolled in their S-SCHIP programs. However, states are only supposed to submit enrollee information, not detailed claims data, on children enrolled in S-SCHIP programs. A SCHIP eligibility code was added to the monthly field of the "eligibles" file in the MSIS so that SCHIP children can be readily identified. We used MSIS data for two studies. The first assessed disenrollment and reenrollment patterns in six states (Kentucky, New Jersey, North Carolina, Ohio, South Carolina, and Utah) using MSIS data from October 1998 through September 2001. The second study identified areas with above-average enrollment outcomes in three states (Georgia, Kentucky, and Ohio) by tracking enrollment trends at the state and local levels (based on MSIS data from October 1998 through September 2002). For additional detail on the data and methods for these two studies, see Merrill and Rosenbach (2006); and Irvin et al. (2006).

## 6. Current Population Survey

MPR used the CPS to analyze and compare trends in insurance coverage among children, their parents, and other nonelderly adults. These trends highlight the progress toward reducing the number and rate of uninsured, low-income children. The CPS provides annual estimates of insurance coverage. Despite several well-known limitations, it is the most widely cited source of estimates of the number and rate of uninsured people and permits analysis of trends in public and private coverage. To analyze the effects of SCHIP, MPR created a consistent time series from 1997 through 2003 (representing survey years 1998 through 2004).<sup>1</sup> Because of changes in the survey design during this study period, we made several adjustments to account for modifications to the weighting methodology, use of population controls based on the 2000 Census, and inclusion of a verification question in later years. Appendix B provides additional documentation on the use of CPS for this analysis.

## 7. Case Studies in Eight States

The case study included two components: (1) one-week site visits to eight selected states (Georgia, Kansas, Kentucky, Maryland, Ohio, Pennsylvania, South Carolina, and Utah) and two communities in each state; and (2) focus groups with parents of recent enrollees (enrolled for less than one year) and established enrollees (enrolled for more than one year) in the same two communities. The site visit provided an assessment of program implementation and outcomes through the eyes of stakeholders at the state and local levels. Families contributed their voice through the focus groups. Data from the case studies were used in a study of access to dental care in SCHIP, as well as in a study of the role of SCHIP in providing a usual source of care. In addition, the case study results were used to identify "lessons from the field" related to selected enrollment and retention initiatives. Appendix C provides additional documentation on the design and implementation of the case study component.

<sup>&</sup>lt;sup>1</sup> An earlier report examined pre-SCHIP uninsured trends in depth, based on a time series from 1993 to 1998 (representing survey years 1994 to 1999) (Rosenbach et al. 2000).

## 8. SCHIP Performance Measures

Beginning in FFY 2003, CMS required states to report on four core child health measures: (1) well-child visits—age 15 months; (2) well-child visits—ages 3 to 6; (3) use of appropriate medications for asthma; and (4) visits to primary care providers. To the extent that data were available, these measures were included in states' annual SCHIP reports. MPR was responsible for abstracting and analyzing these measures from the state reports for FFY 2003 through 2005, providing technical assistance to states to improve the completeness and quality of the data, and working with CMS to improve the reporting template. See Day et al. (2005) and Rosenbach et al. (2006) for additional detail on our methods.

## C. ORGANIZATION OF THIS REPORT

This report contains five additional chapters. Chapter II synthesizes the findings related to SCHIP outreach, enrollment, and retention. Chapter III analyzes state progress toward reducing the number and rate of low-income children. Chapter IV presents evidence on the effects of SCHIP on access to care for low-income children. Chapter V describes "lessons from the field," based on case studies in eight states. For each state, we explore one theme that tells a story about a major feature, event, or transition that shaped the state's program. Finally, Chapter VI discusses the implications of this evaluation. Appendix A contains the executive summary of the background report that was used to prepare CMS's report to Congress. Appendix B describes the methods for the analysis of the trends in insurance coverage, and Appendix C describes the methods for the case study.

## II. OUTREACH, ENROLLMENT, AND RETENTION IN SCHIP

Before the State Children's Health Insurance Program (SCHIP) was enacted in 1997, states did little to actively market Medicaid or other public coverage to children or adults (Perry et al. 2000). As a result, there was growing public recognition that many children were eligible for Medicaid but not enrolled (Selden et al. 1998). SCHIP brought a new emphasis on reaching out to enroll uninsured children in public insurance coverage. States recognized that, to encourage participation in SCHIP, they needed to build awareness of the program and streamline the application and enrollment process. Under Title XXI, states had to develop outreach plans and document their progress with outreach and enrollment activities. States responded by implementing creative strategies to promote SCHIP enrollment. These same strategies also led to increased Medicaid enrollment.

Outreach activities have focused on building name recognition for the program, educating families about eligibility criteria and program features, and motivating families to enroll. In addition, states have reduced barriers to enrollment by simplifying the application process through such activities as providing one-on-one application assistance, developing new mail-in or web-based application forms, and reducing documentation requirements. As SCHIP enrollment increased, attention focused on the level of turnover among enrollees. States recognized the importance of simplifying the renewal process, much as they had streamlined the application and enrollment process. As part of their enrollment process, states also implemented strategies to prevent substitution of SCHIP for private coverage (referred to as "crowd out"). These strategies were designed to prevent families from dropping private coverage to enroll in SCHIP.

The CMS national evaluation of SCHIP included six studies on outreach, enrollment, and retention in SCHIP. The first study documented early enrollment trends based on an analysis of the SCHIP Enrollment Data System (SEDS) (Ellwood et al. 2003). Next, we examined the evolution of outreach in SCHIP to demonstrate how states shifted from broad-based efforts that raised awareness about the program to more focused efforts aimed at reaching hard-to-reach populations (Williams and Rosenbach 2005). To assess the effectiveness of state and local SCHIP outreach efforts, we conducted an empirical analysis of the link between outreach and enrollment in three states (Kentucky, Ohio, and Georgia), applying epidemiological methods to predict "enrollment outbreaks" that might be related to outreach (Irvin et al. 2006). Two studies focused on the extent and patterns of retention in SCHIP, including a synthesis of the literature (Shulman et al. 2006) and an empirical analysis in six states (Kentucky, New Jersey, North Carolina, Ohio, South Carolina, and Utah) based on data from the Medicaid Statistical Information System (MSIS) (Merrill and Rosenbach 2006). Finally, our evaluation of SCHIP enrollment policies and practices included an assessment of states' efforts to prevent substitution of SCHIP for private coverage (Limpa-Amara et al. 2006).

Section A of this chapter describes states' progress enrolling children in SCHIP, focusing on the early implementation period, when enrollment was growing rapidly. Section B presents states' evidence of the effect of SCHIP on Medicaid enrollment. Sections C and D describe states' outreach efforts using both qualitative and quantitative methods. Section E focuses on retention in SCHIP, including an analysis of retention rates and the effect of SCHIP policies on facilitating retention. Section F synthesizes evidence of the effectiveness of state efforts to prevent substitution of SCHIP for private coverage. Finally, Section G summarizes the overall conclusions for this chapter.

## A. TRENDS IN SCHIP ENROLLMENT

During the early years of SCHIP, considerable attention focused on state progress in enrolling children in SCHIP. SCHIP was implemented in October 1997, just a few months after Title XXI was enacted, so states had little time to design and obtain approval for their programs. Not surprisingly, enrollment during the first year (federal fiscal year [FFY] 1998) was modest; of the 749,000 children enrolled in SCHIP, about one-third transferred to SCHIP from preexisting child health programs that were "grandfathered" under Title XXI.<sup>1</sup> States gained significant momentum in FFY 1999, and SCHIP enrollment increased rapidly through FFY 2001; thereafter, the rate of increase declined sharply (Table II.1; Figure II.1). Enrollment plateaued at 6 million children ever enrolled in FFY 2003, with modest increases in subsequent years. By FFY 2006, SCHIP enrollment reached 6.6 million children. Rates of growth are expected to be high in the beginning of a program, but to gradually level out. SCHIP's enrollment growth rates have followed this expected pattern (Ellwood et al. 2003).

Over time, an increasing share of the total SCHIP enrollment was in separate child health (S-SCHIP) programs, while the share in Medicaid expansion SCHIP (M-SCHIP) programs declined (Table II.1). Three main factors accounted for this shift: (1) the gradual phase-in of coverage for adolescents with family income below 100 percent of the federal poverty level (FPL) through traditional Medicaid,<sup>2</sup> (2) the later implementation and "ramp-up" of S-SCHIP programs, and (3) broader expansion of income eligibility thresholds through S-SCHIP program components.

The growth in S-SCHIP enrollment is, in part, a function of the evolution of SCHIP program type and eligibility thresholds (Table II.2).<sup>3</sup> The number of states with S-SCHIP programs (either alone or in combination with an M-SCHIP program) increased over time. Whereas 31

<sup>&</sup>lt;sup>1</sup> Florida, New York, and Pennsylvania had preexisting comprehensive child health programs that were permitted to convert to SCHIP by Title XXI. Estimated enrollment in these pre-SCHIP programs totaled 275,000, with 50,000, 170,000, and 55,000 children, respectively, by state.

<sup>&</sup>lt;sup>2</sup> The Omnibus Budget Reconciliation Act of 1990 included a mandate that Medicaid coverage be phased in for children with family incomes less than 100 percent of the FPL who were born after September 30, 1983. Six states (Alabama, Arkansas, Connecticut, Mississippi, Tennessee, and Texas) implemented M-SCHIP programs designed to expedite the coverage of these children. These M-SCHIP programs phased out in October 2002 as the mandatory poverty-related expansions for traditional Medicaid were fully phased in. Other states also expedited coverage of these children as part of their M-SCHIP programs, but they used M-SCHIP income thresholds higher than 100 percent of the FPL.

<sup>&</sup>lt;sup>3</sup> Table II.2 displays the status for three points in time: September 1999, September 2001, and July 2005. The first point in time reflects the program type and eligibility threshold during an early period when nearly all states had implemented SCHIP. The second reflects a period of active expansion of SCHIP programs. The third reflects a later period in which expansions had stabilized.

## TABLE II.1

| Federal Number of<br>Fiscal Children Ever |                   | Increase Over<br>Previous Year |         | Enrollment by<br>Program Type |           | Percent of<br>Total Enrollment |         |
|---|-------------------|--------------------------------|---------|-------------------------------|-----------|--------------------------------|---------|
| Year                                      | Enrolled in SCHIP | Number                         | Percent | M-SCHIP                       | S-SCHIP   | M-SCHIP                        | S-SCHIP |
| 1998                                      | 749,054           |                                |         | 330,413                       | 418,641   | 44.1                           | 55.9    |
| 1999                                      | 2,039,033         | 1,289,979                      | 172.2   | 764,272                       | 1,274,761 | 37.5                           | 62.5    |
| 2000                                      | 3,391,911         | 1,352,878                      | 66.3    | 1,056,942                     | 2,334,969 | 31.2                           | 68.8    |
| 2001                                      | 4,617,485         | 1,225,574                      | 36.1    | 1,204,746                     | 3,412,739 | 26.1                           | 73.9    |
| 2002                                      | 5,409,348         | 791,863                        | 17.1    | 1,390,748                     | 4,018,600 | 25.7                           | 74.3    |
| 2003                                      | 5,984,772         | 575,424                        | 10.6    | 1,609,896                     | 4,374,876 | 26.9                           | 73.1    |
| 2004                                      | 6,102,784         | 118,012                        | 2.0     | 1,723,182                     | 4,379,602 | 28.2                           | 71.8    |
| 2005                                      | 6,188,913         | 86,129                         | 1.4     | 1,775,968                     | 4,412,945 | 28.7                           | 71.3    |
| 2006                                      | 6,624,152         | 435,239                        | 7.0     | 1,932,667                     | 4,691,485 | 29.2                           | 70.8    |

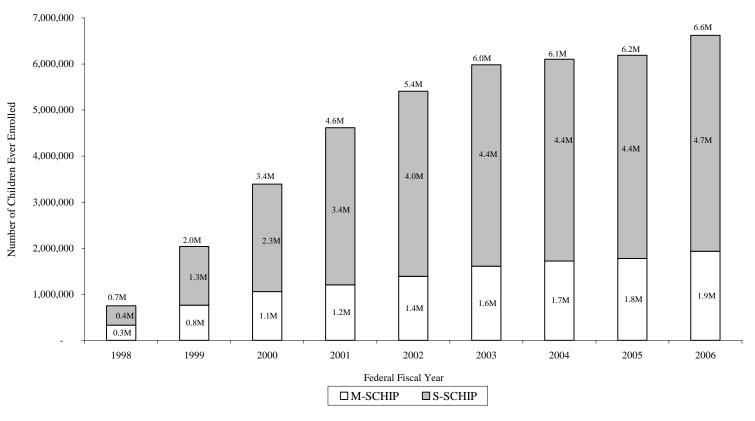
#### TRENDS IN SCHIP ENROLLMENT: NUMBER OF CHILDREN EVER ENROLLED, FFY 1998-2006

Source: FFY 1998-2001: Ellwood et al. (2003); FFY 2002-2006: CMS Annual Enrollment Reports.

Estimates of SCHIP ever enrolled have been adjusted for missing or inconsistent data. See Appendix B Note: of Ellwood et al. (2003) for methods.

S-SCHIP = Separate child health program. M-SCHIP = Medicaid expansion SCHIP program.

#### FIGURE II.1



#### TRENDS IN SCHIP ENROLLMENT BY PROGRAM TYPE, FFY 1998-2006

Source: FFY 1998-2001: Ellwood et al. (2003); FFY 2002-2006: CMS Annual Enrollment Reports.

Note: Estimates of SCHIP ever enrolled have been adjusted for missing or inconsistent data. See Appendix B of Ellwood et al. (2003) for methods.

M-SCHIP = Medicaid expansion SCHIP program.

S-SCHIP = Separate child health program.

#### TABLE II.2

|                          | As of September 30, 1999 |                                      | As of Septem          | iber 30, 2001                        | As of July 1, 2005    |                                      |
|--------------------------|--------------------------|--------------------------------------|-----------------------|--------------------------------------|-----------------------|--------------------------------------|
| State                    | SCHIP<br>Program Type    | SCHIP Upper<br>Income<br>Eligibility | SCHIP<br>Program Type | SCHIP Upper<br>Income<br>Eligibility | SCHIP<br>Program Type | SCHIP Upper<br>Income<br>Eligibility |
| Alabama <sup>a</sup>     | COMBO                    | 200                                  | COMBO                 | 200                                  | S-SCHIP               | 200                                  |
| Alaska <sup>b</sup>      | M-SCHIP                  | 200                                  | M-SCHIP               | 200                                  | M-SCHIP               | 175                                  |
| Arizona                  | S-SCHIP                  | 200                                  | S-SCHIP               | 200                                  | S-SCHIP               | 200                                  |
| Arkansas <sup>c</sup>    | M-SCHIP                  | 100                                  | M-SCHIP               | 100                                  | M-SCHIP               | 200                                  |
| California               | COMBO                    | 250                                  | COMBO                 | 250                                  | COMBO                 | 300                                  |
| Colorado                 | S-SCHIP                  | 185                                  | S-SCHIP               | 185                                  | S-SCHIP               | 185                                  |
| Connecticut              | COMBO                    | 300                                  | COMBO                 | 300                                  | S-SCHIP               | 300                                  |
| Delaware                 | S-SCHIP                  | 200                                  | S-SCHIP               | 200                                  | COMBO                 | 200                                  |
| District of Columbia     | M-SCHIP                  | 200                                  | M-SCHIP               | 200                                  | M-SCHIP               | 200                                  |
| Florida                  | COMBO                    | 200                                  | COMBO                 | 200                                  | COMBO                 | 200                                  |
| Georgia                  | S-SCHIP                  | 200                                  | S-SCHIP               | 235                                  | S-SCHIP               | 235                                  |
| Hawaii                   | NI                       | NI                                   | M-SCHIP               | 200                                  | M-SCHIP               | 200                                  |
| Idaho                    | M-SCHIP                  | 150                                  | M-SCHIP               | 150                                  | COMBO                 | 185                                  |
| Illinois                 | COMBO                    | 133                                  | COMBO                 | 185                                  | COMBO                 | 200                                  |
| Indiana                  | COMBO                    | 150                                  | COMBO                 | 200                                  | COMBO                 | 200                                  |
| Iowa                     | COMBO                    | 185                                  | COMBO                 | 200                                  | COMBO                 | 200                                  |
| Kansas                   | S-SCHIP                  | 200                                  | S-SCHIP               | 200                                  | S-SCHIP               | 200                                  |
| Kentucky                 | COMBO                    | 200                                  | COMBO                 | 200                                  | COMBO                 | 200                                  |
| Louisiana                | M-SCHIP                  | 150                                  | M-SCHIP               | 150                                  | M-SCHIP               | 200                                  |
| Maine                    | COMBO                    | 185                                  | COMBO                 | 200                                  | COMBO                 | 200                                  |
| Maryland                 | M-SCHIP                  | 200                                  | COMBO                 | 300                                  | COMBO                 | 300                                  |
| Massachusetts            | COMBO                    | 200                                  | COMBO                 | 200                                  | COMBO                 | 200                                  |
| Michigan                 | COMBO                    | 200                                  | COMBO                 | 200                                  | COMBO                 | 200                                  |
| Minnesota                | M-SCHIP                  | 280                                  | M-SCHIP               | 280                                  | M-SCHIP               | 280                                  |
| Mississippi <sup>a</sup> | COMBO                    | 100                                  | COMBO                 | 200                                  | S-SCHIP               | 200                                  |
| Missouri                 | M-SCHIP                  | 300                                  | M-SCHIP               | 300                                  | M-SCHIP               | 300                                  |
| Montana                  | S-SCHIP                  | 150                                  | S-SCHIP               | 150                                  | S-SCHIP               | 150                                  |
| Nebraska                 | M-SCHIP                  | 185                                  | M-SCHIP               | 185                                  | M-SCHIP               | 185                                  |
| Nevada                   | S-SCHIP                  | 200                                  | S-SCHIP               | 200                                  | S-SCHIP               | 200                                  |
| New Hampshire            | COMBO                    | 300                                  | COMBO                 | 300                                  | COMBO                 | 300                                  |
| New Jersey               | COMBO                    | 350                                  | COMBO                 | 350                                  | COMBO                 | 350                                  |
| New Mexico               | M-SCHIP                  | 235                                  | M-SCHIP               | 235                                  | M-SCHIP               | 235                                  |
| New York <sup>a</sup>    | COMBO                    | 192                                  | COMBO                 | 200                                  | S-SCHIP               | 208                                  |
| North Carolina           | S-SCHIP                  | 200                                  | S-SCHIP               | 200                                  | S-SCHIP               | 200                                  |
| North Dakota             | COMBO                    | 100                                  | COMBO                 | 140                                  | COMBO                 | 140                                  |
| Ohio                     | M-SCHIP                  | 150                                  | M-SCHIP               | 200                                  | M-SCHIP               | 200                                  |
| Oklahoma                 | M-SCHIP                  | 185                                  | M-SCHIP               | 185                                  | M-SCHIP               | 185                                  |
| Oregon                   | S-SCHIP                  | 170                                  | S-SCHIP               | 170                                  | S-SCHIP               | 185                                  |
| Pennsylvania             | S-SCHIP                  | 200                                  | S-SCHIP               | 200                                  | S-SCHIP               | 200                                  |
| Rhode Island             | M-SCHIP                  | 250                                  | M-SCHIP               | 250                                  | M-SCHIP               | 250                                  |

## CHANGES IN SCHIP PROGRAM TYPE AND INCOME THRESHOLDS FOR CHILDREN UNDER AGE 19, BY STATE

#### TABLE II.2 (continued)

|                           | As of Septemb         | per 30, 1999                         | As of Septem          | nber 30, 2001                        | As of July 1, 2005    |                                      |
|---------------------------|-----------------------|--------------------------------------|-----------------------|--------------------------------------|-----------------------|--------------------------------------|
| State                     | SCHIP<br>Program Type | SCHIP Upper<br>Income<br>Eligibility | SCHIP<br>Program Type | SCHIP Upper<br>Income<br>Eligibility | SCHIP<br>Program Type | SCHIP Upper<br>Income<br>Eligibility |
| South Carolina            | M-SCHIP               | 150                                  | M-SCHIP               | 150                                  | M-SCHIP               | 150                                  |
| South Dakota              | COMBO                 | 140                                  | COMBO                 | 200                                  | COMBO                 | 200                                  |
| Tennessee <sup>a, d</sup> | M-SCHIP               | 100                                  | M-SCHIP               | 100                                  | None                  | n.a.                                 |
| Texas <sup>a</sup>        | COMBO                 | 100                                  | COMBO                 | 200                                  | S-SCHIP               | 200                                  |
| Utah                      | S-SCHIP               | 200                                  | S-SCHIP               | 200                                  | S-SCHIP               | 200                                  |
| Vermont                   | S-SCHIP               | 300                                  | S-SCHIP               | 300                                  | S-SCHIP               | 300                                  |
| Virginia                  | S-SCHIP               | 185                                  | S-SCHIP               | 200                                  | COMBO                 | 200                                  |
| Washington                | NI                    | NI                                   | S-SCHIP               | 250                                  | S-SCHIP               | 250                                  |
| West Virginia             | COMBO                 | 150                                  | S-SCHIP               | 200                                  | S-SCHIP               | 200                                  |
| Wisconsin <sup>e</sup>    | M-SCHIP               | 185                                  | M-SCHIP               | 185                                  | M-SCHIP               | 185                                  |
| Wyoming                   | NI                    | NI                                   | S-SCHIP               | 133                                  | S-SCHIP               | 200                                  |

Sources: Data for 9/30/1999 are from CMS (2001); data for 9/30/2001 are from CMS (2002); data for 7/1/2005 are from Kaye et al. (2006).

Notes: The SCHIP upper income thresholds build on the Medicaid income thresholds. Because the Medicaid income thresholds vary by state and age group, the magnitude of the SCHIP expansion will vary by state and age group. See Rosenbach et al. (2003) for details. This table excludes eligibility thresholds for unborn children, parents, or other adults.

NI = not implemented

n.a. = not applicable

<sup>a</sup>In these states, the M-SCHIP component was designed to accelerate Medicaid coverage of children born before September 30, 1983. As of October 1, 2002, the M-SCHIP component no longer existed. In five states, the programs became S-SCHIP only and in one state (Tennessee), the SCHIP program no longer covered any children.

<sup>b</sup>The M-SCHIP income threshold was reduced to 175 percent of the FPL in September 2003 and the FPL guideline was frozen, effectively lowering the income threshold each year.

<sup>c</sup>The Medicaid program covers children ages 0 to 18 up to 200 percent of the FPL. The M-SCHIP program covers uninsured children up to 200 percent of the FPL who are not eligible for Medicaid.

<sup>d</sup>Under its section 1115 Medicaid demonstration, Tennessee had no upper eligibility level. (TennCare recipients with income above the poverty level were charged a monthly premium based on a sliding scale. Premium subsidies ended when income reached 400 percent of the FPL.) M-SCHIP covered children born before October 1, 1983 and who enrolled in TennCare on or after April 1, 1997. Tennessee's M-SCHIP program no longer covered any children when the Medicaid phase-in of children born before September 30, 1983 was complete.

<sup>e</sup>Once a child is enrolled, eligibility is maintained as long as income stays below 200 percent of the FPL.

states had implemented an S-SCHIP program as of September 30, 1999, 36 states had an S-SCHIP program by July 2005. In addition, the number of states with eligibility thresholds at or above 200 percent of the FPL increased from 25 as of September 1999 to 36 as of September 2001 and 39 as of July 2005. This is reflected in an increase in the average income threshold from 193 percent of the FPL in September 1999 to 215 percent of the FPL in July 2005.<sup>4</sup>

## **B. EFFECT OF SCHIP ON MEDICAID ENROLLMENT**

SCHIP enrollment levels understate the full effect of SCHIP outreach and enrollment simplifications on expanding public coverage for low-income children. During the early years of SCHIP, there was considerable evidence that many uninsured children were eligible for Medicaid but not enrolled, perhaps because of lack of awareness or stigma about participating in a public program (Selden et al. 1999). To make coordination between SCHIP and traditional Medicaid programs easier, Title XXI mandated that states with S-SCHIP programs implement a "screen and enroll" procedure to ensure that SCHIP applicants who were potentially eligible for Medicaid if found eligible. This provision promoted seamlessness between S-SCHIP and Medicaid programs to maximize public coverage, regardless of which program initially received the application.

There is substantial anecdotal evidence, but limited empirical evidence, that the implementation of SCHIP increased Medicaid enrollment. Whereas children's Medicaid enrollment was declining in the mid-1990's, Medicaid enrollment began to increase steadily after SCHIP was implemented. In FFY 1999, for example, about 19.4 million children under age 21 were ever enrolled in traditional Medicaid (excluding those who were eligible due to disability or foster care). By FFY 2003, traditional Medicaid enrollment had climbed to about 24.8 million.<sup>5</sup> This is known as a "spillover effect" or "woodwork effect," whereby families who apply for SCHIP coverage are found to be eligible for Medicaid and are then enrolled. States found that SCHIP outreach and enrollment simplifications raised awareness and destigmatized the application process (for example, through mail-in applications and elimination of face-to-face interviews). In addition, use of joint applications for Medicaid and SCHIP made coordination of eligibility between the two programs easier. Recent evidence suggests that Medicaid participation has improved because of recent program changes (Selden et al. 2004).

Although the magnitude of the spillover effect is unknown at the national level, many states have documented the effect of SCHIP on traditional Medicaid enrollment. States used two main methods: (1) tracking applications to Medicaid that came through the SCHIP outreach and

<sup>&</sup>lt;sup>4</sup> Three states (Hawaii, Washington, and Wyoming) had not yet implemented their SCHIP programs as of September 1999. One state (Tennessee) no longer covered any children under its SCHIP program as of October 1, 2002.

<sup>&</sup>lt;sup>5</sup> Data on Medicaid enrollment trends for FY 1999 to FY 2003 were obtained from the CMS website (http://www.cms.hhs.gov/MedicaidDataSourcesGenInfo/02\_MSISData.asp). Enrollment in the Medicaid expansion component of SCHIP was subtracted, using estimates of the number ever enrolled from CMS annual SCHIP enrollment reports (see Table II.1).

enrollment process, and (2) estimating longitudinal Medicaid enrollment trends and attributing enrollment that was higher than expected to SCHIP. States varied in how they measured Medicaid spillover effects, but they generally concur that SCHIP reversed the trend of flat or declining Medicaid enrollment levels for children (Table II.3). Unfortunately, states were unable to attribute the share of Medicaid enrollment growth due to SCHIP versus other factors (such as the economic slowdown in the early 2000s).

## C. THE EVOLUTION OF OUTREACH IN SCHIP

Much of the enrollment growth in SCHIP and Medicaid during the early years of SCHIP is attributable to the multifaceted outreach efforts at the national, state, and local levels. Widespread recognition of the importance of outreach in SCHIP led to several initiatives within the federal government (such as Insure Kids Now), at foundations (such as the Robert Wood Johnson Foundation's [RWJF's] Covering Kids program), and at the state and local levels. Title XXI required states to conduct outreach to increase families' awareness of the availability of public insurance coverage and to help them enroll their children in the appropriate program. States have shown creativity and adaptability in developing strategies to promote SCHIP. As the program has matured and the fiscal environment has tightened, states have learned what is successful and have tailored their approaches accordingly.

As part of the CMS national evaluation of SCHIP, we reviewed the evolution of state outreach activities under SCHIP using qualitative information from all 50 states and the District of Columbia. We documented how states modified their target populations, messages, methods, emphases, and partnerships as they gained experience. This analysis is based primarily on information from the state SCHIP annual reports for FFY 2000 through 2003. We supplemented information from the annual reports with perspectives gained from focus groups in eight states (Georgia, Kansas, Kentucky, Maryland, Ohio, Pennsylvania, South Carolina, and Utah).

We examined five dimensions of outreach: (1) target population, (2) message, (3) method, (4) organizational strategies, and (5) emphasis. States modified their strategies across all five dimensions to move from broad-based outreach campaigns to more targeted strategies.

- 1. *Target Population.* States initially focused on the general population to create broad awareness of SCHIP, but they gradually began to target those who were eligible but not enrolled (such as minorities, immigrants, working families, and rural residents). States used feedback from many sources—such as local outreach workers, SCHIP helpline data, and survey data—to identify vulnerable populations and geographic areas for more targeted outreach.
- 2. *Message.* States initially used broad messages to build "brand recognition" and raise awareness about the availability of low- or no-cost health insurance for children. Messages were often crafted to look like commercial insurance products to distance SCHIP from the stigma associated with other public programs. Based on market research, states fine-tuned their messages to more explicitly highlight the eligibility criteria and value of SCHIP coverage.

## TABLE II.3

## STATE ESTIMATES OF THE EFFECT OF SCHIP ON CHANGES IN MEDICAID ENROLLMENT (MEDICAID SPILLOVER)

| State       | Medicaid Spillover<br>Estimate | Time Period                                 | State Comments  |
|-------------|--------------------------------|---|---|
| Alabama     | 120,000 enrollees              | Cumulative from<br>FFY 1998 through<br>2004 | SCHIP and Medicaid use the same application form. Children who apply to SCHIP and are potentially eligible for Medicaid are referred for a regular Medicaid eligibility determination. The state Medicaid agency estimated that 120,000 children have enrolled in Medicaid because of SCHIP marketing and outreach activities from 1998 to 2004. They attribute the sharp enrollment increase in the Medicaid poverty category to SCHIP, because enrollment had been flat before SCHIP was implemented. |
| Alaska      | 17,000 enrollees               | As of September 30, 2004                    | Alaska had approximately 11,000 children in average monthly enrollment in its Medicaid SCHIP expansion and approximately 17,000 children in average monthly enrollment in nonexpansion Medicaid because of outreach activities and enrollment simplification as a result of the Denali KidCare Program.   |
| Connecticut | 5,591 enrollees                | FFY 2004                                    | Net enrollment growth for Medicaid children for FFY 2004 was 5,591 (an increase of 2.1 percent). Most of this growth is deemed to be due to outreach activities, and only a small proportion would have been enrolled otherwise. The information is based on comments from clients at the time of application and anecdotal reports.  |
| Florida     | 54,114 enrollees               | FFY 2004                                    | The Florida KidCare application may be used to apply for children's Medicaid and SCHIP. Of the 89,401 KidCare applications received, 48,859 applications (representing 85,416 children) were referred for a Medicaid eligibility determination. Of these, 54,114 children were approved for Medicaid benefits. Thirty-six percent of children applying with a Florida KidCare application were determined to be eligible for Medicaid.  |
| Georgia     | 17,000 enrollees               | FFY 2004                                    | Approximately 17,000 children have been enrolled in Medicaid as a result of SCHIP outreach activities and enrollment simplification in FFY 2004. The estimate is based on the count of PeachCare for Kids applications that were referred to Medicaid with the 51 percent approval rate applied.  |
| Illinois    | 59,740 applications            | FFY 2004                                    | The Central KidCare Unit processes nearly all Medicaid and SCHIP joint mail-in applications. The Central KidCare Unit approved 61,631 mail-in applications during FFY 2004. Of these, 59,740 (or 97 percent) were approved for traditional Medicaid. The rest were approved for SCHIP.  |
| Indiana     | 193,287 enrollees              | July 1997 to June<br>2004 (Cumulative)      | Traditional Medicaid enrollment of children under age 19 increased from 245,839 on July 1, 1997, to 439,126 as of June 30, 2004. This is an increase of 79 percent since the implementation of the first phase of Indiana's SCHIP program.  |

| State         | Medicaid Spillover<br>Estimate   | Time Period                             | State Comments  |
|---------------|--|---|---|
| Iowa          | 2,850 applications   | FFY 2004                                | During FFY 2004, the hawk-i program received 17,305 new applications. Of these, 28 percent (or 5,000 new applications) were referred to Medicaid. Of the new applications referred, approximately 57 percent (or 2,850 applications) were approved for enrollment in Medicaid or Medicaid expansion programs.   |
| Kansas        | 70,988 enrollees   | Cumulative<br>through September<br>2003 | Through September 2003, the estimate of Medicaid-enrolled children as a result of SCHIP activities was 70,988, based on the use of the revised "short form" SCHIP application.  |
| Kentucky      | 89,451 enrollees   | July 1999 to<br>September 2004          | Before KCHIP began its joint mail-in process and aggressive outreach in July 1999, 239,380 children enrolled in the Medicaid program. By the end of September 2004, 328,831 children enrolled in Medicaid. This is an increase of 89,451 (37 percent) enrolled children. This enrollment increase is the result of economic factors, as well as KCHIP outreach and recertification simplification.  |
| Louisiana     | 26,606 enrollees   | FFY 2004                                | The net increase in traditional Medicaid children (26,606) is more than two times the net increase in SCHIP children (12,804) during FFY 2004. This can be attributed to a number of factors, including (1) the high poverty rate in Louisiana, (2) 100 percent of children identified as eligible for traditional Medicaid through the LaCHIP "Screen and Enroll" process, and (3) Medicaid income methodology that disregards income from such sources as a stepparent, grandparent, and other kin caregiver.     |
| Maryland      | 5,500 enrollees  | June 2003 versus<br>June 2004           | Maryland's traditional Medicaid-poverty enrollment was 188,000 in June 2004, an increase of approximately 17 percent over enrollment in June 2003 (161,000). A large portion of this increase was attributable to the mass eligibility review in August and September 2003, which shifted 16,000 children from SCHIP to Medicaid coverage groups. The state estimates that approximately half of the remaining growth (5,500 children) was attributable to SCHIP outreach activities and enrollment simplification. |
| Michigan      | 65,000 applications<br>referred from SCHIP<br>to Medicaid                  | FFY 2004                                | During FFY 2004, more than 65,000 children have been referred to Medicaid as a result of SCHIP enrollment simplification.   |
| New Hampshire | 33,146 mail-in<br>applications<br>processed for the<br>Medicaid population | October 2000 to<br>September 2004       | The Healthy Kids Corporation has processed 33,146 mail-in applications for the Healthy Kids Gold (Medicaid) population since October 2000.  |

| State          | Medicaid Spillover<br>Estimate | Time Period  | State Comments   |
|----------------|--------------------------------|--|--|
| New Jersey     | 98,165 enrollees               | June 2002  | As of June 2002, there were 98,165 more traditional Medicaid-poverty enrollees than would have been eligible had there been no SCHIP outreach and simplification. This estimate was based on a longitudinal analysis of traditional Medicaid-poverty child enrollment before and after the start of SCHIP. Before SCHIP started in New Jersey, Medicaid enrollment was growing at a steady rate of approximately 8,000 per year. The annual growth increased abruptly to approximately 30,000 per year during the period of rapid SCHIP enrollment growth through June 2002. The steadiness of the pre- and post-SCHIP growth rates, and the fact that no other contributing factors could be identified to account for the abrupt change, led the state to conclude that the SCHIP publicity and outreach accounted for the increase. This estimate was based on a semi-annual series taken from quarterly production reports of NJ Medicaid eligibles, extending back before 1995. |
| New York       | 289,000 enrollees              | FFY 2004   | Approximately 289,000 children were enrolled in Medicaid during FFY 2004 due to the outreach activities of the health plans and community-based organizations in the CHPlus program. This number represents the direct, quantifiable number associated with the facilitated enrollment effort of the CHPlus program. This information was extracted from New York's facilitated enroller data system.  |
| North Carolina | 191,951 enrollees              | Cumulative from<br>October 1, 1998,<br>through July 1,<br>2004 | Since the implementation of NC Health Choice (October 1, 1998) through July 1, 2004, a total of 191,951 children were enrolled in Medicaid as a result of the joint application for children's health insurance. Originally, the state had estimated that 68,000 "woodwork children" would be added to the Medicaid rolls.   |
| Pennsylvania   | 56,632 enrollees               | FFY 2004   | Since September 2003, the number of children enrolled in Medicaid has increased from 806,974 to 863,606 (an increase of 56,632). The state assumes that a portion of the increase is caused by SCHIP outreach activities, enrollment simplification, and the change in income calculations.  |
| Utah           | 916 applications               | June 2004 open<br>enrollment                                   | During the CHIP open enrollment period in June 2004, approximately 916 applications were denied for CHIP because they were approved for Medicaid.  |

| State    | Medicaid Spillover<br>Estimate | Time Period                       | State Comments   |
|----------|--------------------------------|-----------------------------------|--|
| Virginia | 67,113 enrollees               | September 2002 to<br>October 2004 | As of October 1, 2004, 92,797 more children were enrolled in Virginia's Medicaid and SCHIP programs than were covered on September 1, 2002, when the SCHIP and Medicaid programs were simplified and outreach efforts were enhanced. Of those additional children, 67,113 (72 percent) were enrolled in Virginia Medicaid. While it is impossible to determine specifically how much of this growth is a direct result of simplification and outreach, a comparison of average monthly growth before and after program changes provides strong evidence of the impact of such activities. In the 13 months before program changes (August 2001 to September 2002), the average monthly enrollment growth in Virginia's SCHIP and Medicaid programs was 1,526 children per month. In the 13 months after implementation of the changes (September 2002 to October 2003), the average monthly enrollment growth was 4,053 children per month. This represents a 166 percent increase. This surge in enrollment was mirrored in the Medicaid program alone, where average monthly enrollment grow from 1,107 to 2,918 (164 percent increase). |
| Wyoming  | 16,630 enrollees               | Cumulative since 1999             | Since the SCHIP program was implemented in 1999, it is estimated that an additional 16,630 children have been enrolled in Medicaid.  |

Note: Medicaid spillover refers to the effect of SCHIP outreach activities and enrollment simplification on changes in Medicaid enrollment.

- 3. *Method.* Consistent with their early efforts to build broad awareness of SCHIP, most states initially mounted mass media campaigns and partnered with a wide range of state and local organizations. Over time, most states focused on strengthening partnerships with the community-based organizations that had access to "hard-to-reach" populations. They also shifted resources from mass media campaigns to local in-person outreach, including the use of mini-grants and application assistance fees to stimulate outreach and enrollment at the local level. Promoting SCHIP at the local level allowed communities to tailor activities to the targeted populations.
- 4. *Organizational Strategies.* As states increasingly turned to community-based agencies to assist with one-on-one SCHIP outreach efforts, they formalized their outreach infrastructure to reflect the increasing importance of local efforts. States typically used three organizational strategies to establish efforts at the local level: (1) partnerships, (2) contracting, and (3) outstationing. These strategies were often used in combination with each other to strengthen their local presence. While state/local partnerships have been sustained in recent years, many states have cut back on their contracting and outstationing efforts due to budget constraints.
- 5. *Emphasis.* In the early years, states concentrated on finding and enrolling eligible but uninsured children, including those participating in other public programs (such as the National School Lunch Program). More recently, with increasing budget constraints, states have reduced their outreach efforts and shifted their emphasis to "inreach"—education efforts to keep eligible SCHIP enrollees and reduce churning.<sup>6</sup> States' "inreach" messages often communicated two complementary themes: (1) promoting the value of health insurance to encourage timely renewal for families who might lose coverage, and (2) educating families about the appropriate use of health insurance to access care.

The evolution of state outreach efforts reflects an orientation toward "continuous quality improvement," as states have refined their approaches based on assessments of what is working well and what could be improved. States are continuing to learn from their outreach efforts, especially in the face of adverse economic conditions and tighter state budgets. These important lessons from the early years of SCHIP are even more valuable today, as many states will need to prioritize their outreach efforts because of budget constraints.

# D. MEASURING THE EFFECTIVENESS OF OUTREACH AND ENROLLMENT INITIATIVES

Although states have continually refined their outreach efforts, little is known about the effectiveness of specific SCHIP outreach activities, and, particularly, the link between state and local outreach activities and enrollment trends. Building evidence-based information on the impact of outreach strategies has been hampered by the lack of systematic data that quantifies the

<sup>&</sup>lt;sup>6</sup> "Churning" occurs when an eligible child disenrolls from SCHIP and then reenrolls within a short period of time (usually three to six months).

type, intensity, and timing of the outreach activities that have occurred. As a result, the most significant challenge in this area of research has been distinguishing the impact of a specific outreach initiative from the impact of other factors (such as demographic or programmatic changes) that influenced enrollment at the same time.

The CMS national evaluation of SCHIP piloted an approach for detecting and explaining, to the extent possible, any notable gains or "outbreaks" of enrollment at the state and local levels. The study approach is based on epidemiological methods for detecting outbreaks of disease. The quantitative analyses use SCHIP enrollment data from three states—Kentucky, Ohio, and Georgia—from FFY1998 through 2002. State-level analyses assess quarter-by-quarter changes in the number of new SCHIP enrollees. Local-level analyses identify outbreaks that may occur at particular times and in particular locations in a state, controlling for economic conditions and a variety of sociodemographic factors. After the outbreaks have been identified, the design uses qualitative information from stakeholder interviews and sensitivity analyses to determine whether the outbreaks can be linked credibly to specific outreach activities or changes in enrollment policies.

The state-level analyses highlighted statewide outreach activities and procedural changes associated with enrollment increases in Kentucky, Ohio, and Georgia (Figure II.2). These included annual statewide Back-to-School campaigns in Kentucky; expanded eligibility criteria, simplified application requirements, and a statewide Back-to-School campaign in Ohio; and media exposure and introduction of a website (including online application) in Georgia. In Kentucky, for example, the number of new SCHIP and traditional Medicaid-poverty enrollees increased by 39 percent during the FFY 2000 Back-to-School campaign and by 55 percent during the FFY 2001 campaign. These surges were driven by increased enrollment in the traditional Medicaid-poverty program, suggesting that the state's efforts to promote SCHIP had important spillover effects for the traditional Medicaid program. Ohio's one surge in new enrollment came during the summer and fall of 2000, when enrollment more than doubled. At this time, the state expanded eligibility from 150 to 200 percent of the FPL, simplified documentation requirements, and began a statewide Back-to-School campaign. In Georgia, media coverage was associated with an enrollment increase of 19 percent in spring 2000 and 54 percent in spring 2001 (when the website was introduced). The variation in results across the three states reflects the different approaches used to expand coverage at the state level.

The local-level analyses allowed the identification of specific counties with SCHIP enrollment spikes. In many instances, we identified comprehensive, multifaceted, and well-focused strategies (data not shown).<sup>7</sup> These strategies were implemented by a variety of organizations, including health care providers, county social service offices, community-based service organizations, and faith-based groups. For example:

• In two separate regions of Georgia, competing hospitals served clusters of counties that had surges of enrollment during periods when the hospitals had initiatives to help

<sup>&</sup>lt;sup>7</sup> See Irvin et al. (2006) for additional information on the methods used to determine high-performing counties and the strategies associated with enrollment outbreaks in those counties.

families of uninsured children obtain coverage. In addition to conducting advertising campaigns approved by the state, the hospitals used their facilities to help families enroll.

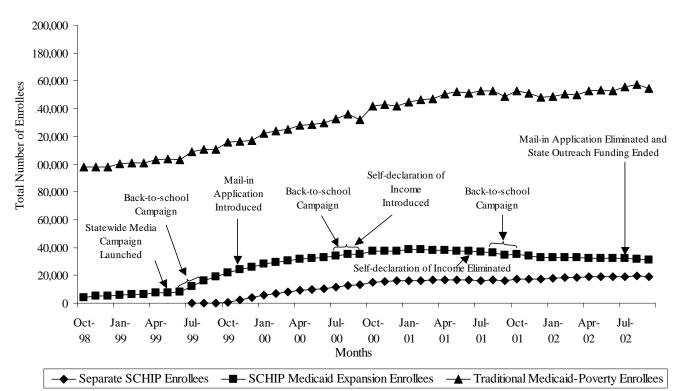
- A southwest Georgia county benefited from a community-wide, faith-based initiative spearheaded by a group of African American ministers and their congregations. The ministers conducted outreach from their pulpits, and congregants followed up with families in the community. SCHIP officials met with the ministers to help them develop their outreach initiatives.
- In Richland County, Ohio, the average quarterly number of new enrollees was far above the level predicted. The county's success appears to be linked to a multifaceted campaign mounted by the county social service agency. The campaign combined advertising, presentations to local groups, a small mini-grant program, a local family coordinating council, and grassroots initiatives developed by other community groups (including providers). Although it was not possible to distinguish the independent contribution of specific activities, the analysis showed that the cumulative effect of these efforts resulted in above-average enrollment.

In addition, the local-level results point to the important role of funding mechanisms designed to leverage community resources. These mechanisms included the Covering Kids program developed and administered by RWJF; the Community Access to Child Health (CATCH) grants administered by the American Academy of Pediatrics; and state mini-grant programs to distribute state and federal outreach funds to communities.

- The medical community in Owensboro, Kentucky, blended CATCH funds with other grant funding to develop a successful community-wide commitment to maximizing enrollment in public insurance. It conducted a community health needs assessment, including 100 focus groups. Its efforts resulted in several spikes in enrollment, according to the analysis of enrollment outbreaks.
- Georgia used a mini-grant program to distribute a small proportion of its outreach funds. The state commissioned an independent evaluation of the program and found that applications increased by 16 percent compared to a selected group of counties that did not receive mini-grants. One mini-grant recipient was a local Goodwill agency that conducted outreach in seven counties (six of which were identified as high-performing in this analysis). The agency first targeted outreach to its clients through job fairs, Goodwill stores, and job placement services, and then targeted its employees through paycheck stuffers.

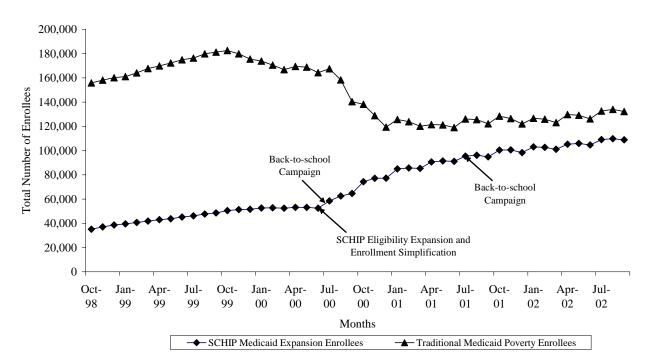
This analytic approach was used to detect enrollment outbreaks retrospectively—namely, to detect what worked well in the past. This approach could also be used as a "real-time" surveillance tool to help states and communities proactively design better outreach strategies, assess the effect of administrative and procedural changes, allocate resources for evidence-based strategies, and identify priorities for outreach funds. To replicate this system, states would require access to current enrollment information for SCHIP and traditional Medicaid. As each

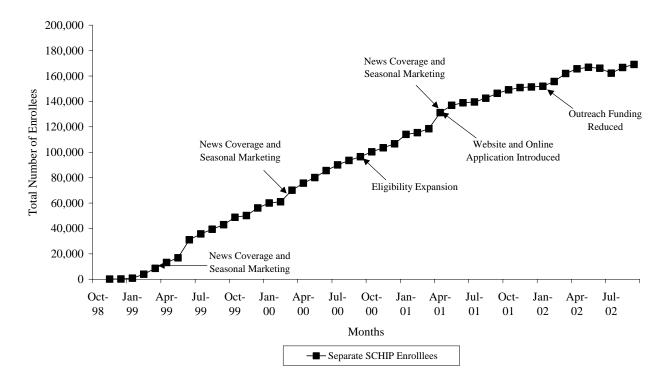
#### FIGURE II.2



#### TOTAL NUMBER OF CHILDREN ENROLLED BY MONTH AND BY ELIGIBILITY GROUP: KENTUCKY

#### TOTAL NUMBER OF CHILDREN ENROLLED BY MONTH AND BY ELIGIBILITY GROUP: OHIO





#### TOTAL NUMBER OF CHILDREN ENROLLED BY MONTH: GEORGIA

Source: Mathematica Policy Research, Inc. analysis of Kentucky and Ohio MSIS eligibility files and PeachCare for Kids enrollment files from October 1998 through September 2002.

quarter of data becomes available, the trend analyses can be updated to identify increases in new enrollment. The regression analysis would reveal whether any increase identified at the local level was above average and, if so, it would trigger an in-depth assessment of the outreach and enrollment activities that occurred at the time of the enrollment outbreak. By blending quantitative and qualitative information, states and communities can improve their outreach strategies, better target funds, and, ultimately, cover more children.

## E. RETENTION OF ELIGIBLE CHILDREN IN SCHIP

States' early successes with outreach and enrollment led to a growing awareness that enrollment gains were being eroded by the disenrollment of many children from SCHIP when they were still eligible. Lack of awareness about the renewal process and the administrative complexity of redetermination procedures led states to simplify their approach, much in the same way they had simplified the application process. In addition, many states with S-SCHIP programs strengthened their methods for coordinating with Medicaid during the renewal process to ensure that eligible children would transfer seamlessly to Medicaid (including both traditional Medicaid and M-SCHIP in combination states). This section reviews the evidence on retention and disenrollment in SCHIP, based on two studies conducted by the CMS national evaluation of SCHIP (Shulman et al. 2006; Merrill and Rosenbach 2006).

## 1. Estimates of SCHIP Retention Rates

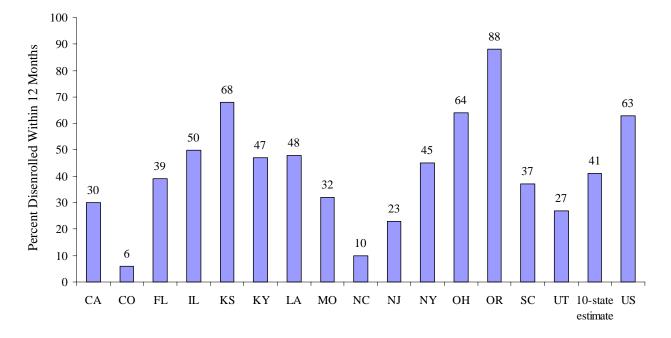
Retention measures the proportion of children who stay *enrolled* in SCHIP among children who remain *eligible* for coverage. Currently, there are no direct estimates of the rate of retention among children who remain eligible for SCHIP. Instead, researchers have primarily measured rates of program disenrollment. However, disenrollment gives a broader measure of turnover than retention because disenrollment rates typically include both eligible and ineligible children who leave the program. Thus, disenrollment rates alone do not allow program officials and policymakers to assess the extent to which SCHIP retains children who are eligible. To estimate retention based on data from existing studies, we combined state-level rates of disenrollment with estimates of the percentage of children who were still eligible when they left SCHIP. We identified 10 studies that provided estimates of disenrollment rates at the state level. Together, these nine studies present data on disenrollment rates in 19 states over six years. In addition, we identified two studies that estimated the percentage of children who were still eligible when they left SCHIP.<sup>8</sup>

Estimates of disenrollment for any reason within 12 months of enrollment varied widely, ranging from a low of 6 percent in Colorado (Moreno and Black 2005) to a high of 88 percent in Oregon (Dick et al. 2002) (Figure II.3).<sup>9</sup> The national estimate of 63 percent calculated by Sommers (2005) is at the high end of this range, whereas the 10-state rate of 41 percent

<sup>&</sup>lt;sup>8</sup> Further information about these studies is available in Shulman et al. (2006).

<sup>&</sup>lt;sup>9</sup> Oregon had a 6-month renewal period at this time, in contrast to the 12-month renewal period of most states.

#### FIGURE II.3



#### ESTIMATED RATES OF SCHIP DISENROLLMENT WITHIN 12 MONTHS FROM INITIAL ENROLLMENT, BY STATE

- Sources: Estimates for FL, KS, and OR are from Dick et al. (2002); estimates for KY, NJ, NC, OH, SC, and UT are from Merrill and Rosenbach (2006); estimates for CA, CO, IL, LA, MO, NY, TX, and 10-state estimate are from Moreno and Black (2005); US estimate is from Sommers (2005).
- Note: The methods used in these studies may vary along several dimensions, including the type of disenrollment measured, the population included in the estimate, and the time frame relative to initial enrollment. See Shulman et al. (2006) for details.

calculated by Moreno and Black (2005) sits at its midpoint.<sup>10</sup> The 12-month disenrollment rate understates the level of disenrollment at renewal in states that offer 2- to 3-month grace periods for reenrollment. In Colorado, the disenrollment rate increased from 6 percent at 12 months to 37 percent with a grace period (Moreno and Black 2005), while in Utah, the disenrollment rate increased from 27 to 54 percent (Merrill and Rosenbach 2006).

State estimates of disenrollment from SCHIP do not accurately reflect the magnitude of retention, as they cannot identify children who disenrolled but remained eligible for the program. We used findings from prior research to adjust disenrollment rates by accounting for the percentage of children who disenrolled while still eligible. Based on surveys of SCHIP disenrollees, Riley et al. (2002) and Kenney et al. (2005) estimated that 25 to 31 percent of all disenrollees were still eligible for SCHIP coverage. Applying these estimates to the disenrollment rates shown in Figure II.3 yields an estimate that 2 to 27 percent of children may have disenrolled while still eligible. If we define retention as the proportion of children who remain enrolled among children eligible for continued participation, these adjusted estimates suggest that retention in SCHIP ranged between 31 and 98 percent. When calculated for all 12month rates of disenrollment for any reason, most estimates exceed 75 percent (data not shown). These results are in line with retention rates in the individual insurance market and Medicaid. The National Blue Cross/Blue Shield Association estimates retention in the individual market at 70 to 75 percent (Managed Risk Medical Insurance Board 2006), and Medicaid retention rates (pre-welfare reform) have been estimated at between 71 and 79 percent (Ellwood and Lewis 1999; Ku and Cohen Ross 2002).

## 2. Effect of State Policies on Retention

State administrative policies are one source of variation in state retention rates. Some policies have been designed explicitly to promote program retention, while others serve a different program purpose but may affect retention incidentally. There are no experimental studies that compare the effect of natural variation in the use of policies across states or the relative influence of policies on the timing of, and reasons for, disenrollment. However, nine studies, reflecting the experience of 22 states, provide insight into the types of policies that appear to be most influential in facilitating or impeding retention.

These studies suggest that simplified renewal procedures, especially passive renewal, appear to increase retention (Table II.4). In addition, as expected, policies that allow children to continue SCHIP coverage for a specified period despite fluctuations in family income are associated with higher retention until the renewal period. These policies include continuous coverage and extending grace periods for premium payments until the end of the continuous coverage period. Although continuous coverage policies may prolong enrollment spans, it is not

<sup>&</sup>lt;sup>10</sup> The different methodology used in these two studies may account for some of the difference in their estimates. The Sommers estimate relied on a national sample of self-reported data, whereas the Moreno and Black estimate was based on administrative records for a sample of recent SCHIP enrollees in 10 states with sizable low-income uninsured populations.

## TABLE II.4

## EMPIRICAL EVIDENCE OF RELATIONSHIP BETWEEN STATE SCHIP POLICIES AND RETENTION

| Policy  | Association<br>with<br>Retention | Empirical Evidence from Retention Literature  |
|---|----------------------------------|---|
|   | 1                                | Renewal Procedures  |
| Streamlined renewal processes                                       | Ť                                | • Decrease in disenrollment with implementation of streamlined renewal<br>procedures; increase in disenrollment after streamlined procedures<br>were revoked<br>KY (Merrill and Rosenbach 2006)   |
| Passive renewal   | <b>†</b>                         | <ul> <li>Stable per month disenrollment rates associated with passive renewal versus sharp increase at renewal month in states without passive renewal FL vs. KS, TX, NY (Dick et al. 2002) FL vs. NH (Shenkman 2002)</li> <li>Increase in disenrollment after transition from passive to active renewal FL (Herndon and Shenkman 2005)</li> </ul>  |
| Continuous coverage<br>with corresponding<br>longer renewal periods | Ť                                | <ul> <li>Delay in disenrollment associated with continuous coverage<br/>KS, OR, NY (Dick et al. 2002)<br/>CA, CO, LA, NC (Moreno and Black 2005)<sup>a</sup><br/>NC, UT (Merrill and Rosenbach 2006)<sup>b</sup></li> <li>Lower disenrollment associated with longer continuous coverage<br/>period<br/>OR vs. FL, KS, NY (Dick et al. 2002)</li> </ul>   |
| Off-cycle renewal at sites of care                                  | ~                                | No empirical evidence   |
|   |                                  | Premium Payment Policies  |
| Premiums  | +                                | <ul> <li>Premium payers more likely to disenroll than non-premium payers NJ (Merrill and Rosenbach 2006, Miller et al. 2004) NY (Dick et al. 2002)</li> <li>Shorter length of enrollment following introduction of premiums KY (Marton 2006)</li> <li>Lower disenrollment following a premium reduction FL (Shenkman et al. 2002)</li> <li>Higher re-enrollment in programs requiring premiums than programs with no cost-sharing FL, KS vs. OR (Dick et al. 2002)</li> <li>NJ S-SCHIP plan B vs. S-SCHIP plans C and D (Merrill and Rosenbach 2006)</li> </ul> |
| Grace periods for premiums  | +                                | • Longer grace period associated with lower disenrollment among premium payers<br>KS vs. NY (Dick et al. 2002)  |
| Lock-out provisions   | ÷                                | <ul> <li>Slight increase in disenrollment after implementation of lock-out provision<br/>FL (Shenkman et al. 2002)</li> <li>Decline in level of re-enrollment after implementation of lock-out provision<br/>FL (Shenkman et al. 2002)</li> </ul>   |

## TABLE II.4 (continued)

| Policy  | Association<br>with<br>Retention | Empirical Evidence from Retention Literature |
|---|----------------------------------|--|
|   |                                  | Communication Strategies                     |
| Renewal reminder notices  | ~                                | No empirical evidence                        |
| Follow-up with<br>families by<br>caseworkers or<br>outreach workers | ~                                | No empirical evidence                        |
| Inreach or education  | ~                                | No empirical evidence                        |
|   | •                                | Coordination Efforts                         |
| Ex parte review   | ~                                | No empirical evidence                        |
| Express lane renewal  | ~                                | No empirical evidence                        |

<sup>a</sup> In contrast, two other states with continuous coverage, Illinois and Texas, evidenced a relatively steady rate of

disenrollment. <sup>b</sup> In contrast, one other state with continuous coverage, South Carolina, evidenced a relatively steady rate of disenrollment.

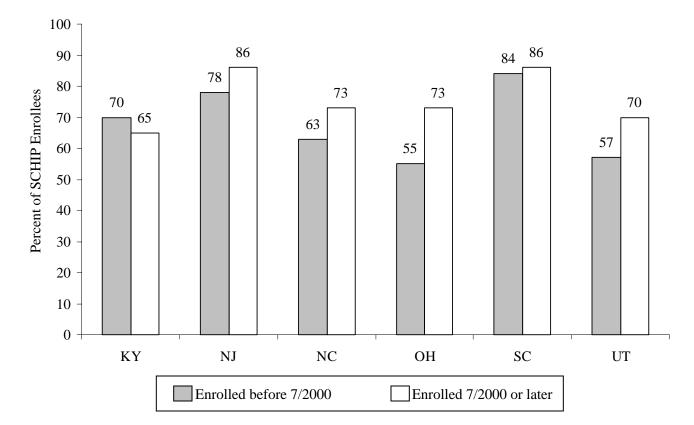
clear that their effect is maintained after the period of continuous coverage ends. The net effect, however, is that more children are covered for longer periods because of these policies (Merrill and Rosenbach 2006; Moreno and Black 2005).

Policies that seem to reduce retention include premium payments and lockout provisions. Children subject to premiums experienced more disenrollment and discontinuity of SCHIP coverage than children not subject to premiums, based on evidence from six studies (see Shulman et al. 2006). It is not well established in the literature why disenrollment was higher among children subject to premiums than children not subject to premiums. One explanation is that premium payers may disenroll because their families cannot afford to pay the SCHIP premiums or because they encounter administrative hurdles related to paying the premiums. Alternatively, because premium levels are often tied to higher family income, premium payers may be more likely to obtain private insurance coverage or experience increases in income that make them ineligible for coverage under SCHIP (Dick et al. 2002). Lockout provisions—which prevent children who did not pay their premiums from reenrolling in SCHIP for a specified period—further increased discontinuities of coverage, as shown by Florida's experience; implementation of a lockout provision was associated with a slight increase in disenrollment and a substantial decrease in reenrollment among disenrolled children (Shenkman et al. 2002). Among states that charge premiums, there is evidence that longer grace periods may prolong enrollment among children subject to premiums. More children remained enrolled in Kansas than in New York, even though both states charge premiums for SCHIP. However, Kansas keeps children enrolled for the entire 12-month continuous coverage period, regardless of premium nonpayment, but requires families to pay all outstanding premiums to renew coverage (Dick et al. 2002). In contrast, New York had a 30-day grace period, as is typical of the 17 states known to have grace periods (Dick et al. 2004; Steinberg 2004). By extending the grace period for nonpayment of premiums until the end of continuous coverage, Kansas has expanded its continuous coverage policy to smooth over fluctuations in family income and help families afford the premium.

## 3. Effect of Renewal Simplifications on Renewal Rates

Evidence of the effects of renewal simplifications is provided by our six-state study of enrollment and reenrollment patterns (Merrill and Rosenbach 2006). Figure II.4 shows retention rates during the study period (April 1999 through September 2001), a time when many states implemented simplifications to the renewal process and other policy changes. Children who enrolled in SCHIP during the second half of the study period (July 2000 or later) were more likely to remain enrolled in public insurance (including traditional Medicaid) through the annual renewal in four out of six study states. For example, in Ohio, 74 percent of children who enrolled in July 2000 or later were estimated to remain in public insurance after the annual renewal, compared to 55 percent of children who enrolled before July 2000. This rate increased from 57 to 70 percent in Utah and from 78 to 86 percent in New Jersey. These states implemented changes to eligibility and/or renewal processes during the study period (Table II.5). North Carolina also experienced increases in the percent of children remaining enrolled; the state imposed an enrollment freeze in January 2001, so it is possible that fewer children left the program voluntarily because families knew that they would not be able to reenroll. South Carolina had no change in the percent remaining enrolled, consistent with its lack of changes in renewal procedures. Kentucky is the only state in which the later cohort of children had lower

#### FIGURE II.4



## PERCENTAGE OF NEW SCHIP ENROLLEES REMAINING ENROLLED IN PUBLIC INSURANCE THROUGH THE ANNUAL RENEWAL, BY ENROLLEE COHORT, APRIL 1999 - SEPTEMBER 2001

Source: Medicaid Statistical Information System, FFY 1999-2001. See Merrill and Rosenbach (2006).

Note: Includes enrollment spells of new SCHIP enrollees (no enrollment in SCHIP in prior six months) beginning in April 1999 through September 2001. Survival probabilities calculated with Kaplan-Meier nonparametric estimation. Enrollment is measured at 14 months after enrollment to capture lags or grace periods in the annual renewal process.

#### TABLE II.5

## KEY CHANGES IN ELIGIBILITY AND RENEWAL POLICIES DURING THE STUDY PERIOD, FFY 1999-2001

| State                       | Date  | Description   |
|-----------------------------|-------|---|
| Kentucky                    | 7/99  | Expanded income eligibility limit from 133 to 150 percent of FPL for M-SCHIP  |
|                             | 11/99 | Implemented S-SCHIP program with eligibility limit to 200 percent of FPL  |
|                             | 7/00  | Dropped requirement for face-to-face interviews<br>Dropped requirement for written verification of income   |
|                             | 6/01  | Resumed requirement for written verification of income with mail-in application<br>Resumed face-to-face interview and verification of income at time of renewal   |
| New Jersey                  | 7/00  | Switched from 6- to 12-month renewal period for Medicaid and M-SCHIP Families only required to verify "volatile" income   |
|                             | 1/01  | Implemented a section 1115 demonstration for parents; coverage up to 200 percent of FPL   |
|                             | 9/01  | Implemented a "retention unit," which conducts outreach to families prior to their renewal period and follows up with non-respondents   |
| North Carolina <sup>a</sup> | 1/01  | Implemented an enrollment freeze  |
| Ohio                        | 11/99 | Implemented ex-parte review policy (caseworkers review potential Medicaid eligibility for other categories prior to terminating coverage)   |
|                             | 7/00  | Expanded income eligibility limit from 150 to 200 percent of FPL<br>Switched from a 6- to 12-month renewal period for Medicaid and M-SCHIP<br>Allowed self-declaration of non-income items for Medicaid and M-SCHIP<br>Emphasized not terminating M-SCHIP/Medicaid during an eligibility<br>redetermination for another program |
| South Carolina              |       | None <sup>b</sup>   |
| Utah <sup>c</sup>           | 7/00  | Redesigned S-SCHIP renewal forms, adding pre-printed forms; families would no<br>longer have to "reapply" for coverage but would have to contact their eligibility<br>staff to verify the information is still correct and provide additional documentation<br>in the case of a job change                                      |

Source: Original analysis of state SCHIP annual reports from FFY 1999 through 2003 by Mathematica Policy Research, Inc.

<sup>a</sup>In 10/01, North Carolina lifted its enrollment freeze.

<sup>b</sup>In 10/01, South Carolina implemented a "passive" renewal process for M-SCHIP and poverty-related Medicaid in which families are mailed a pre-printed form and asked to return it only if there have been changes in income, household composition, or child care payments. Families not returning the form or contacting the office within 30 days of the mailing date are presumed to have had no change in circumstances and continued eligibility is authorized automatically by the system.

<sup>c</sup>Utah implemented an enrollment freeze in 12/01, following the period of this study.

retention than the earlier cohort (70 versus 65 percent).<sup>11</sup> The state implemented enrollment and renewal simplifications—removing face-to-face interviews and written verification of income— in July 2000; however, it reversed these changes in June 2001 by once again requiring written verification of income and a face-to-face interview at renewal.

# F. STATE EFFORTS TO PREVENT SUBSTITUTION OF SCHIP FOR PRIVATE COVERAGE

Prevention of substitution—also known as "crowd out"—is an important public policy issue. To the extent that families voluntarily drop private coverage and shift to public coverage, public spending increases, but the uninsurance rate does not decline. When Title XXI was enacted, policymakers sought to safeguard against the substitution of SCHIP for other insurance coverage. Eligibility for SCHIP was restricted to children who were uninsured, not eligible for traditional Medicaid, under age 19, and below 200 percent of the FPL.<sup>12</sup> Although Title XXI allowed states flexibility in their program design, the final rules specified certain minimum requirements with regard to substitution (*Federal Register* 2001). All states must monitor the extent of substitution in their SCHIP programs. Additional requirements apply to states that offer SCHIP coverage to children whose families earn more than 200 percent of the FPL. These states must (1) study the extent to which substitution occurs, (2) identify specific strategies to limit substitution if monitoring shows unacceptable levels of substitution, and (3) specify a trigger point at which substitution prevention mechanisms would be instituted. States providing coverage for children in families with income more than 250 percent of the FPL must have a substitution prevention strategy.

In response to concerns about the potential for substitution, states have implemented mechanisms to deter families from substituting SCHIP for private coverage. Nearly all states have implemented one or more anti-substitution strategies (Limpa-Amara et al. 2007). To prevent families from voluntarily dropping coverage when they apply for SCHIP, 33 states have implemented waiting periods without health insurance, ranging from 1 to 12 months. Of the 39 states with separate child health programs, all but 9 had a waiting period. In most states with combination programs, the waiting period applies only to the separate component and not to the Medicaid expansion SCHIP component. Notably, 10 of the 13 states with income thresholds above 200 percent of the FPL have waiting periods.<sup>13</sup>

<sup>&</sup>lt;sup>11</sup> On closer inspection, the percent of children remaining enrolled in Kentucky appeared to increase with the state policy changes that occurred in July 2000, then began to decrease when these state policy changes were reversed in June 2001 (data not shown).

<sup>&</sup>lt;sup>12</sup> States were required to maintain the Medicaid income thresholds they had in place on June 1, 1997. In other words, SCHIP eligibility picks up where Medicaid eligibility leaves off. For states that had expanded Medicaid eligibility above 150 percent of the FPL, the SCHIP income eligibility threshold was 50 percentage points above the Medicaid threshold. In addition, several states effectively raised the income threshold above 200 percent of the FPL by using income disregards.

<sup>&</sup>lt;sup>13</sup> The three exceptions are Minnesota, New York, and Rhode Island. Minnesota uses SCHIP funding to cover a small number of infants, as well as uninsured pregnant women who are not eligible for Medicaid. New York and Rhode Island have vigorous monitoring of previous private insurance coverage and use premiums as a deterrent for substitution.

As part of the CMS national evaluation of SCHIP, we synthesized and assessed evidence from published and unpublished literature and state SCHIP annual reports on the magnitude of substitution in SCHIP (Limpa-Amara et al. 2007). We reviewed three types of evidence: population-based studies, enrollee-based studies, and applicant-based studies (Table II.6).

Substitution of coverage is difficult to measure. Existing data sources and methods yield wide-ranging estimates, with the magnitude varying depending on how substitution is defined and measured. The CMS national evaluation of SCHIP looked at evidence from three kinds of studies: population-based, enrollee-based, and applicant-based.<sup>14</sup>

- Population-based studies estimate that substitution of SCHIP for private coverage ranges from 10 to 56 percent. Most of these studies estimate substitution among children who were simulated to be eligible for SCHIP and who were below 300 percent of the FPL. These studies do not estimate substitution that would occur in higher income groups. These studies define substitution as *any* decline in private coverage within the population of low-income children who were eligible for SCHIP (regardless of the reason for loss of coverage). These studies use multivariate methods to estimate substitution by simulating eligibility for SCHIP and comparing changes in private coverage among SCHIP-eligible children versus a comparison group. The methodology is designed to capture foregone opportunities for taking up private coverage after a child is enrolled in SCHIP. However, study limitations, as acknowledged by the authors, include the instability of estimates based on the choice of comparison group or multivariate methodology, error in self-reported insurance status, issues with imputing SCHIP eligibility, and limited ability to account for state-specific anti-substitution rules.
- Enrollee-based studies estimate that substitution is between 0.7 and 15 percent, based on descriptive analysis of pre-SCHIP insurance status and access to employer coverage among children who recently enrolled in SCHIP. These studies take into account reasons for loss of coverage, and do not count involuntary loss of coverage as substitution (such as job loss, divorce, death of a parent). However, these studies may underestimate the extent of substitution because they generally do not account for the likelihood that families had access to private coverage before or after their children enrolled in SCHIP (also known as "foregone opportunities").

<sup>&</sup>lt;sup>14</sup> These three kinds of studies are designed to serve different purposes. Enrollee- and applicant-based studies support states' real-time monitoring of the effectiveness of their anti-substitution efforts, while population-based studies provide retrospective national estimates of the targeting of SCHIP to uninsured low-income children, without regard for variations in states' substitution policies.

## TABLE II.6

|                               | Population-based Studies   | Enrollee-based Studies   | Applicant-based Studies  |
|-------------------------------|--|--|--|
| Population<br>Focus           | National   | Multistate or state-specific   | State-specific   |
| Purpose                       | Estimate the overall rate of substitution to inform future public policy   | Evaluate extent to which<br>enrollees dropped private<br>coverage before applying, and<br>reasons for dropping coverage  | Provide ongoing feedback to<br>states to ensure appropriate<br>anti-substitution provisions are<br>in place  |
| Definition of<br>Substitution | Among all children who were<br>eligible for SCHIP, the percent<br>who dropped private coverage or<br>declined to take up available<br>private coverage, with no<br>exceptions for good cause | Among those recently enrolled in<br>SCHIP, the percent who dropped<br>private coverage and reasons for<br>dropping coverage; may also<br>estimate those who had access to<br>private coverage while enrolled in<br>SCHIP | Among those who applied for<br>SCHIP, the percent who were<br>denied coverage because they<br>dropped or intended to drop<br>private coverage, with various<br>exceptions for good cause |
| Data Source                   | Population-based surveys   | Recent enrollee surveys  | State administrative data  |
| Estimation<br>Method          | Multivariate analysis of the effects<br>of SCHIP eligibility on insurance<br>status, controlling for secular<br>trends, child and family<br>characteristics, and state program<br>features   | Descriptive analysis of self-<br>reported pre-SCHIP insurance<br>status and access to employer<br>coverage among parents and<br>children in family   | Descriptive analysis of<br>applicant characteristics from<br>administrative records  |
| Range of<br>Estimates         | 10 to 56 percent   | 0.7 to 15 percent  | Percent of applicants who had<br>other coverage at time of<br>application: ~0 to 17 percent  |
|                               |  |  | Percent of applicants who<br>dropped other coverage:<br>~0 to 15 percent   |

## COMPARISON OF METHODS FOR MEASURING SUBSTITUTION

Source: Limpa-Amara et al. (2007).

• Estimates from applicant-based studies are typically below 10 percent. These studies estimate substitution among those who applied for SCHIP based on state administrative data. These studies apply state-specific anti-substitution rules to their estimates of substitution (including waiting periods and reasons for dropping coverage). Like the enrollee-based studies, these studies focus on children's availability of private insurance coverage at the time of SCHIP application or enrollment, and do not account for foregone opportunities for taking up private coverage after a child is enrolled in SCHIP.

This study suggests that some amount of substitution is unavoidable, regardless of how substitution is defined and measured. The salient policy questions include "how much" and "what kind of" substitution is acceptable. On one hand, the population-based studies consider any reason for declines in private coverage as substitution, whereas the enrollee- and applicant-based studies take into account state-specific reasons for loss of private coverage (such as job loss, divorce, death of a parent, or in some cases, unaffordability of private coverage). Thus, conclusions about the extent of substitution in SCHIP will depend not only on how substitution is defined and measured, but also on perspectives on the circumstances under which substitution may be acceptable.

## G. CONCLUSION

National, state, and local initiatives to conduct outreach to eligible families were associated with rapid enrollment growth in the early years of SCHIP, followed by a tapering off in the later years. There also is anecdotal evidence that SCHIP outreach and application simplifications had a spillover effect on traditional Medicaid enrollment, reversing enrollment declines that occurred during welfare reform, following the delinking of eligibility for Medicaid and public assistance. Over time, states recognized that they needed to fine-tune their outreach approaches to reach those who were eligible but who remained uninsured by (1) targeting underserved populations, (2) modifying their outreach methods and messages, and (3) expanding their emphasis to include "inreach" to keep those already enrolled. Without empirical evidence about the effectiveness of specific outreach activities, state efforts were characterized by "learning by doing."

We developed an approach to assessing the link between outreach and enrollment, building on a public health surveillance model for disease outbreaks. Using quantitative methods, we identified enrollment outbreaks at the state and local levels and explored the potential causes using qualitative methods. At the state level, enrollment simplifications and statewide campaigns were frequently associated with large gains. At the local level, the underlying factors were diverse, reflecting the community context, resources, and needs. While this analysis identified promising outreach practices retrospectively, using this method as a "real-time surveillance system" could help states set priorities and allocate resources, especially given states' recent budget constraints. This approach may, in part, fill the gap resulting from the lack of systematic data on outreach activities, expenditures, and outcomes that limits the assessment of effectiveness.

Our evaluation also sought to fill a gap resulting from the lack of national- or state-level estimates of retention. Retention is defined as the proportion of children who stay enrolled

among children who remain eligible for SCHIP. To estimate retention, data are required on the eligibility status of children who are subject to renewal; however, the eligibility status is unknown for children who disenroll without an eligibility determination. Surveys of disenrollees have sought to examine reasons for disenrollment (voluntary versus involuntary) to estimate what proportion of disenrollees would have been eligible for continued participation in SCHIP. We combined this information with SCHIP disenrollment rates to estimate retention rates. Our results suggest that retention in SCHIP ranged between 31 and 98 percent but that most estimates exceeded 75 percent, similar to the experience in the individual insurance market and traditional Medicaid. Among the factors that were found to facilitate retention were continuous coverage policies, renewal simplifications, and passive renewal. Premiums and lockout provisions for nonpayment of premiums appear to have reduced retention among children subject to premiums, but the extension of grace periods for premium nonpayment prolonged enrollment spans.

Finally, we attempted to reconcile differences in the magnitude of substitution estimates generated by population-, enrollee-, and applicant-based studies. Variations in methods, data sources, and definitions of substitution contribute to the range from 1 to 56 percent. This study suggests that some amount of substitution is unavoidable and conclusions may depend not only on how substitution is defined and measured, but also on perspectives on the circumstances under which substitution may be acceptable.

States' proactive efforts to raise awareness about SCHIP, simplify the application and enrollment process, and improve retention resulted in persistent enrollment growth during the first six years. Moreover, despite state budget constraints and reduction in outreach efforts, SCHIP enrollment levels have been sustained. We turn now to an analysis of trends in insurance coverage, highlighting SCHIP's role as a safety net for covering low-income children with the continuing erosion of employer-sponsored coverage.

## III. PROGRESS TOWARD REDUCING THE NUMBER AND RATE OF UNINSURED LOW-INCOME CHILDREN

The State Children's Health Insurance Program (SCHIP) was created to provide health insurance coverage for children whose families earned too much to qualify for Medicaid but did not have access to affordable employer-sponsored coverage. In the years preceding SCHIP, the highest uninsured rates among children had been observed among those between 100 and 150 percent of the federal poverty level (FPL)—most of whom were not eligible for Medicaid (Rosenbach et al. 2001). SCHIP offered states considerable flexibility to expand coverage to uninsured, low-income children under age 19, subject to minimum guidelines specified in Title XXI.<sup>1</sup>

Most states implemented their SCHIP programs in 1998, and SCHIP enrollment grew steadily as states gained momentum with outreach activities and application simplifications and as they continued to expand their eligibility thresholds (Ellwood et al. 2003). Retention also appears to have improved as states focused increasing attention on streamlining the renewal process (Shulman et al. 2006; Merrill and Rosenbach 2006). Expanded enrollment and improved retention are important indicators of SCHIP's role in providing coverage to low-income children. However, they are not direct measures of the progress toward reducing the number or rate of low-income children who are uninsured because of secular changes in the economy and the private health insurance market that can simultaneously affect these trends.

Challenges associated with measuring the effects of SCHIP on the number and/or rate of uninsured children are well acknowledged (Riley 1999; Dubay and Kenney 2000). Major concerns include changes in survey methodology, small sample sizes, and imprecision in counting the uninsured. The CMS national evaluation of SCHIP included a detailed, rigorous analysis of the trends in children's health insurance coverage since the establishment of SCHIP. This analysis had two purposes: (1) to examine how the number and proportion of children—and, in particular, low-income children—without health insurance have changed since the implementation of SCHIP; and (2) to assess the contribution of SCHIP to the observed trends in coverage. To inform the latter effort, we disaggregated trends in health insurance coverage by poverty level, compared trends for children and adults, considered the impact of the economy and population growth, and examined changes in the source of coverage.

This analysis was based on the Current Population Survey (CPS), which is widely used for estimating and analyzing health insurance coverage in the United States. The CPS has well-known limitations in the data: (1) uncertainty about the reference period of the uninsured episode, and (2) undercounting of the number of children enrolled in Medicaid (Lewis et al.

<sup>&</sup>lt;sup>1</sup> Title XXI required states to maintain their Medicaid eligibility levels for children that were in effect as of June 1, 1997. It also authorized states to establish income eligibility levels for SCHIP up to 200 percent of the FPL, or 50 percentage points above the Medicaid thresholds in effect on March 31, 1997. Because states were given flexibility to determine how they would count income, they could set eligibility thresholds above these limits by using income disregards.

1998).<sup>2</sup> Other major concerns include changes in survey methodology, small sample sizes at the state level, and imprecision in the classification of health insurance coverage. These issues affect the consistency and reliability of insurance estimates based on the CPS. Studies vary in how they have adjusted for these issues, which may lead to differences in estimates of insurance coverage based on the CPS. In addition, studies vary in how they define the population of children for which estimates are made. Some studies produce estimates for children under age 18 and others include children under age 19. Some make adjustments for citizenship status (that is, excluding noncitizens). This study produces estimates for children under age 19 and does not adjust for citizenship status. More information on the CPS, including its limitations, is provided in Section A, below, and Appendix B.

This analysis covers a seven-year period from 1997, the year SCHIP was established, through 2003, six full years after the implementation of SCHIP. The analysis uses 1997 data (based on the March 1998 CPS) as the baseline year for estimating the changes in children's health insurance coverage that may be attributable to SCHIP. Although some states started enrolling children in SCHIP during the fourth quarter of 1997, most states did not do so until mid-1998 or later.<sup>3</sup> For this reason, and because uninsured rates had continued to rise between 1996 and 1997, we considered 1997 a more appropriate baseline than 1996. This analysis uses 2003 as the final year of the time series. Beginning in federal fiscal year (FFY) 2003, SCHIP enrollment leveled off at approximately 6 million children who were ever enrolled during the year (Centers for Medicare & Medicaid Services 2006).

Using a consistent time series of data from the CPS, we found that, between 1997 and 2003, the proportion of children under age 19 who were uninsured decreased from 15.5 to 12.8 percent, and the number of uninsured children fell from 11.7 to 9.9 million. The uninsured rate among low-income children (below 200 percent of the FPL) declined by an even greater margin, falling from 25.2 to 20.1 percent. Three-quarters of these declines occurred between 1997 and 2000, when the nation was in the final years of a prolonged economic expansion. However, the continuing declines between 2000 and 2003, when the economy was in a slowdown, were perhaps even more striking because nonelderly adults—including the parents of these same children—experienced a sharp rise in their uninsured rates during the same time period. After 2000, SCHIP provided a safety net for children whose families lost employer-sponsored coverage during the economic downturn. While children and nonelderly adults experienced similar losses of private coverage between 2000 and 2003, children were able to sustain their earlier gains in coverage through a continued growth of public coverage, which was largely attributable to SCHIP. Nonelderly adults, including parents, lacked access to much of this public coverage and, as a result, incurred a significant increase in their uninsured rates.

<sup>&</sup>lt;sup>2</sup> Estimates of the CPS Medicaid undercount range from about 10 percent to 30 percent, depending on how the CPS reference period is interpreted. The Medicaid undercount is higher if CPS insurance coverage is interpreted as a measure of "ever enrolled" and lower if it is considered a "point-in-time" measure. See Appendix B for additional discussion of the Medicaid undercount.

<sup>&</sup>lt;sup>3</sup> Title XXI authorized enrollment as of October 1, 1997, but only eight states began covering children under SCHIP during 1997. Most states (33 in all) began enrollment in 1998, while 8 states did not begin enrollment until 1999, and 2 additional states began enrollment in 2000 (Rosenbach et al. 2003).

Section A of this chapter discusses the data source and methods used in this analysis. Section B compares estimates of uninsured rates among children and nonelderly adults in 1997 and 2003, and Section C extends this analysis by examining year-to-year trends in uninsured rates. Section D documents changes in the source of coverage over this period. Section E examines changes in the number with no insurance and the numbers with private or publicly sponsored coverage. Section F presents our main conclusions and discusses their implications. Appendix B describes the data and methods used in this analysis, including the steps we used to develop a consistent time series for the study period. Appendix B also contains detailed supplemental tables on the trends in health insurance coverage among children and nonelderly adults.

## A. DATA AND METHODS

This analysis is based on data from the CPS, which is conducted by the U.S. Census Bureau for the Bureau of Labor Statistics. The CPS is a monthly survey whose primary purpose is to measure labor force participation in the United States. Data on health insurance coverage are collected in an annual supplement, which is also the source of official statistics on poverty in the United States. Known until recently as the Annual Demographic Supplement or, more commonly, the March Supplement, it has been renamed the Annual Social and Economic (ASEC) Supplement and is now (as of 2001) being administered in February and April in addition to March.

#### 1. Limitations of the CPS

The CPS is widely used for estimating and analyzing health insurance coverage, despite well-known limitations in the data. The two main concerns are that (1) there is uncertainty about the reference period of the uninsured episode, and (2) the CPS underestimates by a substantial margin the number of children enrolled in publicly sponsored health insurance.

The annual estimates of insurance coverage, collected in February, March, and April of each year, are intended to refer to the previous calendar year. Respondents are asked to indicate whether they were *ever* covered by specific types of health insurance during that period. Those who report that they had no insurance coverage are counted as uninsured for the entire year. Yet the CPS estimate of the number of uninsured children lies close to alternative survey estimates of the number who are uninsured at a point in time, or roughly twice the number estimated to be uninsured for an entire year.<sup>4</sup> In view of this, the estimates of uninsured children from the CPS are commonly interpreted as representing the number who are uninsured at a point in time, for example, Bilheimer 1997). We employ this interpretation as well.

That the CPS and other surveys underestimate children's enrollment in Medicaid has been recognized for many years, and efforts are under way to determine the magnitude and causes of

<sup>&</sup>lt;sup>4</sup>Ongoing surveys that provide point-in-time estimates that approximate the CPS estimate of the uninsured include the National Health Interview Survey (NHIS) and the Survey of Income and Program Participation (SIPP). Estimates of the number of people uninsured for an entire year can be derived from the SIPP, a longitudinal survey much better suited than the CPS to measuring the incidence of yearlong spells without insurance.

the Medicaid undercount and, in particular, its impact on counts of the number of uninsured (Kincheloe et al. 2006; Callahan and Mays 2005; Hoffman and Holahan 2005). The magnitude of the error in the CPS depends on whether the CPS estimates of Medicaid coverage are interpreted as the number who were ever enrolled during the reference year or the smaller number enrolled at a single point in time. If the CPS estimate of Medicaid enrollment is interpreted as referring to a point in time, then the Medicaid undercount for children is estimated to be less than 10 percent. If the CPS is considered to capture annual-ever enrollment, then the undercount may be as much as a third. Proposed explanations have focused on underreporting and misreporting of public coverage as the chief causes.<sup>5</sup> However, the undercount may also be symptomatic of a more general problem associated with household surveys-namely, underrepresentation of segments of the population, which could affect the uninsured even more than the insured. Some researchers have also suggested that the national Medicaid estimates based on administrative data may overstate total enrollment because of imperfect unduplication of enrollment counts within some states and no unduplication across states. Given this uncertainty about the reasons for the discrepancy between survey and administrative estimates of Medicaid enrollment, coupled with the additional uncertainty about the reference period for reported Medicaid and other public coverage in the CPS, we do not attempt to adjust the CPS estimates of health insurance coverage to be consistent with administrative estimates of Medicaid—or SCHIP—enrollment.

## 2. Recent Survey Changes

Over the period covered by this analysis, the Census Bureau introduced a number of changes to the annual supplement that have a potential impact on estimates of health insurance. These changes and, in parentheses, the dates they were introduced, include:

- Introduction of a "verification" question asking respondents who reported no coverage to confirm that they were indeed uninsured or to identify their sources of coverage; previously, the CPS asked if household members were *insured* by various sources during the previous year, but it did not ask if they were *uninsured*; this addresses a frequent criticism that the CPS does not identify the uninsured directly but only as a "residual" (March 2001).
- Expansion of the CPS sample to increase the precision of state estimates of uninsured children; this was accomplished in part by administering the "March" supplement to CPS households interviewed in February and April (March 2001).
- Introduction of questions to measure participation in SCHIP among children with no reported Medicaid coverage (March 2001).

<sup>&</sup>lt;sup>5</sup> Possible explanations for misreporting of Medicaid coverage include lack of awareness about current coverage, lack of name recognition for the Medicaid program, stigma about reporting public coverage, and confusion between public and private coverage, especially among those enrolled in managed care plans (see, for example, Blewett et al. 2005; Center for Health Program Development and Management 2005).

- Incorporation of 2000 census data into the population estimates used to "control" the CPS weights (March 2002).
- Revision of the methodology used to produce the survey weights (March 2003).
- Adoption of the new race classification issued by the Office of Management and Budget, which allows respondents to report multiple races (March 2003).

Congress mandated the first two changes and also gave the Census Bureau funding to implement the sample expansion. Changes in the population controls always follow a new census, while the change in the weighting methodology was designed to address a number of deficiencies in procedures that had been in place for years. To develop a consistent time series of estimates over the period 1997 to 2002, we adapted our estimation procedures to these changing features of the survey:

- *Choice of Weights.* We used the Census Bureau's 2000 census-based weights in place of the 1990 census-based weights for March 2000 and 2001—the two years for which the Census Bureau produced both sets of weights. We also elected to use the Census Bureau weights for the 2003 and 2004 supplements, despite their understatement of infants, after determining that the impact on our estimates would be small.
- *Verification Question.* We excluded coverage reported in response to the verification question introduced in March 2001; the resulting estimates from this and the later surveys yield higher uninsured rates but are consistent with earlier years.
- *Population Controls.* We developed alternative population controls for March 1998 and 1999 that incorporate the results of the 2000 census, and we used these population controls to derive new weights for the two surveys, which we substituted for the Census Bureau's 1990 census-based weights.

Most of these changes had a minimal effect on estimates of uninsured rates, with one exception. Among children, the verification question reduced the overall uninsured rate by 1.0 to 1.3 percentage points over the period 2000 to 2003 (Appendix B, Table B.1). Because our estimates do not include coverage reported in response to the verification question, they are likely to be higher than other estimates for 2000 and beyond that included the verification question. Thus, estimates presented in this report will differ from other estimates as a result of differences in adjustments that are made to the data to produce a consistent time-series.

## B. OVERVIEW OF GAINS IN CHILD HEALTH INSURANCE COVERAGE BETWEEN 1997 AND 2003

To show how the prevalence of health insurance coverage among children has changed since the establishment of SCHIP, we present estimates of children's uninsured rates for 1997 and 2003 by poverty level. We show that the gains recorded by children were unique to them, by comparing estimates for children and nonelderly adults. We then show that the gains in coverage among children did not vary appreciably by age and were broadly shared by race and Hispanic origin as well.

### 1. Change in Uninsured Rates, by Poverty Level

Between 1997 and 2003, the proportion of children who were without health insurance declined by 2.7 percentage points, from 15.5 to 12.8 percent (Table III.1). The decline was even greater among the low-income children whose coverage SCHIP was designed to expand—that is, children below 200 percent of the FPL. For this group, the uninsured rate declined by 5.1 percentage points, falling from 25.2 to 20.1 percent—a reduction of one-fifth. Uninsured rates declined significantly in every income class below 150 percent of the FPL, with the largest decline occurring among children between 100 and 150 percent. A reduction of 2.5 percentage points between 150 and 200 percent of the FPL narrowly missed statistical significance.

For children above 200 percent of the FPL, however, the uninsured rate was essentially unchanged between 1997 and 2003. A significant reduction of 2.9 percentage points between 200 and 250 percent of the FPL was largely offset by smaller, nonsignificant increases above 300 percent of the FPL, leaving a net reduction of just 0.5 percentage points.

The improvements in coverage observed among low-income children stand in sharp contrast to the experience of nonelderly adults, who were not extended coverage by SCHIP (except for selected programs in a few states).<sup>6</sup> Between 1997 and 2003, the uninsured rate among all nonelderly adults increased significantly, from 19.8 to 21.7 percent. This increase was shared by low-income and higher-income adults. The uninsured rate among adults below 200 percent of the FPL grew by nearly three percentage points, while the uninsured rate among adults above 200 percent of the FPL grew by two percentage points. The largest increase, 5.6 percentage points, occurred among adults between 300 and 350 percent of the FPL.

The sharp decline in uninsured rates among low-income children seems to provide compelling evidence of SCHIP's role in improving coverage of low-income children, especially when viewed in the context of other comparisons—specifically, uninsured rates changed little among higher-income children and rose significantly among nonelderly adults overall and in nearly every poverty class. Section C explores these trends further.

<sup>&</sup>lt;sup>6</sup> In FFY 2003, 484,000 adults were enrolled in Title XXI demonstrations in eight states (Arizona, California, Illinois, Minnesota, New Jersey, Oregon, Rhode Island, and Wisconsin) (Centers for Medicare & Medicaid Services 2004).

|                                | 1997                | 2003              | Change |  |  |  |
|--------------------------------|---------------------|-------------------|--------|--|--|--|
| Poverty Level (Percent of FPL) | Percent of Children |                   |        |  |  |  |
| Total                          | 15.5                | 12.8              | -2.7*  |  |  |  |
| Less than 200                  | 25.2                | 20.1              | -5.1*  |  |  |  |
| 200 or more                    | 8.6                 | 8.1               | -0.5   |  |  |  |
| Less than 50                   | 26.1                | 21.7              | -4.4*  |  |  |  |
| 50 to < 100                    | 25.0                | 20.2              | -4.8*  |  |  |  |
| 100 to < 150                   | 28.1                | 19.7              | -8.4*  |  |  |  |
| 150 to < 200                   | 21.4                | 18.9              | -2.5   |  |  |  |
| 200 to < 250                   | 15.2                | 12.2              | -2.9*  |  |  |  |
| 250 to < 300                   | 10.9                | 10.8              | -0.1   |  |  |  |
| 300 to < 350                   | 8.5                 | 8.9               | 0.5    |  |  |  |
| 350 to < 400                   | 7.4                 | 9.0               | 1.6    |  |  |  |
| 400 or more                    | 5.6                 | 5.6               | 0.1    |  |  |  |
|                                |                     | Percent of Adults |        |  |  |  |
| Total                          | 19.8                | 21.7              | 1.9*   |  |  |  |
| Less than 200                  | 39.5                | 42.2              | 2.7*   |  |  |  |
| 200 or more                    | 12.5                | 14.5              | 1.9*   |  |  |  |
| Less than 50                   | 48.9                | 51.0              | 2.1    |  |  |  |
| 50 to < 100                    | 39.2                | 42.7              | 3.5*   |  |  |  |
| 100 to < 150                   | 41.0                | 43.5              | 2.5*   |  |  |  |
| 150 to < 200                   | 33.1                | 35.3              | 2.2*   |  |  |  |
| 200 to < 250                   | 25.1                | 27.6              | 2.5*   |  |  |  |
| 250 to < 300                   | 19.3                | 22.2              | 2.9*   |  |  |  |
| 300 to < 350                   | 13.8                | 19.3              | 5.6*   |  |  |  |
| 350 to < 400                   | 12.4                | 15.5              | 3.0*   |  |  |  |
| 400 or more                    | 8.4                 | 9.7               | 1.3*   |  |  |  |

## PERCENTAGE WITHOUT HEALTH INSURANCE BY POVERTY LEVEL, 1997 AND 2003: CHILDREN UNDER AGE 19 AND NONELDERLY ADULTS

Source: Mathematica Policy Research, Inc. analysis of CPS March 1998 Supplement and 2004 ASEC Supplement.

Note: All estimates use 2000 census-based weights. See Appendix B for details.

## 2. Gains Among Children by Age Group

The gains in coverage observed among low-income children were shared among younger and older children (Table III.2). Indeed, few differences are evident in comparing children under age 6, children ages 6 to 12, and children ages 13 to 18. All three groups had significant declines of 2 to 3 percentage points in their overall uninsured rates; children below 200 percent of the FPL had significant declines of 4.3 to 6.4 percentage points, while children above 200 percent of the FPL showed only marginal and nonsignificant reductions.

In every age group, the largest reduction in the uninsured rate occurred among children between 100 and 150 percent of the FPL, who had the highest uninsured rate in 1997. Declines ranged from 8 percent among children under age 6 and children ages 6 to 12 to 10.5 percent among children ages 13 to 18. The larger reduction among teenagers is consistent with the broader SCHIP eligibility expansions among this population.<sup>7</sup>

Reductions in the uninsured rate among children below 100 percent of the FPL were generally greater than those among children above 150 percent of the FPL, but reductions were evident—if not always statistically significant—up to 250 percent of the FPL, after which they ended abruptly. The widespread gains by age and across poverty levels (especially below 100 of the FPL) suggest that growth in Medicaid coverage was important during this period as well. These findings suggest that SCHIP outreach and application simplifications had a positive spillover effect on enrollment in traditional Medicaid.

## 3. Gains by Race and Hispanic Origin

Gains in coverage were shared among Hispanic children and both white and black non-Hispanic children; we did not observe significant gains among children of other races. Before SCHIP, Hispanic children tended to have much higher uninsured rates than non-Hispanic children. In 1997, for example, 29 percent of Hispanic children were uninsured, compared to just 11 percent of non-Hispanic white children, 19 percent of non-Hispanic black children, and 16 percent of all other children (Table III.3). Differences in the distribution of income contributed substantially to these differences in uninsured rates. Among low-income children, blacks and whites had nearly identical uninsured rates (between 21 and 22 percent), and other non-Hispanic children were not far behind, at 24 percent. Low-income Hispanic children, however, had an uninsured rate of 35 percent.

<sup>&</sup>lt;sup>7</sup> The magnitude of the SCHIP coverage expansion was a function of the pre-SCHIP Medicaid threshold, which varied by state and age group. On average, SCHIP raised income thresholds by 61 percentage points among children ages 1 to 5, by 92 points among children ages 6 to 16, and by 129 points among children ages 17 and 18 (Rosenbach et al. 2003).

|                                  | 1997             | 2003              | Change |  |  |
|----------------------------------|------------------|-------------------|--------|--|--|
| Poverty Level (Percent of FPL)   | Children Under 6 |                   |        |  |  |
| Total                            | 14.5             | 11.3              | -3.2*  |  |  |
| Less than 200                    | 21.1             | 15.7              | -5.5*  |  |  |
| 200 or more                      | 8.8              | 8.0               | -0.8   |  |  |
| Less than 50                     | 22.5             | 17.0              | -5.5*  |  |  |
| 50 to < 100                      | 19.8             | 14.4              | -5.5*  |  |  |
| 100 to < 150                     | 23.6             | 15.5              | -8.0*  |  |  |
| 150 to < 200                     | 18.5             | 15.8              | -2.7   |  |  |
| 200 to < 250                     | 13.4             | 10.9              | -2.5   |  |  |
| 250 to < 300                     | 11.3             | 11.0              | -0.3   |  |  |
| 300 to < 350                     | 9.1              | 9.1               | 0.1    |  |  |
| 350  to < 400                    | 8.0              | 8.1               | 0.0    |  |  |
| 400 or more                      | 6.1              | 5.9               | -0.2   |  |  |
|                                  |                  | Children 6 to 12  |        |  |  |
| Total                            | 14.3             | 12.0              | -2.3*  |  |  |
| Less than 200                    | 23.6             | 19.2              | -4.3*  |  |  |
| 200 or more                      | 7.4              | 7.2               | -0.2   |  |  |
| Less than 50                     | 23.1             | 20.5              | -2.6   |  |  |
| 50 to < 100                      | 24.5             | 20.6              | -3.9*  |  |  |
| 100 to < 150                     | 26.5             | 18.7              | -7.8*  |  |  |
| 150  to < 200                    | 20.2             | 17.5              | -2.7   |  |  |
| 200 to < 250                     | 13.3             | 10.9              | -2.4   |  |  |
| 250 to < 300                     | 9.2              | 10.2              | 1.1    |  |  |
| 300 to < 350                     | 6.7              | 7.6               | 0.9    |  |  |
| 350  to  < 400                   | 6.3              | 8.1               | 1.7    |  |  |
| 400 or more                      | 4.6              | 4.7               | 0.1    |  |  |
|                                  |                  | Children 13 to 18 |        |  |  |
| Total                            | 18.1             | 15.1              | -3.0*  |  |  |
| Less than 200                    | 32.4             | 26.1              | -6.3*  |  |  |
| 200 or more                      | 9.8              | 9.2               | -0.6   |  |  |
| Less than 50                     | 35.7             | 30.3              | -5.5   |  |  |
| 50 to < 100                      | 32.0             | 26.2              | -5.8*  |  |  |
| 100  to  < 150                   | 35.9             | 25.4              | -10.5* |  |  |
| 150  to  < 200                   | 26.4             | 23.7              | -2.7   |  |  |
| 200  to < 250                    | 19.0             | 15.0              | -4.0*  |  |  |
| 250  to  < 250<br>250  to  < 300 | 12.6             | 11.3              | -1.3   |  |  |
| 300  to < 350                    | 10.1             | 10.4              | 0.3    |  |  |
| 350  to  < 400                   | 8.1              | 10.9              | 2.8    |  |  |
| 400 or more                      | 6.1              | 6.3               | 0.3    |  |  |

#### PERCENTAGE OF CHILDREN WITHOUT HEALTH INSURANCE, BY POVERTY LEVEL AND AGE, 1997 AND 2003

Source: Mathematica Policy Research, Inc. analysis of CPS March 1998 Supplement and 2004 ASEC Supplement.

Note: All estimates use 2000 census-based weights. See Appendix B for details.

| Poverty Level (Percent of FPL) and Race and Hispanic Origin | 1997 | 2003 | Change |
|---|------|------|--------|
| All Children  |      |      |        |
| White, non-Hispanic   | 11.1 | 8.9  | -2.2*  |
| Black, non-Hispanic   | 18.8 | 15.3 | -3.5*  |
| Hispanic  | 29.3 | 22.6 | -6.7*  |
| Other   | 16.5 | 14.8 | -1.7   |
| Less than 200%  |      |      |        |
| White, non-Hispanic   | 21.2 | 16.1 | -5.0*  |
| Black, non-Hispanic   | 21.9 | 17.8 | -4.1*  |
| Hispanic  | 34.9 | 26.6 | -8.3*  |
| Other   | 24.4 | 23.5 | -0.9   |
| 200% or more  |      |      |        |
| White, non-Hispanic   | 6.8  | 6.2  | -0.6   |
| Black, non-Hispanic   | 13.4 | 11.5 | -1.9   |
| Hispanic  | 16.8 | 15.9 | -0.9   |
| Other   | 11.7 | 10.1 | -1.5   |

#### PERCENTAGE WITHOUT HEALTH INSURANCE BY RACE AND HISPANIC ORIGIN, 1997 AND 2003: CHILDREN UNDER AGE 19 BY POVERTY LEVEL

Source: Mathematica Policy Research, Inc. analysis of CPS March 1998 Supplement and 2004 ASEC Supplement.

Note: In 2002 and 2003, with the introduction of the new, multi-race concept into the CPS, racial groups cannot be defined consistently with prior years. We define as "whites" those who were identified as only white whereas we define "black" to include those with any mention of black. "Other" includes all who were not identified as white or black. This change in racial definitions reduced the number of whites while increasing the numbers of blacks and others. The identification of Hispanic persons, which is separate from the measurement of race, was not changed. All estimates use 2000 census-based weights. See Appendix B for details.

Between 1997 and 2003, the uninsured rate among low-income white children declined by five percentage points, while the uninsured rate among black children declined by four percentage points. Over this same period, low-income Hispanic children had a nearly seven percentage point decline in their uninsured rate. This is particularly noteworthy for Hispanic children and may reflect special efforts made to reach this population using tailored outreach messages and materials (Williams and Rosenbach 2005).

Non-Hispanic children of other races showed smaller and nonsignificant improvements in their health insurance coverage. The decline among low-income children was just one percentage point. Therefore, the gap roughly doubled between other non-Hispanic low-income children and white non-Hispanic children, from about three percentage points in 1997 to more than seven percentage points in 2003.

### C. TRENDS IN UNINSURED RATES

That the decline in uninsured rates between 1997 and 2003 was confined to children who were likely to have been eligible for SCHIP or Medicaid suggests that SCHIP played a significant role in bringing about these changes. Yet several other factors may have influenced children's uninsured rates during this period—some favorably and others not. Overlooking the other positive influences on children's coverage could lead us to overstate the importance of SCHIP, while neglecting the negative influences might lead us to understate its importance.

#### 1. Overview of Secular Trends

When SCHIP was enacted in 1997, the uninsured rate among children had been rising steadily since earlier in the decade (Rosenbach et al. 2000). This secular trend continued despite an extended economic boom that saw unemployment rates fall to a 30-year low.<sup>8</sup> Nevertheless, the economy continued to expand, creating the possibility that growth in employment and wages might reverse the upward trend in the uninsured rate. In 2001, the economy entered a recession that, while short-lived, reversed the downward trend in unemployment.<sup>9</sup>

SCHIP also followed closely on the heels of welfare reform, which gave further momentum to a steep decline in public assistance caseloads that began in the middle of the decade.<sup>10</sup> Of particular relevance to health insurance coverage, the welfare reform law "delinked" Medicaid and public assistance. Families joining the assistance rolls no longer qualified automatically for

<sup>&</sup>lt;sup>8</sup> The annual average unemployment rate reached 4.5 percent in 1998—its lowest level since 1969 (Bureau of Labor Statistics 2004).

<sup>&</sup>lt;sup>9</sup> The 2001 recession began in March and ended in November of that same year (Business Cycle Dating Committee 2003). The unemployment rate bottomed out at four percent in 2000 and rose to more than six percent in 2003 before turning down again. The unemployment rate stood at 5.6 percent in April 2004, when data collection ended for the last round of health insurance estimates presented in this report (Bureau of Labor Statistics 2004).

<sup>&</sup>lt;sup>10</sup> The federal welfare reform law—the Personal Responsibility and Work Opportunity Reconciliation Act of 1996—was preceded by a period of state initiatives authorized by federal waivers. Researchers attribute some of the earlier caseload decline to these efforts (see, for example, the Council of Economic Advisors 1997).

Medicaid, and many of those who left assistance lost Medicaid coverage despite continued eligibility.

To determine the full impact of SCHIP, we examined the trends in health insurance coverage over this entire period to take these other influences into account. Moreover, to account for the variation in the economic cycles during this period, we compared trends during the early years (1997 to 2000) versus the later years (2000 to 2003). Comparisons of trends for children versus nonelderly adults further highlighted the contributions of SCHIP to the decline of uninsured rates among children.

#### 2. Trends in Children's Health Insurance Coverage

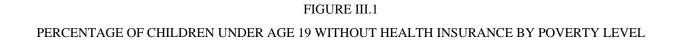
After rising slightly between 1997 and 1998, the uninsured rate among low-income children dropped by 4.2 percentage points through 2000 but then decreased more gradually between 2000 and 2003, falling an additional 1.3 percentage points, with most of this reduction occurring in the final year (Figure III.1). In contrast, the uninsured rate among higher-income children (200 percent of the FPL and above) declined only marginally (1.0 percentage point) after a modest increase between 1997 and 1998, showing little net change (0.5 percentage points) over the entire period.

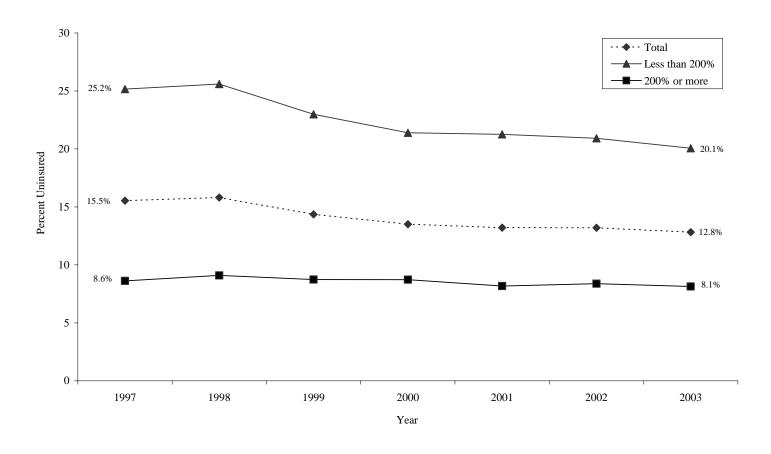
In the low-income population, we found marked differences in the trends by poverty subgroup over time (Figure III.2A).<sup>11</sup> We also saw evidence that the recession and its aftermath had uneven effects on the four low-income subgroups. Children between 100 and 150 percent of the FPL led the decline in uninsured rates, which started for them between 1997 and 1998, but the uninsured rate in this group leveled off between 2000 and 2002, after falling by 6.5 percentage points. The downward trend resumed with a 1.1 percentage point decline between 2002 and 2003. Children between 150 and 200 percent of the FPL showed a marked decline (5.8 percentage points) in their uninsured rate between 1998 and 2000. However, this trend reversed in 2001, and the group's uninsured rate continued to rise through at least 2003, showing an increase of 2.8 percentage points (or nearly half the earlier reduction). Between 1998 and 2003, the uninsured rates for both below-poverty groups declined by 6.3 percentage points. Despite these varying trends, the uninsured rates among the four low-income subgroups had converged to a narrow range by 2003. Whereas children between 100 and 150 percent of the FPL had been saddled with the highest uninsured rate in 1997 (and also in the years preceding 1997), by 1999, this group's uninsured rate had fallen between those of the immediately surrounding poverty groups, and this is how things stood in 2003 as well.

Among higher-income children, only those between 200 and 250 percent of the FPL had a decline in their uninsured rate lasting more than two years (Figure III.2B). The decline in this subgroup began in 1998, was interrupted between 1999 and 2000, and then resumed, picking up speed in the final year. The net reduction between 1998 and 2003 was 5.1 percentage points.<sup>12</sup>

<sup>&</sup>lt;sup>11</sup> The effects of sampling error are more prominent in Figure III.2A than in Figure III.1 because the sample sizes are only a quarter as large, on average, as they are for all low-income children.

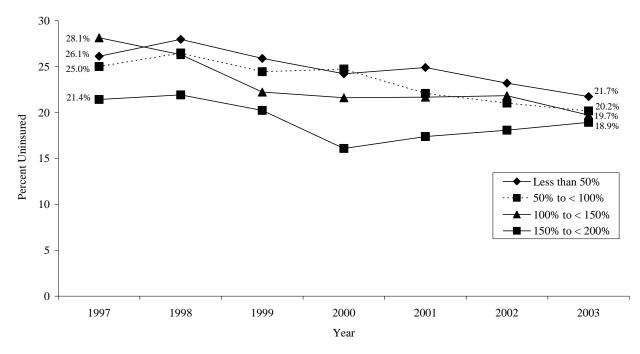
<sup>&</sup>lt;sup>12</sup> SCHIP probably contributed to this reduction. As of March 31, 2001, 10 states had SCHIP eligibility thresholds above 200 percent of the FPL (Rosenbach et al. 2003). Moreover, the measurement of the FPL levels in the CPS is imprecise, based on self-reported income data.





Source: Mathematica Policy Research, Inc. analysis of CPS March supplement, 1998 through 2001, and ASEC Supplement, 2002 through 2004.

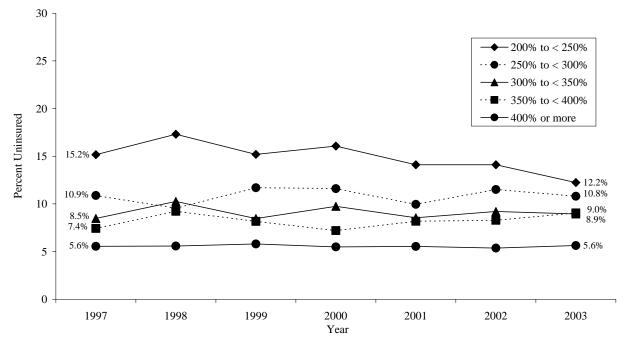
#### FIGURE III.2A



PERCENTAGE OF LOW-INCOME CHILDREN UNDER AGE 19 WITHOUT HEALTH INSURANCE BY POVERTY LEVEL

#### FIGURE III.2B

PERCENTAGE OF HIGHER-INCOME CHILDREN UNDER AGE 19 WITHOUT HEALTH INSURANCE BY POVERTY LEVEL



Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 through 2001, and ASEC Supplement, 2002 through 2004.

Above 250 percent of the FPL, there is no persistent downward trend in any of the poverty subgroups, and only the subgroup between 350 and 400 percent of the FPL displayed an extended upward trend.<sup>13</sup> The flatness of the trend lines for children above 250 percent of the FPL provides a distinct contrast to the trends among children below 250 percent of the FPL, whose uninsured rates declined from 1998 on.

## 3. Trends in Nonelderly Adults' Health Insurance Coverage

We have just seen that children up to 250 percent of the FPL showed steady improvements in coverage after 1998, with the greatest gains coming between 1998 and 2000 and after 2002, while children above 250 percent of the FPL exhibited little change over this period. How do these trends compare to trends among nonelderly adults, and what does this tell us about the trends that we might have observed among children in the absence of SCHIP?

We divided nonelderly adults into three groups: (1) parents of children under age 19, (2) nonparents under age 40, and (3) nonparents age 40 and older. Comparing children to their parents underscores the impact of SCHIP, which was not widely available to parents. However, because the trends in parents' coverage may have been influenced by the availability of public coverage for children, we also compare both children and parents to nonparents. We divide nonparents by age, for several reasons. Younger nonparents resemble parents with respect to their distribution by poverty, but they are nearly twice as likely to be uninsured. Older nonparents are less likely than parents to be low-income, but their uninsured rates compare to those of parents.<sup>14</sup>

## a. Comparison of Coverage Trends Among Parents Versus Children

Among all parents, the uninsured rate trended down slightly between 1997 and 2000, dropping 0.7 percentage points, but then turned upward, rising by 2.5 percentage points between 2000 and 2003. Among all children, the uninsured rate dropped by 2.0 percentage points between 1997 and 2000 and by 0.7 percentage points between 2000 and 2003. Where children and parents had exhibited essentially equal uninsured rates in 1997, at 15.5 percent for children and 15.7 percent for parents, the divergent trends created a nearly 5 percentage point differential by 2003, with the uninsured rate falling to 12.8 percentage points among children, while rising to 17.5 percentage points among parents.

The divergence in trends is even more pronounced for low-income children and parents. Compared to low-income children, low-income parents experienced a small decrease (0.9 percentage points) in their uninsured rate between 1997 and 2000, followed by a sharp increase

<sup>&</sup>lt;sup>13</sup> There is little evidence that uninsured rates among children above 250 percent of the FPL declined during the final years of economic expansion and then rose during the years surrounding the recession. Instead, they were essentially flat for the entire period, with the fluctuation in Figure III.2B being due primarily to sampling error. The sample of children above 400 percent of the FPL is more than four times the size of any of the other subgroups in Figure III.2B, which contributes to the stability of the trend line for that group.

<sup>&</sup>lt;sup>14</sup> See Tables B.4 and B.5 in Appendix B for supplemental data by subgroup and poverty level.

(5.0 percentage points) between 2000 and 2003 (Table III.4 and Figure III.3). With this difference in trends between low-income children and parents, a 9.0 percentage point differential in 1997 (25.2 for children versus 34.2 for parents) grew to 11.9 percentage points in 2000 and 18.2 percentage points in 2003 (20.1 percent for children versus 38.2 for parents). Unexpectedly, the differential in uninsured rates grew much more between 2000 and 2003, when the uninsured rate for children declined relatively little, than between 1997 and 2000, when the uninsured rate for children declined more substantially. The fact that low-income children were able to maintain their gains in coverage through the economic slowdown after 2000 while their parents experienced a significant reduction in coverage calls attentions to the role of SCHIP and Medicaid as a safety net, which was not at all evident from the trend in children's uninsured rates alone.

## b. Comparison of Coverage Trends Among Nonparents Versus Parents

Low-income nonparents were 50 percent more likely than parents to be uninsured throughout this seven-year period (Table III.4). Trends in uninsured rates between parents and nonparents were similar, with slight increases occurring in the later period (from 2001 to 2003), especially among those who were low income (Figures III.4A and III.4B). The considerable similarity between parents and nonparents in their trends in uninsured rates from 1997 to 2003 suggests that the factors responsible for the growth in parents' uninsured rates over this period were broad-based and by no means unique to parents. This further underscores the significance of the observed decline in children's uninsured rates and its likely source in factors that were largely restricted to children. It also suggests that the most important impact of SCHIP over this later period lay not so much in the net reduction in children's uninsured rates from their 1997 level but the fact that the improvement in children's coverage occurred when coverage among adults was declining broadly.

### D. CHANGES IN THE SOURCE OF COVERAGE

Compared to their parents and higher-income children, children from low-income families experienced larger gains in coverage during the final years of the economic boom and were more effectively shielded from the impact of the subsequent economic slowdown. What differentiates low-income children from their parents and from higher-income children during this period is their access to SCHIP and the poverty-related expansions under traditional Medicaid, which were generally not available to adults or to children at higher income levels. By examining trends in the source of coverage, we provide more direct evidence of the role of SCHIP in the improvements in children's coverage.<sup>15</sup>

<sup>&</sup>lt;sup>15</sup> See Tables B.6, B.7, and B.8 in Appendix B for supplemental data on trends in public and private coverage by subgroup and poverty level.

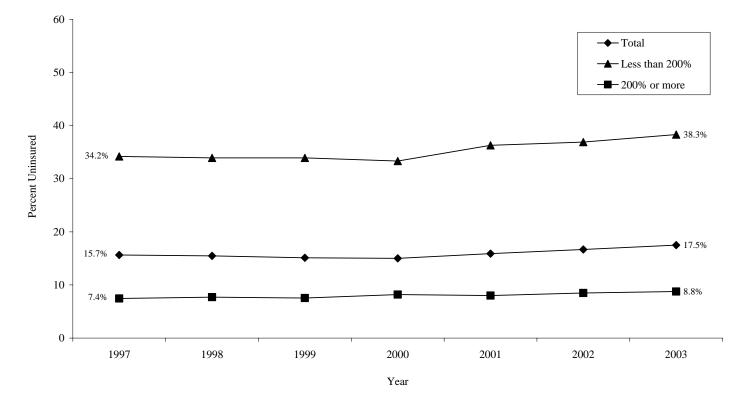
|                  | А                              | Annual Estimates |               |                    | Estimates of Change |              |  |  |
|------------------|--------------------------------|------------------|---------------|--------------------|---------------------|--------------|--|--|
| Poverty Level    | 1997                           | 2000             | 2003          | 1997 to 2000       | 2000 to 2003        | 1997 to 2003 |  |  |
| (Percent of FPL) |                                |                  | Percent       | of Children        |                     |              |  |  |
| Total            | 15.5                           | 13.5             | 12.8          | -2.0*              | -0.7                | -2.7*        |  |  |
| Less than 200    | 25.2                           | 21.4             | 20.1          | -3.8*              | -1.3                | -5.1*        |  |  |
| 200 or more      | 8.6                            | 8.7              | 8.1           | 0.1                | -0.6                | -0.5         |  |  |
|                  | Percent of Parents             |                  |               |                    |                     |              |  |  |
| Total            | 15.7                           | 15.0             | 17.5          | -0.6               | 2.5*                | 1.8*         |  |  |
| Less than 200    | 34.2                           | 33.3             | 38.3          | -0.9               | 5.0*                | 4.1*         |  |  |
| 200 or more      | 7.4                            | 8.2              | 8.8           | 0.7*               | 0.6                 | 1.3*         |  |  |
|                  |                                |                  | Percent of No | onparents 19 to 39 |                     |              |  |  |
| Total            | 30.0                           | 29.3             | 33.2          | -0.8               | 3.9*                | 3.2*         |  |  |
| Less than 200    | 52.1                           | 50.8             | 54.8          | -1.3               | 4.0*                | 2.7*         |  |  |
| 200 or more      | 21.6                           | 22.2             | 24.9          | 0.7                | 2.7*                | 3.4*         |  |  |
|                  | Percent of Nonparents 40 to 64 |                  |               |                    |                     |              |  |  |
| Total            | 16.2                           | 16.0             | 17.5          | -0.2               | 1.5*                | 1.3*         |  |  |
| Less than 200    | 35.0                           | 33.5             | 35.4          | -1.5               | 2.0                 | 0.5          |  |  |
| 200 or more      | 11.0                           | 11.5             | 12.6          | 0.5                | 1.1*                | 1.6*         |  |  |

## PERCENTAGE OF CHILDREN, NONELDERLY PARENTS AND NONPARENTS WITHOUT HEALTH INSURANCE, BY BROAD POVERTY LEVEL: 1997, 2000, AND 2003

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 and 2001, and 2004 ASEC Supplement.

Note: All estimates use 2000 census-based weights. See Appendix B for details.

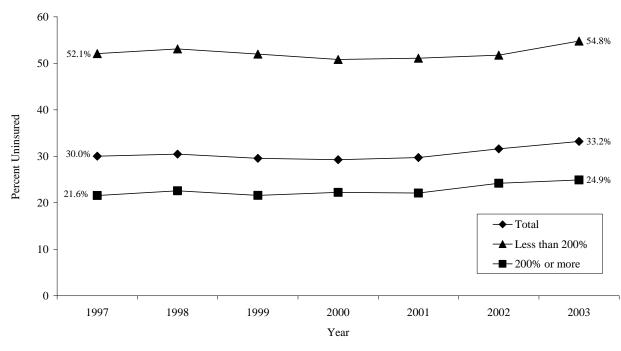
#### FIGURE III.3



PERCENTAGE OF ADULT PARENTS WITHOUT HEALTH INSURANCE BY POVERTY LEVEL

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 through 2001, and ASEC Supplement, 2002 through 2004.

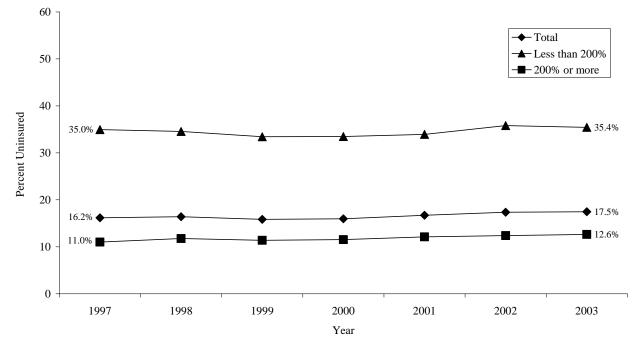




PERCENTAGE OF NONPARENTS AGES 19 TO 39 WITHOUT HEALTH INSURANCE BY POVERTY LEVEL

FIGURE III.4B

PERCENTAGE OF NONPARENTS AGES 40 TO 64 WITHOUT HEALTH INSURANCE BY POVERTY LEVEL



Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 through 2001, and ASEC Supplement, 2002 through 2004.

#### **1.** Trends in Private Coverage

Despite differences in the absolute levels of private coverage, children, parents, and nonparents under age 40 exhibited similar trends in private coverage between 1997 and 2003, as Table III.5 shows. Among all three groups, private coverage increased slightly from 1997 through 2000, followed by larger declines from 2000 to 2003, resulting in net reductions in private coverage over the seven-year period (Figures III.5A to III.5C). Over the whole period, the net reduction in private coverage differed little between low-income and higher income children and adults. Among low-income children and adults, however, private coverage rose between 1997 and 2000 before declining (Figures III.6A to III.6C). Among low-income children, for example, private coverage rose from 33.2 percent in 1997 to 35.7 percent in 2000, and then fell to 28.6 percent by 2003 (Figure III.6A). Among low-income parents, private coverage rose from 41.8 percent to 46.1 percent between 1997 and 2000, but then declined to 38.4 percent by 2003. Among higher-income children and adults, private coverage declined slowly over the entire period (Figures III.7A to III.7C)

#### 2. Trends in Public Coverage

As expected, children showed a very different trend than adults in public coverage (Table III.6), which we interpret as reflecting greater access to SCHIP and Medicaid coverage for them than for parents and nonparents.<sup>16</sup> The proportion of all children with any public coverage grew by 5.5 percentage points over this period, reflecting a 9.7 percentage point increase among low-income children and a 4.4 percentage point increase among higher-income children. The 9.7 percentage point increase among low-income children was the cumulative result of a 1.3 percentage point increase between 1997 and 2000 and an 8.4 percentage point increase between 2000 and 2003. For adults—both parents and nonparents—public coverage declined slightly in the early years of SCHIP (during the post-welfare-reform era), and then reverted back to pre-SCHIP levels between 2000 and 2003 (possibly reflecting a response to the economic downturn that began in 2001).

Among low-income children, the declines in private coverage in the later years of SCHIP were more than offset by increases in public coverage (Figure III.6A). There is little evidence that this reflects substitution of public for private coverage. That low-income adults—both parents and nonparents—had parallel reductions in private coverage suggests that the increases in public coverage among low-income children were not attributable solely to parents dropping private coverage because of the availability of public coverage for their children. Rather, as we discuss later, this trend may reflect broader secular trends in the availability of employer-sponsored coverage for workers and their families.

<sup>&</sup>lt;sup>16</sup> We exclude nonparents ages 40 to 64 from the trend comparisons discussed here—partly for space and partly because they add little to what we can learn from parents and younger nonparents. However, estimates for nonparents ages 40 to 64 are included alongside those for the other subpopulations in the appendix tables, as well as the tables that follow later in this section. In general, the older nonparents show a more muted response to the changing economic conditions and policy initiatives of the late 1990s and early 2000s than do these other subpopulations.

|                  | А                              | Annual Estimates | Estimates Estimates of Change |                    |              | ige          |  |  |
|------------------|--------------------------------|------------------|-------------------------------|--------------------|--------------|--------------|--|--|
| Poverty Level    | 1997                           | 2000             | 2003                          | 1997 to 2000       | 2000 to 2003 | 1997 to 2003 |  |  |
| (Percent of FPL) |                                |                  | Percent                       | of Children        |              |              |  |  |
| Total            | 64.1                           | 66.2             | 61.3                          | 2.1*               | -4.9*        | -2.8*        |  |  |
| Less than 200    | 33.2                           | 35.7             | 28.6                          | 2.5*               | -7.1*        | -4.6*        |  |  |
| 200 or more      | 86.3                           | 84.7             | 82.4                          | -1.6*              | -2.3*        | -3.9*        |  |  |
|                  | Percent of Parents             |                  |                               |                    |              |              |  |  |
| Total            | 75.5                           | 77.8             | 73.8                          | 2.3*               | -4.0*        | -1.7*        |  |  |
| Less than 200    | 41.8                           | 46.1             | 38.5                          | 4.3*               | -7.6*        | -3.3*        |  |  |
| 200 or more      | 90.5                           | 89.6             | 88.6                          | -0.9*              | -1.0*        | -1.9*        |  |  |
|                  |                                |                  | Percent of No                 | onparents 19 to 39 |              |              |  |  |
| Total            | 63.6                           | 65.4             | 59.9                          | 1.7*               | -5.5*        | -3.7*        |  |  |
| Less than 200    | 32.2                           | 36.3             | 29.8                          | 4.1*               | -6.4*        | -2.4         |  |  |
| 200 or more      | 75.7                           | 74.8             | 71.5                          | -0.9               | -3.4*        | -4.2*        |  |  |
|                  | Percent of Nonparents 40 to 64 |                  |                               |                    |              |              |  |  |
| Total            | 73.9                           | 73.6             | 71.8                          | -0.3               | -1.8*        | -2.1*        |  |  |
| Less than 200    | 35.3                           | 34.9             | 33.1                          | -0.4               | -1.8         | -2.2*        |  |  |
| 200 or more      | 84.5                           | 83.3             | 82.2                          | -1.2*              | -1.1*        | -2.3*        |  |  |

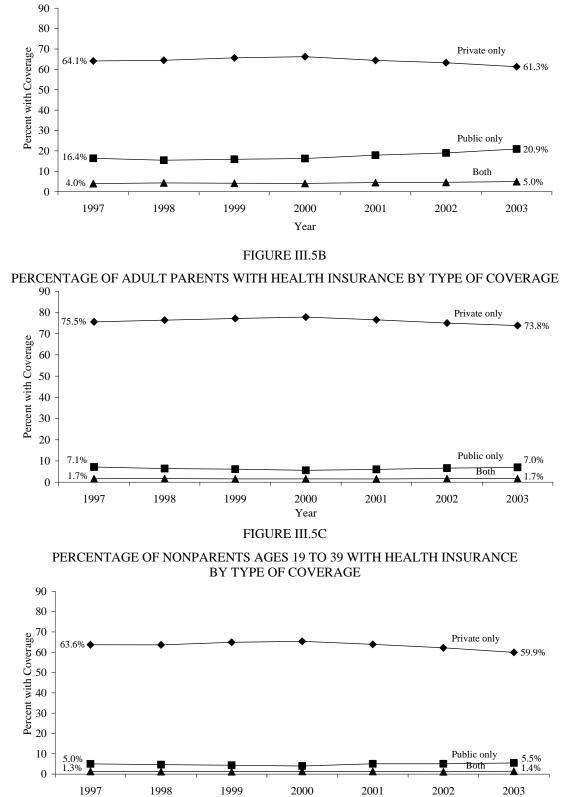
## PERCENTAGE OF CHILDREN, NONELDERLY PARENTS AND NONPARENTS WITH ONLY PRIVATE COVERAGE, BY BROAD POVERTY LEVEL: 1997, 2000, AND 2003

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 and 2001, and 2004 ASEC Supplement.

Note: All estimates use 2000 census-based weights. See Appendix B for details.

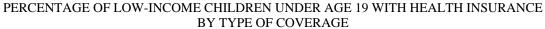


PERCENTAGE OF CHILDREN UNDER AGE 19 WITH HEALTH INSURANCE BY TYPE OF COVERAGE



Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 through 2001, and ASEC Supplement, 2002 through 2004

Year



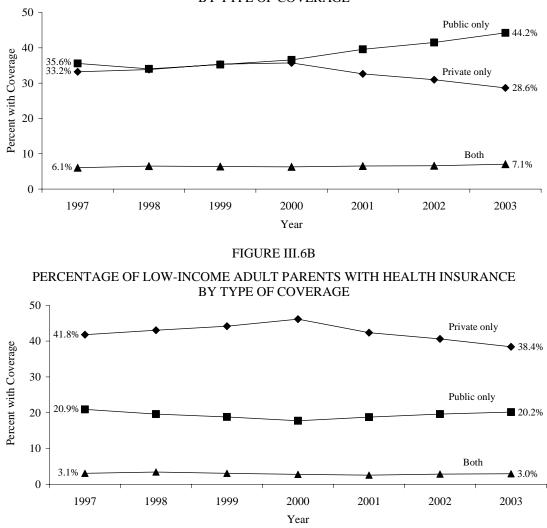
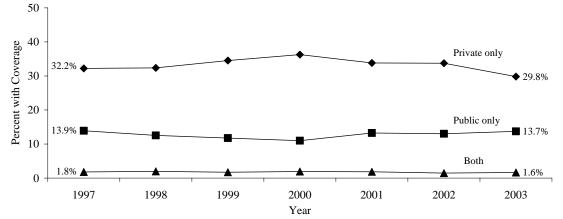


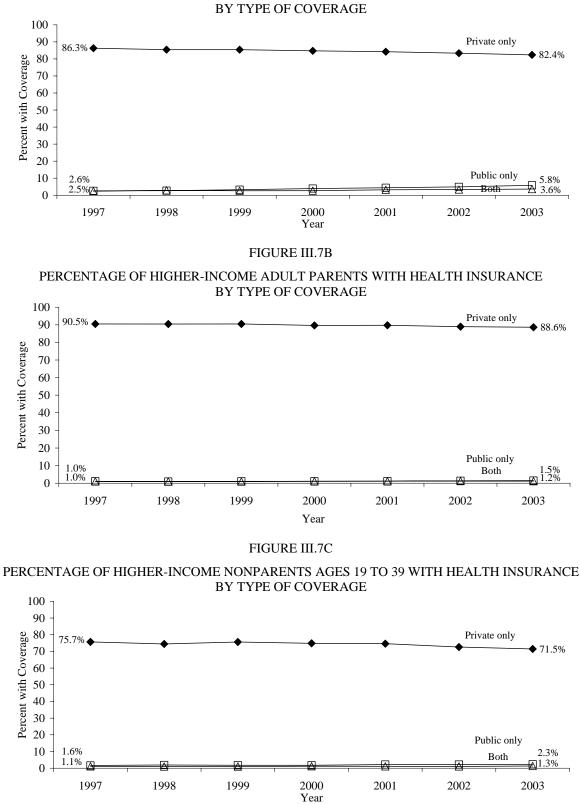
FIGURE III.6C

PERCENTAGE OF LOW-INCOME NONPARENTS AGES 19 TO 39 WITH HEALTH INSURANCE BY TYPE OF COVERAGE



Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 through 2001, and ASEC Supplement, 2002 through 2004.





PERCENTAGE OF HIGHER-INCOME CHILDREN UNDER AGE 19 WITH HEALTH INSURANCE BY TYPE OF COVERAGE

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 through 2001, and ASEC Supplement, 2002 through 2004.

|                  | A                              | Annual Estimates |               |                    | Estimates of Change |              |  |  |
|------------------|--------------------------------|------------------|---------------|--------------------|---------------------|--------------|--|--|
| Poverty Level    | 1997                           | 2000             | 2003          | 1997 to 2000       | 2000 to 2003        | 1997 to 2003 |  |  |
| (Percent of FPL) |                                |                  | Percent       | of Children        |                     |              |  |  |
| Total            | 20.4                           | 20.3             | 25.9          | -0.1               | 5.6*                | 5.5*         |  |  |
| Less than 200    | 41.6                           | 42.9             | 51.3          | 1.3                | 8.4*                | 9.7*         |  |  |
| 200 or more      | 5.1                            | 6.6              | 9.5           | 1.5*               | 2.9*                | 4.4*         |  |  |
|                  | Percent of Parents             |                  |               |                    |                     |              |  |  |
| Total            | 8.8                            | 7.2              | 8.7           | -1.6*              | 1.5*                | -0.1         |  |  |
| Less than 200    | 24.0                           | 20.6             | 23.2          | -3.5*              | 2.6*                | -0.9         |  |  |
| 200 or more      | 2.1                            | 2.2              | 2.6           | 0.1                | 0.4*                | 0.6*         |  |  |
|                  |                                |                  | Percent of No | onparents 19 to 39 |                     |              |  |  |
| Total            | 6.3                            | 5.4              | 6.9           | -1.0*              | 1.5*                | 0.6          |  |  |
| Less than 200    | 15.7                           | 12.9             | 15.4          | -2.8*              | 2.5*                | -0.3         |  |  |
| 200 or more      | 2.7                            | 2.9              | 3.6           | 0.2                | 0.7*                | 0.9*         |  |  |
|                  | Percent of Nonparents 40 to 64 |                  |               |                    |                     |              |  |  |
| Total            | 9.9                            | 10.5             | 10.7          | 0.5                | 0.3                 | 0.8*         |  |  |
| Less than 200    | 29.7                           | 31.6             | 31.5          | 1.9                | -0.1                | 1.7          |  |  |
| 200 or more      | 4.5                            | 5.1              | 5.1           | 0.7*               | 0.0                 | 0.7*         |  |  |

## PERCENTAGE OF CHILDREN, NONELDERLY PARENTS AND NONPARENTS WITH ANY PUBLIC COVERAGE, BY BROAD POVERTY LEVEL: 1997, 2000, AND 2003

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 and 2001, and 2004 ASEC Supplement.

Note: All estimates use 2000 census-based weights. See Appendix B for details.

# E. CHANGES IN THE NUMBER OF CHILDREN WITH AND WITHOUT COVERAGE

To this point, we have focused on changes in rates—that is, uninsured rates and coverage rates by source. We turn now to an analysis of trends in the *number* of children without coverage, as well as trends by type of coverage. First, we explore changes in the population composition that would be likely to affect insurance trends, independent of the implementation of SCHIP. We then examine how the changing demographics affect the number of uninsured children, as well as the number covered by public and private insurance. As shown below, the trends in the number of uninsured children understate the effect of insurance expansions because of demographic changes that occurred concurrently with the implementation of SCHIP.

#### 1. Changes in Population Composition from 1997 to 2003

Four changes to the population of children between 1997 and 2003 are noteworthy because of their implications for tracking the number of uninsured children. First, the number of children grew by 2.1 million, increasing from 75.5 million in 1997 to 77.6 million in 2003 (Table III.7). Second, all the population growth was attributable to Hispanic children, whose numbers increased by 2.3 million over this period, while the number of non-Hispanic children actually decreased by 0.2 million. Third, between 1997 and 2000, the number of low-income children declined by 2.7 million, while the number of higher-income children rose by 3.6 million. Fourth, between 2000 and 2003, the number of low-income children rose by 1.6 million, substantially, but not entirely, reversing the earlier decline, whereas the number of higher-income children fell, but by only a fraction of that amount (0.4 million).

To illustrate the joint impact of these changes, we examined the number of children by Hispanic origin and broad poverty level (below and above 200 percent of the FPL in 1997, 2000, and 2003) (top panel of Table III.7). In 1997, more than two-thirds of Hispanic children were below 200 percent of the FPL. Despite an increase of 1.0 million Hispanic children between 1997 and 2000, the number of low-income Hispanic children declined slightly, while the number of higher-income Hispanic children grew by 1.2 million. In short, the net growth in the population of Hispanic children between 1997 and 2000, however, the low-income Hispanic population added 0.8 million children between 2000 and 2003, while the higher-income Hispanic population added barely half that number, or less than 0.5 million. Over the whole period, the number of low-income Hispanic children grew by 0.7 million, while the number of higher-income Hispanic children grew by 1.7 million.

Among non-Hispanic children, the virtual absence of any net change in population size meant that the changes in the low-income and higher-income subpopulations were offsetting. Between 1997 and 2000, the number of low-income non-Hispanic children decreased by 2.5 million, while the number of higher-income non-Hispanic children grew by 2.4 million. Between 2000 and 2003, the number of low-income non-Hispanic children grew by 0.8 million, while the number of higher-income non-Hispanic children grew by 0.8 million, while the number of higher-income non-Hispanic children are by 0.8 million.

#### NUMBER OF CHILDREN UNDER AGE 19, NUMBER WITHOUT HEALTH INSURANCE, AND INCREMENTS DUE TO CHANGE IN POPULATION SIZE AND UNINSURED RATE, BY HISPANIC ORIGIN AND POVERTY LEVEL: 1997, 2000, AND 2003

|                                   | A  | nnual Estimates |                | E                 | stimates of Char              | ige          |
|-----------------------------------|--|-----------------|----------------|-------------------|-------------------------------|--------------|
| Hispanic Origin and Poverty Level | 1997   | 2000            | 2003           | 1997 to 2000      | 2000 to 2003                  | 1997 to 2003 |
| (Percent of FPL)                  |  |                 | Number of C    | hildren (1,000s)  |                               |              |
| Total                             | 75,461   | 76,386          | 77,598         | 926               | 1,211                         | 2,137*       |
| Hispanic                          |  |                 |                |                   |                               |              |
| Less than 200                     | 8,401  | 8,238           | 9,075          | -163              | 836*                          | 674*         |
| 200 or more                       | 3,775  | 4,986           | 5,441          | 1,211*            | 455                           | 1,665*       |
| Non-Hispanic                      |  |                 |                |                   |                               |              |
| Less than 200                     | 23,171   | 20,622          | 21,392         | -2,549*           | 770                           | -1,779*      |
| 200 or more                       | 40,114   | 42,540          | 41,690         | 2,427*            | -850                          | 1,576*       |
| —                                 |  | Number of C     | Children Witho | out Health Insura | nce (1,000s)                  |              |
| Total                             | 11,726   | 10,318          | 9,947          | -1,408*           | -371                          | -1,779*      |
| Hispanic                          |  |                 |                |                   |                               |              |
| Less than 200                     | 2,933  | 2,610           | 2,415          | -323              | -195                          | -518*        |
| 200 or more                       | 635  | 938             | 867            | 303               | -72                           | 232          |
| Non-Hispanic                      |  |                 |                |                   |                               |              |
| Less than 200                     | 5,011  | 3,563           | 3,695          | -1,447*           | 132                           | -1,315*      |
| 200 or more                       | 3,148  | 3,207           | 2,970          | 58                | -237                          | -179         |
|                                   | Increment to Uninsured Due<br>Population Change (1,000s) |                 |                |                   |                               |              |
| Total                             |  |                 |                |                   |                               | 254          |
| Hispanic                          |  |                 |                |                   |                               |              |
| Less than 200                     |  |                 |                | -57               | 292                           | 235          |
| 200 or more                       |  |                 |                | 203               | 76                            | 280          |
| Non-Hispanic                      |  |                 |                |                   |                               |              |
| Less than 200                     |  |                 |                | -551              | 167                           | -385         |
| 200 or more                       |  |                 |                | 190               | -67                           | 124          |
|                                   |  |                 |                |                   | Increment to Uninsured Due to |              |
|                                   |  |                 |                | Uninsure          | $(1,000s)^{b}$                |              |
| Total                             |  |                 |                | -1,194            | -840                          | -2,034       |
| Hispanic                          |  |                 |                |                   |                               |              |
| Less than 200                     |  |                 |                | -266              | -487                          | -753         |
| 200 or more                       |  |                 |                | 100               | -148                          | -48          |
| Non-Hispanic                      |  |                 |                |                   |                               |              |
| Less than 200                     |  |                 |                | -896              | -35                           | -931         |
| 200 or more                       |  |                 |                | -132              | -170                          | -302         |

#### TABLE III.7 (continued)

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 and 2001, and 2004 ASEC Supplement.

Note: All estimates use 2000 census-based weights. See Appendix B for details.

<sup>a</sup>Product of population change and 1997 uninsured rate by Hispanic origin and poverty level. <sup>b</sup>Difference between the observed change in the number of uninsured and the increment due to population change.

### 2. Changes in the Number of Uninsured Children

Over the seven-year period from 1997 to 2003, the estimated number of uninsured children decreased from 11.7 to 9.9 million, with all this decrease occurring among low-income children (below 200 percent of the FPL) (Table III.7). During this period, the total number of children increased, while the number of low-income children declined in the early years of SCHIP and rose in the later years of SCHIP. Therefore, to track changes in the number of uninsured children independent of changes in the population composition, we need to control for these demographic changes.

To estimate the effect of changing demographics, we applied the uninsured rate in each of the four subpopulations in 1997 to the change in subpopulation size between 1997 and 2000 and between 2000 and 2003. Our results, displayed in the third panel of Table III.7, indicate how much the number of uninsured children in each subpopulation would have increased or decreased as a direct result of the population changes documented in the first panel, if the subpopulation uninsured rates had remained constant. For example, over the seven-year period, the addition of 0.7 million low-income Hispanic children implied 0.2 million more low-income uninsured children, while the addition of 1.7 million higher-income Hispanic children implied 0.3 million more higher-income uninsured children. Similarly, the loss of 1.8 million lowincome non-Hispanic children and the addition of 1.6 million higher-income non-Hispanic children implied a decrease of 0.4 million uninsured low-income children and an increase of 0.1 million higher-income uninsured children, for a net reduction of nearly 0.3 million uninsured children. For the whole population of children, these population shifts implied a reduction of 0.2million uninsured children between 1997 and 2000, but an increase of nearly 0.5 million uninsured children between 2000 and 2003, yielding a net increase of between 0.2 and 0.3 million uninsured children over the seven-year period due to population shifts alone.

We estimate that the reduction in the number of uninsured children would have been even larger if the size and composition of the population of children had not changed as it did. We have seen that the 2.7 percentage point drop in the uninsured rate yielded a reduction of 1.8 million uninsured children before adjusting for population changes. In effect, 0.3 percentage points of the 2.7 percentage point reduction in the uninsured rate were needed to offset the population changes.<sup>17</sup> Thus, accounting for population changes yields a slightly higher estimate of the progress made toward reducing the number of uninsured children—on the order of 2.0 million children (bottom panel of Table III.7)—which equals the observed decline in the number of children without health insurance (1,779,000) plus the additional decline needed to offset the growth due to population changes (254,000).

These estimates reflect the complex interaction between (1) changes in population size (by poverty status and ethnicity) and (2) changes in the take-up of insurance coverage. These results suggest that population changes—notably the increasing number of Hispanic children—would

<sup>&</sup>lt;sup>17</sup> We estimated that 0.3 percentage points were needed to offset the population changes as follows: the net reduction of 0.2 million uninsured children due to population changes is one-ninth of the total reduction in the number of uninsured children (1.8 million); we applied this fraction to the 2.7 percentage point drop in the overall uninsured rate, yielding an estimate that 0.3 points of the 2.7 point reduction were needed to offset the population changes.

have led to a small increase in the number of uninsured children due to higher uninsured rates among Hispanic children. However, the increase due to population changes was offset by the decrease in uninsured rates among all population subgroups between 1997 and 2003. Thus, although the number of low-income children decreased by 1.1 million between 1997 and 2003, the number of uninsured low-income children decreased by an even greater amount (1.8 million) due to increased take-up of public coverage (Medicaid and SCHIP) among low-income children (Figures III.8A to III.8C). The next section highlight changes in the number of children by source of coverage (public and private).

### 3. Changes in the Number of Children by Source of Coverage

Changes in the number of children by source of coverage reflect a varying mix of population changes and rate changes. As Table III.8 shows, the number of children with any public coverage increased substantially over the seven-year period, with nearly all the net increase occurring in the later years.<sup>18</sup> However, the underlying patterns by poverty status were more complex. The level of public coverage remained fairly constant between 1997 and 2000, due to offsetting gains and losses of coverage dominated by children below 200 percent of the FPL. During the economic expansion of the late 1990s, the number of children below 100 percent of the FPL dropped by 2.7 million, producing a corresponding reduction in the number with public coverage (Medicaid), which fell by 1.9 million (Table III.8).<sup>19</sup> There was no change in the number of children between 100 and 200 percent of the FPL, but the number of children with public coverage increased by 1.1 million. Moreover, the level of public coverage increased by 0.8 million among children between 200 and 400 percent of the FPL, despite overall population reductions. With the 1.1 million children added to public coverage between 100 and 200 percent of the FPL, despite overall population reductions. With the 1.1 million children added to public coverage between 100 and 200 percent of the FPL, the net addition to public coverage among all children above the poverty level was nearly 2.0 million, most likely attributable to coverage expansions under SCHIP.<sup>20</sup>

Medicaid administrative statistics confirm that Medicaid poverty-related enrollment, which includes enrollment in SCHIP programs implemented as Medicaid expansions, increased substantially. Poverty-related enrollment, which includes enrollment in SCHIP programs implemented as Medicaid expansions, grew by 3.5 million, from 6.2 to 9.7 million. The fact that administrative statistics show a net growth of 3.5 million children in Medicaid poverty-related enrollment and SCHIP, while the CPS shows a net increase of only 2.0 million, is due in part to

<sup>&</sup>lt;sup>18</sup> See Tables B.9 and B.10 in Appendix B for supplemental data on the number of children with and without health insurance coverage, by poverty level.

<sup>&</sup>lt;sup>19</sup> Among children below poverty, the proportion with any public coverage also declined by about two percentage points (Table B.11, Appendix B), but the drop in the number of children dominated the decline in public coverage.

<sup>&</sup>lt;sup>20</sup> Public coverage at income levels above 200 percent of the FPL may reflect the high eligibility levels in a small number of states or generous income disregards (some states exclude a portion of earnings, for example). However, the CPS measures income over the entire previous calendar year but asks about any health insurance coverage during the year. Thus, a family with income above, say, 300 percent of the FPL could have been below that level for part of the year and above that level for the rest of the year. A child could have obtained public coverage when the family income was below 300 percent of the FPL but had private coverage or no coverage when the family income was above 300 percent of the FPL.

#### FIGURE III.8A

#### NUMBER OF LOW-INCOME CHILDREN: 1997-2003

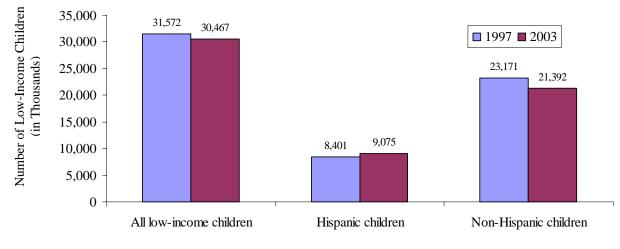
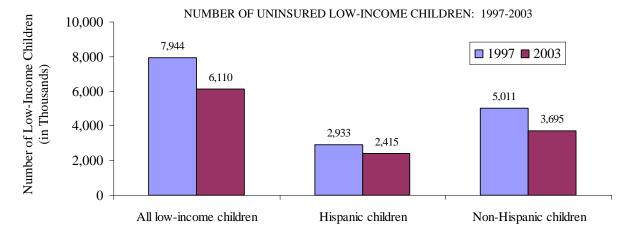
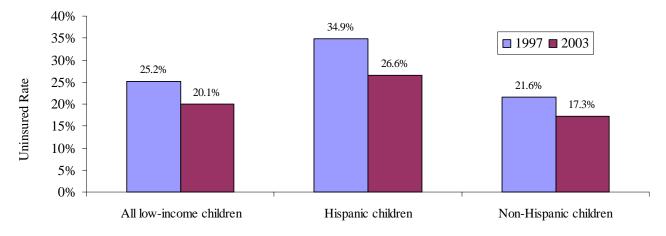


FIGURE III.8B



#### FIGURE III.8C



UNINSURED RATE OF LOW-INCOME CHILDREN: 1997-2003

Source: Mathematica Policy Research, Inc. analysis of 1998 CPS March Supplement and 2004 ASEC Supplement.

the fact that the CPS estimates represent net changes within poverty levels, whereas the administrative statistics show the total change in each eligibility category across all income levels. An additional part of the difference is due to the CPS's underestimation of Medicaid enrollment (discussed in Appendix B).

Unlike public coverage, the growth in private coverage between 1997 and 2000 was due in large part to the shift in population composition, rather than changes in coverage rates. As Table III.8 shows, nearly 2.2 million children gained private coverage between 1997 and 2000. Children above 400 percent of the FPL accounted for this trend, driven entirely by the population growth within the highest income group during the economic boom of the late 1990s. As a result, the net growth in private coverage was substantially greater than the net growth in public coverage during this time period.

Between 2000 and 2003, when economic growth slowed, the number of children below 100 percent of the FPL grew by 1.2 million, while the number above 100 percent of the FPL did not change in the aggregate (Table III.8). In addition to this general downward shift in the poverty distribution, away from poverty levels with high rates of private coverage and into poverty levels with high rates of public coverage, there were changes in coverage rates by source. The proportion of children with private coverage dropped at every poverty level, reflecting changing circumstances that were not limited to children, as the magnitudes of these declines were mirrored among both parents and nonparents under age 40 (see Tables B.11, B.12, and B.13 in Appendix B). At the same time, the proportion of children with public coverage rose at every poverty level. Because of all these changes, the number of low-income children with any public coverage grew by 3.2 million, divided almost evenly between children below and above poverty, while the number with only private coverage declined by 1.6 million, with most of this occurring between 100 and 200 percent of the FPL.

It is clear from these trends in public and private coverage that a substantial safety net role developed for SCHIP after 2000. Most of the substantial growth in public coverage after 2000 offset an almost equally large decline in private coverage. Because children had access to SCHIP and the Medicaid expansions that adults did not, children were able to preserve their earlier gains in coverage and even increase them marginally, while nonelderly adults incurred a substantial reduction in coverage.

## F. CONCLUSION

This analysis has highlighted the role of SCHIP in contributing to recent improvements in children's health insurance coverage, including substantial reductions in both the number and rate of uninsured children. Based on trends from 1997 to 2003, six main pieces of evidence point to SCHIP's success in expanding coverage to low-income children. First, all the declines in uninsured rates by poverty level were limited to children below 250 percent of the FPL, the population that SCHIP specifically targeted. Second, children between 100 and 150 percent of the FPL had the highest uninsured rate in 1997, but, by 2003, their uninsured rate had fallen into line with those of the surrounding income groups. Third, Hispanic children matched the gains in coverage recorded by non-Hispanic white and black children, showing the same proportionate

|                  |        | Annual Estimates |               |                    | Estimates of Change |              |  |  |
|------------------|--------|------------------|---------------|--------------------|---------------------|--------------|--|--|
| Poverty Level    | 1997   | 2000             | 2003          | 1997 to 2000       | 2000 to 2003        | 1997 to 2003 |  |  |
| (Percent of FPL) |        |                  | Number of     | of Children (1,000 | s)                  |              |  |  |
| Total            | 75,461 | 76,386           | 77,598        | 926                | 1,211               | 2,137*       |  |  |
| Less than 200    | 31,572 | 28,860           | 30,467        | -2,712*            | 1,607*              | -1,105       |  |  |
| 200 or more      | 43,889 | 47,526           | 47,130        | 3,637*             | -396                | 3,242*       |  |  |
| Less than 100    | 15,568 | 12,847           | 14,035        | -2,721             | 1,188               | -1,533       |  |  |
| 100 to < 200     | 16,004 | 16,013           | 16,432        | 10                 | 418                 | 428          |  |  |
| 200 to < 400     | 25,295 | 25,078           | 24,413        | -217               | -665                | -882         |  |  |
| 400 or more      | 18,593 | 22,448           | 22,717        | 3,854              | 270                 | 4,124        |  |  |
|                  |        | Number of        | Children with | Any Public Cover   | rage (1,000s)       |              |  |  |
| Total            | 15,364 | 15,498           | 20,093        | 134                | 4,595*              | 4,729*       |  |  |
| Less than 200    | 13,139 | 12,380           | 15,629        | -759               | 3,249*              | 2,489*       |  |  |
| 200 or more      | 2,224  | 3,118            | 4,464         | 894*               | 1,346*              | 2,240*       |  |  |
| Less than 100    | 9,174  | 7,289            | 9,032         | -1,885             | 1,743               | -142         |  |  |
| 100 to < 200     | 3,966  | 5,091            | 6,597         | 1,126              | 1,505               | 2,631        |  |  |
| 200 to < 400     | 1,660  | 2,454            | 3,498         | 794                | 1,044               | 1,838        |  |  |
| 400 or more      | 564    | 664              | 966           | 100                | 302                 | 402          |  |  |
|                  |        | Number of        | Children with | Only Private Cove  | rage (1,000s)       |              |  |  |
| Total            | 48,371 | 50,570           | 47,558        | 2,199*             | -3,012*             | -813         |  |  |
| Less than 200    | 10,489 | 10,307           | 8,728         | -182               | -1,579*             | -1,761*      |  |  |
| 200 or more      | 37,882 | 40,263           | 38,830        | 2,381*             | -1,433*             | 948          |  |  |
| Less than 100    | 2,418  | 2,409            | 2,069         | -9                 | -339                | -348         |  |  |
| 100 to < 200     | 8,071  | 7,898            | 6,659         | -173               | -1,240              | -1,413       |  |  |
| 200 to < 400     | 20,885 | 19,712           | 18,358        | -1,173             | -1,354              | -2,527       |  |  |
| 400 or more      | 16,997 | 20,551           | 20,472        | 3,554              | -79                 | 3,475        |  |  |

#### NUMBER OF CHILDREN UNDER AGE 19 AND NUMBER WITH ANY PUBLIC COVERAGE OR ONLY PRIVATE COVERAGE, BY POVERTY LEVEL: 1997, 2000, AND 2003

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 and 2001, and 2004 ASEC Supplement.

Note: All estimates use 2000 census-based weights. See Appendix B for details.

reduction (and a much higher absolute reduction) in their uninsured rate.<sup>21</sup> Fourth, adolescents had the largest gains in coverage, compensating for their lower rates of coverage before SCHIP. Fifth, at the same time that children's uninsured rates were falling, nonelderly adults had a significant two percentage point increase in their overall uninsured rate; low-income nonelderly adults had an even greater increase, at nearly three percentage points; and low-income parents of children under age 19 had a four percentage point increase. Finally, three-quarters of the decline in the overall uninsured rate and the low-income uninsured rate among children occurred between 1997 and 2000, when the economy was expanding, but the contrast between children and adults was actually greater between 2000 and 2003, when economic growth had slowed.

This analysis has shown the importance of placing children's health insurance coverage trends in the context of broader population shifts and coverage trends. In particular, between 2000 and 2003, there was a downward shift in the income distribution due to the economic slowdown; this contributed to growth in public coverage and declines in private coverage when combined with secular changes in coverage rates. Among children, public coverage grew between 5 and 10 percentage points at every poverty level below 300 percent of the FPL and by smaller margins above that level. Private coverage declined by 5 to 10 percentage points between 50 and 200 percent of the FPL and by 1 to 4 percentage points outside that range. The declines in private coverage among children were echoed among parents and younger nonparents, but the gains in public coverage among these adult groups were much smaller. This suggests that the declines in private coverage.

These findings also are consistent with secular trends in private coverage. During the 2000 to 2003 period, we observed that private coverage rates fell within poverty levels, suggesting that people moving into a given poverty stratum had a lower coverage rate than the people already there. These trends likely reflect changes in the availability of employer-sponsored coverage, independent of the availability of SCHIP or other public coverage. In their analysis of trends in health insurance coverage among nonelderly Americans between 1994 and 2000, Holahan and Pohl (2002) observed that, despite the economic growth of the 1990s, middle-income Americans (between 200 and 400 percent of the FPL) in 2000 were less likely to hold employer-sponsored coverage and more likely to be uninsured than in 1994. Noting in particular the income growth of the late 1990s, they speculated that the rate of employer-sponsored coverage fell, nevertheless, because families whose rising wages moved them above 200 percent of the FPL did not obtain coverage at the same rate as the families they joined. Holahan and Ghosh (2004) further explained the erosion of employer-sponsored coverage between 2000 and 2003 by showing reductions in both the proportion of the population working and the proportion of workers who had coverage. They cited several factors as contributing to the reduction in coverage among workers: (1) health insurance premiums grew faster than wages, (2) the proportion of small- and medium-sized businesses that offered health insurance declined, (3) employment shifted from industries with historically high rates of coverage to industries with historically low rates of coverage, and (4) employment shifted from large- and mid-sized firms to small firms and selfemployment, where coverage was historically low. The CMS national evaluation of SCHIP did

<sup>&</sup>lt;sup>21</sup> Nevertheless, Hispanic children continue to have a higher uninsured rate than other children. However, it is not possible to determine how many Hispanic children are ineligible for public coverage due to their citizenship status.

not examine the effect of health insurance premiums and other cost sharing on reductions in coverage. Such an analysis was out of the scope of this study.

Our results can be extrapolated to estimate how much the uninsured rate would have risen between 2000 and 2003 in the absence of SCHIP. If public coverage rates among children had grown by no more than the increases we observed among parents, while private coverage rates still declined by the amounts that we observed among children, we estimate that the uninsured rate would have risen by 3.3 percentage points, instead of declining by 0.7 percentage points, and the number of uninsured children would have grown by 2.7 million, rather than declining by 0.4 million.<sup>22</sup> This provides a direct measure of how much the higher growth rates of public coverage among children than among parents affected the trends in children's coverage between 2000 and 2003. However, it is not possible to determine whether some of these children or families may have taken up private insurance if enrolling in SCHIP were not an option.

This analysis illustrates how SCHIP enabled low-income children to achieve and maintain an increased level of health insurance coverage during the late 1990s and early 2000s. These trends are in stark contrast to coverage trends among nonelderly adults, including parents of children under age 19, who attained only marginal improvement through the economic expansion during SCHIP's early years, then experienced a significant erosion of coverage as the economy entered a recession during the later years of SCHIP. This analysis provides useful information about how SCHIP offered a safety net to low-income children who otherwise would have been uninsured as the availability of employer-sponsored coverage continued to erode.

<sup>&</sup>lt;sup>22</sup> This estimate is based on an analysis of trends in public and private coverage among children and nonelderly parents from 2000 to 2003 using data from the Current Population Survey (see Tables III.5 and III.6).

## IV. ACCESS TO HEALTH CARE IN SCHIP

There can be no doubt that the State Children's Health Insurance Program (SCHIP) expanded health insurance coverage for many low-income children who would have been uninsured if SCHIP did not exist. However, health insurance coverage alone does not ensure access to needed health services. Measuring whether SCHIP increases access to care requires that we look beyond the level of coverage to examine changes in access to care.

Title XXI required states to specify strategic objectives, performance goals, and performance measures. It also required states to submit annual reports to the Centers for Medicare & Medicaid Services (CMS) describing progress in meeting their performance goals. Related to this, many states have sponsored studies (including surveys and analyses of claims/encounter data) as part of their own monitoring and evaluation efforts. In addition, researchers have devoted considerable attention to analyzing the effects of SCHIP on access to care. Two major efforts are (1) the Children's Health Insurance Research Initiative (CHIRI), jointly sponsored by the Agency for Healthcare Research and Quality (AHRQ) and the Packard Foundation (Agency for Healthcare Research and Quality 2003); and (2) the congressionally mandated 10-state evaluation, funded by the the U.S. Department of Health and Human Services, Assistant Secretary for Planning and Evaluation (Wooldridge et al. 2005).

In keeping with the flexibility offered by Title XXI, each state set its own objectives and goals and developed its own measures to track performance. As a result, the measures varied substantially across states, limiting the potential for monitoring of performance at the national level. CMS recognized these limitations and, in 2002, convened the Performance Measurement Partnership Project (PMPP) as a collaborative effort between federal and state officials to develop a national set of performance measures in Medicaid and SCHIP. The PMPP recommended a core set of seven national performance measures consisting of four child health and three adult measures. CMS requested that states report available data on these measures beginning in their federal fiscal year (FFY) 2003 annual SCHIP reports.

The CMS national evaluation of SCHIP gathered evidence about access to care in SCHIP through many sources, including a comprehensive synthesis of the literature, abstraction of data on selected state-specific performance measures from state annual SCHIP reports, analysis of the four core child health performance measures, and focus groups in eight states. This chapter presents evidence on access to care in SCHIP based on these sources (Shulman et al. 2004; Quinn and Rosenbach 2005; Day et al. 2005; Rosenbach et al. 2006; Shulman et al. 2006).

This chapter contains four sections. Section A reviews the main conclusions of the literature synthesis about access to care in SCHIP, while Section B presents an in-depth analysis on two measures—the availability of a usual source of care and access to dental care—based on evidence from the state annual SCHIP reports and focus groups in eight states. Section C summarizes key findings related to performance measurement in SCHIP, including comparisons with Medicaid and commercial health plan performance. Finally, Section D summarizes the main findings on access to care based on the evidence gathered in the CMS national evaluation of SCHIP.

## A. SYNTHESIS OF EVIDENCE ON THE EFFECT OF SCHIP ON ACCESS TO CARE

As part of the CMS evaluation, we reviewed studies that assessed how access to care changed for children when they enrolled in SCHIP. We conceptualized access to care in SCHIP according to the three dimensions reflected in the evaluation framework: potential, realized, and perceived access (see Figure I.1 in Chapter I). Potential access refers to factors that may facilitate utilization when health care is needed—such as having a usual source of care. Realized access reflects utilization outcomes, such as increased preventive care use, increased provider or specialist visits, and decreased emergency department use. Perceived access refers to experiences or observations that may signal the adequacy of access—such as the level of unmet need or delays in receiving care. Individual measures of access may be imperfect (for example, increased utilization does not necessarily mean appropriate access, while the level of unmet need may reflect parents' subjective expectations). However, when these measures are considered together, they tell a more complete story of the effects of coverage on access to care.

We conducted a comprehensive search of the literature and identified 15 studies that met the following three criteria: (1) the study population included a clearly defined sample of SCHIP enrollees; (2) the study evaluated at least one measure of potential, realized, or perceived access; and (3) the study design measured a change in access to care associated with SCHIP enrollment. These studies cover 14 states, representing the experience of nearly two-thirds of the SCHIP population.

As Table IV.1 shows, SCHIP enrollment was associated with an increased likelihood of having a usual source of care (potential access) and widespread reductions in unmet need and delayed care (perceived access). Evidence was mixed for the measures of utilization (realized access)—some studies found a significant positive effect, but others observed no effect of SCHIP on provider visits, preventive care, and emergency department use. Only one study (in one state) found a significant positive effect of SCHIP on specialty visits. Although the magnitude of the improvements in access varied according to the study and the measure, most exceeded 10 percent.

Figure IV.1 highlights the results from 10 studies on changes in unmet need associated with enrollment in SCHIP, providing the most systematic evidence of improved access across any of the measures in the literature synthesis. The magnitude of reductions in unmet need and/or delayed care was large, with all states except one achieving a decrease of 50 percent or more. (New York's rate decreased by 39 percent.) These results are consistently strong, regardless of the definition of the measure. (Some states referred to the percent with any unmet need, while others referred to the percent with unmet need or delayed care.) As Figure IV.1 shows, six studies reported post-SCHIP rates for unmet need at or below the Healthy People 2010 goal of seven percent or less. California and the 10-state SCHIP evaluation were within two percentage points of the goal. Although New York had a significant reduction in unmet need, the rate remained well above the Healthy People 2010 goal, possibly reflecting its very high baseline rate.

### TABLE IV.1

### CHANGES IN CHILDREN'S ACCESS TO CARE WITHIN SCHIP, BY STATE

|                                |                            | Potential<br>Access     |                                 | Perceived Access |                |   |   |
|--------------------------------|----------------------------|-------------------------|---------------------------------|------------------|----------------|---|---|
| State                          | Study                      | Usual Source<br>of Care | Provider<br>Visits <sup>a</sup> | Preventive Care  | Specialty Care | Reduction of<br>Emergency<br>Department Use | Reduction of<br>Unmet Need or<br>Delayed Care |
| Alabama                        | Mulvihill et al. (2000)*   | +                       |                                 |                  |                |   | +   |
| California                     | Stevens (2006)             | +                       | 0                               |                  |                |   | +   |
|                                | Kenney et al. (2005)       | +                       | 0                               | 0                | 0              | 0   | +   |
|                                | MRMIB (2004)*              | +                       |                                 |                  |                |   | +   |
| Colorado                       | Kempe et al. (2005)        | 0                       | Mixed <sup>b</sup>              | +                | 0              | 0   | +°  |
|                                | Kenney et al. (2005)       | +                       | +                               | 0                | 0              | 0   | +   |
|                                | Eisert and Gabow (2002)    |                         | +                               | +                | 0              | 0   |   |
| Florida                        | Kenney et al. (2005)       | +                       | 0                               | 0                | 0              | +   | +   |
|                                | Nogle and Shenkman (2004)* | +                       |                                 |                  |                |   | $+^{d}$                                       |
|                                | Shenkman et al. (2000)     | +                       |                                 | +                |                |   | +   |
| Illinois                       | Kenney et al. (2005)       | 0                       | 0                               | 0                | 0              | 0   | +   |
| Iowa                           | Damiano and Tyler (2005)   | 0                       | Mixed <sup>e</sup>              |                  |                | 0   | +   |
|                                | Damiano et al. (2003)      | +                       |                                 |                  |                |   | +   |
| Kansas                         | Fox et al. (2003)          | +                       | +                               | +                |                | +   | +   |
| Louisiana                      | Kenney et al. (2005)       | +                       | +                               | +                | 0              | +   | +   |
| Missouri                       | Kenney et al. (2005)       | 0                       | 0                               | 0                | 0              | 0   | +   |
| New Hampshire                  | RKM (2004)*                | +                       |                                 | +                |                |   | +   |
| New Jersey                     | Kenney et al. (2005)       | +                       | 0                               | 0                | 0              | +   | +   |
| New York                       | Kenney et al. (2005)       | 0                       | 0                               | 0                | 0              | 0   | +   |
|                                | Szilagyi et al. (2004)     | +                       | +                               | +                | 0              | 0   | +   |
| North Carolina                 | Kenney et al. (2005)       | +                       | +                               | 0                | +              | 0   | +   |
|                                | Slifkin et al. (2002)      | +                       |                                 | 0                |                | 0   | +   |
| Texas                          | Kenney et al. (2005)       | +                       | 0                               | 0                | 0              | +   | +   |
|                                | Shenkman (2003)*           | +                       |                                 |                  |                |   | +   |
| 10-state estimate <sup>f</sup> | Kenney et al. (2005)       | +                       | 0                               | 0                | 0              | +   | +   |

Note: Except where noted, the (+) symbol indicates that the study reported that SCHIP had a statistically significant positive effect on the access measure; the (-) symbol represents a statistically significant negative effect; (0) indicates no effect. Shading indicates the access measure was not evaluated in the study.

\* Indicates statistical significance testing not performed.

<sup>a</sup>Provider visits defined as the average number of provider visits for Eisert and Gabow (2002), Damiano and Tyler (2005), Fox et al. (2003), and Szilagyi et al. (2000). Provider visits defined as the percent of enrollees with <u>any</u> provider visits in the past year for all other studies.

<sup>b</sup>The percent of children with any routine care significantly increased, however the average number of routine visits did not change.

<sup>c</sup>Delays in care were measured among those who sought care when sick or injured and those who sought routine care.

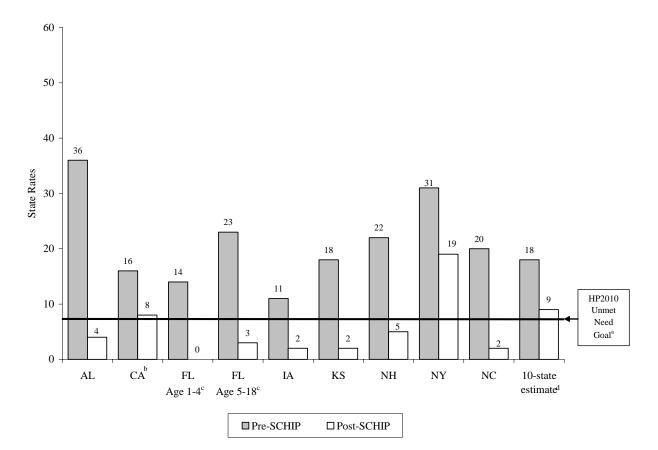
TABLE IV.1 (continued)

<sup>d</sup>Delays in care were reduced in all categories measured, including preventive care, minor illness, and surgical care.

<sup>e</sup>The distribution of the average number of provider visits changed significantly, with fewer children having one visit or less and fewer children having more than 10 visits, but more children having between 2 and 9 visits per year.

<sup>f</sup>Aggregate findings from California, Colorado, Florida, Illinois, Louisiana, Missouri, New Jersey, New York, North Carolina, and Texas.

#### FIGURE IV.1



CHANGE IN PERCENTAGE OF CHILDREN WITH UNMET NEED PRE- AND POST-SCHIP, BY STATE

- Sources: Alabama: Mulvihill et al. (2000); California: Managed Risk Medical Insurance Board (2004); Florida: Nogle and Shenkman (2004); Iowa: Damiano and Tyler (2005); Kansas: Fox et al. (2003); New Hampshire: RKM (2004); New York: Szilagyi et al. (2004); North Carolina: Slifkin et al. (2002); 10-state estimate: Kenney et al. (2005).
- Notes: We reference the most recent bivariate data in this chart if data were available from more than one source for a state. The California and New York studies defined unmet need as pertaining to all health care; all other studies defined unmet need as pertaining to medical care. The 10-State estimate reflects the aggregate change for the 10 study states in Kenney et al. (2005).

<sup>a</sup>Healthy People 2010 goal that 7 percent or less of the population experiences a delay in care or has an unmet health need by 2010. This goal is part of the U.S. Department of Health and Human Services' Healthy People 2010 initiative to establish national public health goals (U.S. Department of Health and Human Services 2000b).

<sup>b</sup>Unmet need or delayed care.

<sup>c</sup>Florida reported unmet need in six categories of health care; this represents the level of unmet need for surgical care or medical procedures, separately for children 1-4 and 5-18 years of age.

<sup>d</sup>The 10-state estimate reported unmet need in eight categories of health care; this represents the level of unmet need for hospital, specialist, doctor, and drug care, combined.

Many of the SCHIP access studies included analyses within subgroups of the SCHIP population, permitting an assessment of how selected vulnerable populations may have fared in the program (data not shown). Two subgroups—the long-term uninsured (that is, those without coverage for more than six months before SCHIP) and adolescents—had the greatest gains in access under SCHIP. Two other subgroups—children with special health care needs and children of minority race/ethnicity—were less likely to experience consistent gains.

These findings provide strong evidence that children enrolled in SCHIP, particularly those least likely to have health insurance coverage before SCHIP, experienced improved access. Although disparities have been reduced for children with special health care needs and those of minority race/ethnicity, substantial gaps still remain, as measured by higher levels of unmet need within these populations. This review suggests that expansion of SCHIP alone may not be able to resolve the long-standing gaps in access. Additional strategies may be needed to further reduce barriers to care for these populations. This review also suggests the need for additional research to examine the link between improvements in access and the effect on health outcomes (such as improved health status and functional status).

# B. IN-DEPTH STUDIES OF SCHIP'S ROLE IN FACILITATING ACCESS TO A USUAL SOURCE OF CARE AND DENTAL CARE

As required by Title XXI, all states' child health plans included strategic objectives and performance measures related to improving access to care among SCHIP enrollees. Although the objectives varied across states, two were specified by most states: (1) ensuring that SCHIP enrollees have a usual source of care, and (2) increasing access to dental care. The CMS national evaluation of SCHIP included in-depth studies of SCHIP's role in facilitating access to a usual source of care and dental care. Both studies involved abstracting data from the state SCHIP annual reports and analyzing evidence from focus groups in eight states.<sup>1</sup> This section summarizes the main findings from the two studies. More detailed descriptions of the methods and results are available in the full reports (Quinn and Rosenbach 2005; Shulman et al. 2004).

### 1. Evidence on SCHIP's Role in Providing a Usual Source of Care

SCHIP strives to provide children with a usual source of care, serving as a bridge between providing coverage and promoting access. Having a usual source of care has been linked to many positive outcomes—such as increased use of preventive care, decreased use of emergency room care, and better continuity of care—and has been considered an important goal for children's health care since the 1960s (Sia et al. 2004). However, no standard definition of "a usual source of care" exists, although it is frequently described as a usual *place* where a child receives sick or routine care or a usual *person* who provides that care.

<sup>&</sup>lt;sup>1</sup> The criteria for inclusion of state estimates in the two in-depth studies differ from those used for the literature synthesis discussed in Section A. Whereas the literature synthesis focused on research that examined *changes* in access, the two in-depth studies included *point-in-time* estimates of access and did not require states to measure changes. Therefore, the number of states in the two in-depth studies is higher than the number in the literature synthesis.

Our analysis focused on the 17 states that reported the percent of SCHIP enrollees with a usual person or place of care (Table IV.2).<sup>2</sup> Ten states reported the percent of SCHIP children who had a usual *person* from whom they received care, with results ranging from 67 to 96 percent. In addition, five states reported the percent of SCHIP children who had a usual *place* for care, with results ranging from 81 to 99 percent. (Two states did not specify whether their data represented a usual place was higher than the percent with other data sources, the percent of children with a usual place was higher than the percent with a usual person, given that families are more likely to identify a place they go for care as opposed to a specific provider at that place (U.S. Department of Health and Human Services 2000b).

Healthy People 2010 provides benchmarks against which SCHIP usual source of care rates can be compared. These goals specify that, by 2010, 85 percent of all people should have a usual primary care provider, and 97 percent of all children should have a usual place for health care other than the hospital emergency room. Figures IV.2 and IV.3 compare the performance of state SCHIP programs to the Healthy People 2010 goals. Six of the 10 states reporting data on the percent of children with a usual person exceeded the Healthy People 2010 goal for a usual provider, and 2 of the 5 states surpassed the Healthy People 2010 goal for a usual place.

Six of the 17 states assessed changes in the percent of enrollees who had a usual source of care before and after SCHIP enrollment (data not shown). Five of the six states showed substantial increases in the percentage of children with a usual source of care—ranging from 6 to 29 percentage points. The sixth state showed no change, but its rate exceeded the Healthy People 2010 goal both before and after SCHIP.

According to focus groups in eight states, families reported that they valued having a usual source of care for their children. Families felt that having a usual source of care made it easier for doctors to be familiar with children's medical histories and thereby aided diagnosis and treatment of ailments. In addition, medical appointments were less frightening to young children when they were familiar with the doctor. Although families confirmed that SCHIP has succeeded in providing a usual source of care to many children, some barriers remained. Parents described administrative troubles, such as practices not accepting new patients or some providers in a practice not accepting SCHIP. Other parents described concerns about maintaining continuity in a usual source of care (for example, when their children switched between SCHIP).

<sup>&</sup>lt;sup>2</sup> Altogether, 44 states and the District of Columbia reported at least one measure related to the provision of a usual source of care in one or more of their SCHIP annual reports for FFY 1999 through 2003. Only 17 states measured the percent of enrollees with a usual source of care. Other states reported delivery system characteristics (for example, the percent of counties with health maintenance organization [HMO] coverage), physician participation data, or utilization data (such as percent who visited an emergency room or a primary care provider). We excluded these measures because they do not directly gauge the provision of a usual source of care.

### TABLE IV.2

| State             | Program Type<br>and Dominant<br>Delivery<br>System | Date of<br>Survey | Sample Size<br>and Response<br>Rate | Definition of Usual<br>Source of Care               | Percent of SCHIP<br>Enrollees with a<br>Usual Source of<br>Care |
|-------------------|--|-------------------|-------------------------------------|---|---|
|                   | States 1   | Reporting the P   | ercent of Childro                   | en With a Usual Person                              | •   |
| Alaska            | FFS Res  |                   | n = 1,998<br>Response<br>rate: 70%  | Personal<br>physician/nurse                         | 67  |
| California        | COMBO<br>MC  | 2002              | n = 6,005<br>Response<br>rate: 87%  | Personal physician                                  | 67  |
| Iowa              | COMBO<br>MIXED                                     | 2001 to 2003      | n = 1,698                           | Personal doctor/nurse                               | 86  |
| North<br>Carolina | S-SCHIP<br>FFS                                     | 2000              | n = 923<br>Response<br>rate: 40%    | Personal doctor/nurse                               | 72  |
| North<br>Dakota   | COMBO<br>PCCM                                      | 2003              | NA                                  | Personal doctor/nurse                               | 78  |
| Ohio              | M-SCHIP<br>FFS                                     | 2001              | $n = 3,900^{a}$                     | Personal doctor/nurse                               | 90  |
| Rhode<br>Island   | M-SCHIP<br>MC                                      | 2001              | n = 1,485<br>Response<br>rate: 32%  | Regular doctor                                      | 96  |
| Texas             | COMBO<br>MC  | 2002              | NA                                  | Usual pediatrician/<br>family practice<br>physician | 94  |
| Utah              | S-SCHIP<br>MC                                      | 2002              | Age 0-12<br>n = 1,013               | Personal doctor/nurse                               | 86  |
| Wyoming           | S-SCHIP<br>FFS                                     | 2002 <sup>b</sup> | n = 247<br>Response<br>rate: 16%    | Regular doctor                                      | 85  |
|                   | States   | Reporting the l   | Percent of Childr                   | en With a Usual Place                               |   |
| Florida           | COMBO<br>MC  | 2003 <sup>b</sup> | NA                                  | Usual place   | Over 95   |
| Maine             | COMBO<br>PCCM                                      | 2000              | n = 806<br>Response<br>rate: 72%    | Regular doctor's office/health center               | 98  |
| Missouri          | M-SCHIP<br>MIXED                                   | 1999 <sup>b</sup> | n = 2,414                           | Regular doctor/clinic                               | 91  |
| New<br>Hampshire  | COMBO<br>MC  | 2001 <sup>b</sup> | S-SCHIP only                        | Usual place   | 99  |
| Virginia          | S-SCHIP<br>MC                                      | 2001              | n = 1,257                           | Particular place for routine care                   | 81  |

### PERCENT OF SCHIP ENROLLEES WITH A USUAL SOURCE OF CARE IN 17 STATES

| State                                    | Program Type<br>and Dominant<br>Delivery<br>System | Date of<br>Survey | Sample Size<br>and Response<br>Rate | Definition of Usual<br>Source of Care | Percent of SCHIP<br>Enrollees with a<br>Usual Source of<br>Care |  |  |  |
|--|--|-------------------|-------------------------------------|---------------------------------------|---|--|--|--|
| States Not Defining Usual Source of Care |  |                   |                                     |                                       |   |  |  |  |
| Alabama                                  | S-SCHIP<br>FFS                                     | 2003              | NA                                  | Undefined                             | 92  |  |  |  |
| West<br>Virginia                         | COMBO<br>FFS                                       | 2000              | NA                                  | Undefined                             | 60  |  |  |  |

Source: Original analysis of state SCHIP annual reports from FFY 1999 through 2003 by Mathematica Policy Research, Inc.

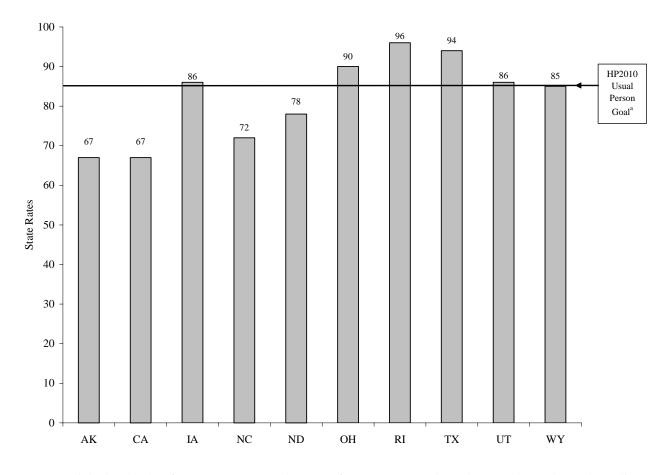
Notes: M-SCHIP denotes that the state operates a Medicaid expansion program; S-SCHIP denotes that the state operates a separate child health program; COMBO denotes that the state operates both an M-SCHIP and an S-SCHIP program. Dominant delivery system is defined according to the type of system accounting for two-thirds or more of SCHIP enrollees in FFY 2003, based on the SCHIP Enrollment Data System (SEDS). MC denotes managed care; PCCM denotes primary care case management; FFS denotes fee-for-service; and MIXED denotes a mixed system in which no single type accounts for more than two-thirds of SCHIP enrollees. Data should not be compared across states due to measurement differences.

NA = not available.

<sup>a</sup>Count is approximate.

<sup>b</sup>Date of annual report in which the survey was presented. Date of survey not reported.

### FIGURE IV.2

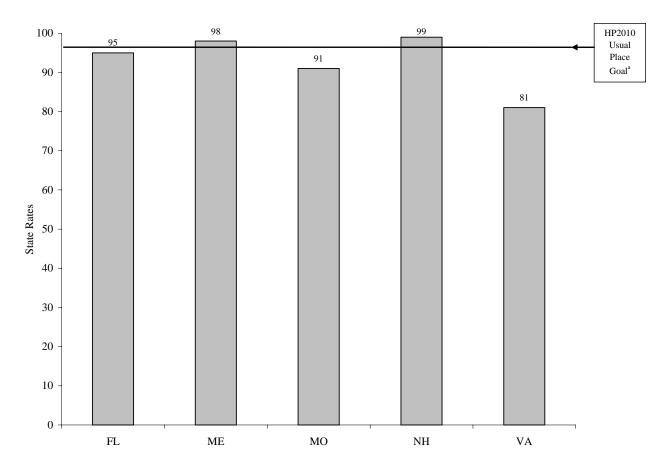


### PERCENT OF SCHIP ENROLLEES WITH A USUAL SOURCE OF CARE, WHERE "USUAL SOURCE" IS DEFINED AS A USUAL PERSON

Source: Original analysis of state SCHIP annual reports from FFY 1999 through 2003 by Mathematica Policy Research, Inc.

<sup>a</sup>Healthy People 2010 goal that 85 percent of all people should have a usual primary care provider. This goal is part of the U.S. Department of Health and Human Services' Healthy People 2010 initiative to establish national public health goals (U.S. Department of Health and Human Services 2000b).

### FIGURE IV.3



### PERCENT OF SCHIP ENROLLEES WITH A USUAL SOURCE OF CARE, WHERE "USUAL SOURCE" IS DEFINED AS A USUAL PLACE

Source: Original analysis of state SCHIP annual reports from FFY 1999 through 2003 by Mathematica Policy Research, Inc.

<sup>a</sup>Healthy People 2010 goal that 97 percent of all children should have a usual place for health care other than the hospital emergency room. This goal is part of the U.S. Department of Health and Human Services' Healthy People 2010 initiative to establish national public health goals (U.S. Department of Health and Human Services 2000b).

Although states varied in how they defined and measured the presence of a usual source of care among SCHIP enrollees, this indicator provides an important barometer of parents' perceptions of access to care. State monitoring efforts suggest that progress has been made because the usual source of care rate was higher after children enrolled in SCHIP than before, and many states had exceeded, or were nearing, the Healthy People 2010 goals for their SCHIP enrollees. Future efforts to monitor access to a usual source of care would benefit from greater standardization and consistency across states in the measurement of this indicator.

### 2. Evidence of SCHIP's Role in Facilitating Access to Dental Care

Access to dental care—including both preventive and restorative care—is integral to the overall health and well-being of children, contributing to healthy growth and positive educational, economic, and social outcomes (U.S. Department of Health and Human Services 2000a). Before SCHIP was enacted, low-income children were far less likely to have a dental visit than children of other incomes (Agency for Healthcare Research and Quality 2003). Inadequate access to dental insurance accounted for much of the disparity in access to dental care by income (U.S. Department of Health and Human Services 2000a). SCHIP offered states a unique opportunity to address the lack of dental coverage among low-income children. As of 2003, every state except Delaware had opted to offer some type of dental coverage within SCHIP. Many states cited the importance of dental care to child health and development as the main reason they adopted this benefit.

Of the 21 states reporting dental visit rates in their SCHIP annual reports, 16 reported 12month dental visit rates, 4 reported 6-month visit rates, and 1 reported both types of rates (Table IV.3). The 12-month rates ranged from 17 to 76 percent. Seven of the 17 states surpassed the Healthy People 2010 goal of 57 percent of low-income children reporting at least one dental visit each year (Figure IV.4). Some differences across states may be due to methodological variation; all but one of the states that reported rates exceeding the Healthy People 2010 goal relied on survey data that may be more prone to overreporting bias when compared to claims data.<sup>3</sup> There was also substantial variation in utilization rates by SCHIP program type. None of the states with Medicaid expansion SCHIP (M-SCHIP) programs appear to have reached the Healthy People 2010 goal. In contrast, two of the five separate child health (S-SCHIP) programs and five of the seven combination SCHIP programs surpassed the goal.<sup>4</sup> As Figure IV.4 shows, all the M-SCHIP programs relied on claims data, whereas the five combination programs surpassing the goal reported survey data, as did one of the two S-SCHIP programs. Therefore, it is not possible to discern whether these distinctions reflect the reporting differences of these programs or a program type effect.

<sup>&</sup>lt;sup>3</sup> Several studies suggest that surveys tend to report higher rates of utilization than do claims data, due to recall error (see, for example, Fowles et al. 1997, 1999; May and Tontell 1998; Thompson et al. 2001).

<sup>&</sup>lt;sup>4</sup> Of the seven combination programs shown in Figure IV.4, five reported rates for the separate child health program (S-SCHIP) component only, and one reported a rate for all publicly insured children in the state. Of the five Medicaid expansion (M-SCHIP) programs shown in Figure IV.4, four reported rates for a combined Medicaid and SCHIP population.

### TABLE IV.3

## DENTAL VISIT RATES IN STATE SCHIP PROGRAMS: PERCENT OF CHILDREN WITH A DENTAL VISIT IN THE PAST SIX MONTHS OR THE PAST YEAR

| State             | Program<br>Type <sup>a</sup> | Reporting<br>Year | Data Source       | Data Source Notes<br>(where reported)  | Percent Receiving<br>Dental Care in Past<br>Six Months | Percent Receiving<br>Dental Care in Past Year |
|-------------------|------------------------------|-------------------|-------------------|--|--|---|
| Alabama           | СОМВО                        | 2001-2002         | Survey            | Response rate: 55%<br>Population: S-SCHIP only   |  | 76% <sup>b</sup>                              |
| Alaska            | M-SCHIP                      | 2001              | Survey            | n = 1,072<br>Response rate: 64%<br>Population: Medicaid and<br>SCHIP combined              | 52%  |   |
| Arkansas          | M-SCHIP                      | 1999-2000         | Claims            | Ages 4-21<br>Population: Medicaid and<br>SCHIP combined                                    |  | 46%   |
| Arizona           | S-SCHIP                      | 2000-2001         | Claims            | Ages 3-18  |  | 36%   |
| Colorado          | S-SCHIP                      | 2002-2003         | Claims            | Ages 0-18  |  | 34%   |
| Florida           | СОМВО                        | 2001-2002         | Survey            | Ages 5-19<br>n = 382<br>Response rate: 67%<br>Population: S-SCHIP only                     |  | 62% (ages 5-10)<br>76% (ages 11-19)           |
| Georgia           | S-SCHIP                      | 2000              | Survey;<br>Claims | Ages 2-18<br>Response rate: 70%°   | 44% <sup>c</sup>                                       | 64% <sup>d</sup>                              |
| Iowa              | СОМВО                        | 2000-2001         | Survey            | n = 2,005<br>Response rate: 39%<br>Population: S-SCHIP only                                |  | 74%   |
| Kentucky          | СОМВО                        | 2001-2002         | Survey            | n = 1,958<br>Response rate: 34%<br>Population: Medicaid and<br>SCHIP combined              | 53%  |   |
| Maine             | СОМВО                        | 1999              | Survey            | n = 298<br>Response rate: 60%<br>Population: all publicly<br>insured children <sup>e</sup> |  | 62%   |
| Maryland          | M-SCHIP                      | 2000              | Claims            | Ages 3-20<br>Population: Medicaid and<br>SCHIP combined                                    |  | 29%   |
| Michigan          | СОМВО                        | 2001              | Claims            | Ages 4-19<br>Population: S-SCHIP only  |  | 43%   |
| Montana           | S-SCHIP                      | 2002              | Survey            | n = 392<br>Response rate: 41%  | 50%  |   |
| New York          | СОМВО                        | 2002              | Claims            | Ages 4-21<br>Population: S-SCHIP only  |  | 41%   |
| North<br>Carolina | S-SCHIP                      | 1999-2000         | Survey            | Ages 6-18<br>n = 439<br>Response rate: 74%   |  | 65%   |
| North<br>Dakota   | COMBO                        | 2001              | Survey            | n = 629<br>Response rate: 50%  | 64%  |   |
| Ohio              | M-SCHIP                      | 2001              | Claims            | Ages 4-21<br>Population: Medicaid and<br>SCHIP combined                                    |  | 41%   |

| State            | Program<br>Type <sup>a</sup> | Reporting<br>Year | Data Source | Data Source Notes<br>(where reported)         | Percent Receiving<br>Dental Care in Past<br>Six Months | Percent Receiving<br>Dental Care in Past Year |
|------------------|------------------------------|-------------------|-------------|---|--|---|
| South<br>Dakota  | COMBO                        | 2001-2002         | Survey      | n = 302<br>Response rate: 34%                 |  | 63%   |
| Tennessee        | M-SCHIP                      | 1999-2000         | Claims      | Population: Medicaid and SCHIP combined       |  | 33% <sup>b</sup>                              |
| West<br>Virginia | S-SCHIP                      | 2000-2001         | Survey      | n = 4,473<br>Response rate: 35%               |  | 55%   |
| Wisconsin        | M-SCHIP                      | 2000              | Claims      | Ages 3-21<br>Population: managed care<br>only |  | 17% <sup>b</sup>                              |

Source: Original analysis of state SCHIP annual reports from FFY 1999 through 2003 by Mathematica Policy Research, Inc.

Notes: M-SCHIP denotes that the state operates a Medicaid expansion program; S-SCHIP denotes that the state operates a separate child health program; COMBO denotes that the state operates both an M-SCHIP and an S-SCHIP program. Some states reported dental visit rates for a subpopulation of their SCHIP program (for example, only S-SCHIP enrollees in a COMBO program) or for a broader population (for example, Medicaid and SCHIP enrollees combined in an M-SCHIP program), as described under "population" in the Data Source Notes column.

<sup>a</sup>Reflects type of program during reporting year specified. Two states, Alabama and Maryland, have since changed the structure of their programs. Alabama switched from a COMBO program to an S-SCHIP program as of October 2002. Maryland switched from an M-SCHIP program to a COMBO program as of July 2001.

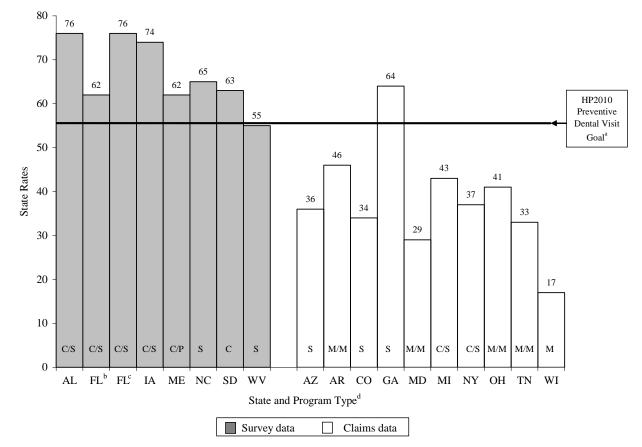
<sup>b</sup>Preventive care visits or examinations only.

<sup>c</sup>Survey data.

<sup>d</sup>Claims data.

<sup>e</sup>Includes children enrolled in SCHIP, Medicaid, Tricare, Medicare, and Indian Health Service.

### FIGURE IV.4



### STATE RATES OF DENTAL VISITS AMONG SCHIP ENROLLEES OVER THE PAST 12 MONTHS, IN COMPARISON TO HEALTHY PEOPLE 2010 NATIONAL GOAL

Source: Original analysis of state SCHIP annual reports from FFY 1999 through 2003 by Mathematica Policy Research, Inc.

<sup>a</sup>Healthy People 2010 goal that 57 percent of low-income children will receive annual preventive dental care by 2010. This goal is part of the U.S. Department of Health and Human Services' Healthy People 2010 initiative to establish national public health goals (U.S. Department of Health and Human Services 2000b).

<sup>b</sup>Age 5 to 10.

<sup>c</sup>Age 11 to 19.

<sup>d</sup>Reflects type of program during reporting year. M = Medicaid expansion program; S = separate child health program; C = combination program. For those states reporting rates for different populations within these programs: C/S= data reported for S-SCHIP only within a combination program; C/P = data reported for all publicly insured children within a combination program; M/M = data reported for Medicaid and SCHIP population combined.

Eight of the 21 states documented changes in dental care access and utilization under SCHIP, by comparing SCHIP enrollees' experiences before and after SCHIP (data not shown). Results from these eight states suggest that SCHIP enrollment was associated with improvements in access to, and use of, dental care. After enrolling in SCHIP, more families reported that their children received a dental visit in the past year, had a usual source of dental care, and increased the total number of dental visits. All but one of the documented improvements exceeded 10 percent. For example, the percentage of children with any dental visit in the past year increased between 44 and 50 percent across four states, while unmet need was reduced 28 to 86 percent across the eight states.

According to focus groups in eight states, parents of SCHIP enrollees were grateful for the program's provision of dental coverage. Some parents reported that the dental benefit was instrumental in their decision to apply to SCHIP. Parents who had received dental services for their children reported satisfaction with SCHIP's preventive care benefits. Parents' experiences, although anecdotal, may shed light on three areas for program improvement: (1) increasing awareness of SCHIP's dental benefits; (2) assessing the scope of covered dental benefits, especially in states where the benefit is less than the recommended two preventive dental care visits per year;<sup>5</sup> and (3) expanding availability and accessibility of dental providers who accept SCHIP.

Despite budgetary constraints, states have continued to demonstrate their commitment to providing dental services to low-income children through SCHIP. The focus group results suggest that some barriers still remain for families accessing dental services through SCHIP. However, interviews with providers and dental associations reflect that states are aware of these challenges and pursuing promising innovations to address them. Through these efforts, SCHIP programs appear to be working toward reducing the dental access gap experienced by previously uninsured, low-income children.

### C. MEASUREMENT OF PERFORMANCE IN SCHIP

Beginning with their FFY 2003 SCHIP annual reports, CMS required states to report on four core child health performance measures, to the extent that data were available. The four measures are:

- 1. Well-child visits in the first 15 months of life
- 2. Well-child visits in the third, fourth, fifth, and sixth years of life
- 3. Use of appropriate medications for children with asthma
- 4. Children's access to primary care providers (PCPs)

<sup>&</sup>lt;sup>5</sup> The American Academy of Pediatric Dentistry recommends that all children age two and older receive at least two preventive dental visits each year (American Academy of Pediatric Dentistry 2003).

These measures are based on the technical specifications provided by the Health Plan Employer Data and Information Set, known as HEDIS.<sup>®</sup> HEDIS provides a useful framework for defining and measuring performance, in addition to allowing for comparison of SCHIP program performance to national or state benchmarks. However, states are not required to use HEDIS and may use a different methodology to report on program performance. States may also modify HEDIS specifications to accommodate data they already collect. The FFY 2003 annual report template provided minimal directions and no definitions for the measures. In addition, states received no training on how to report the measures. Based on the experience in FFY 2003, MPR recommended modifications to the FFY 2004 annual report template to provide detailed instructions and definitions, and initiated a technical assistance effort that included in-person and telephone consultation with states as a group and individually, upon request.

As part of the CMS national evaluation of SCHIP, MPR analyzed the child health performance measurement data that states reported and provided technical assistance to improve the completeness and quality of the states' reporting. MPR downloaded the reports from the CMS website and abstracted the data reported by each state in its FFY 2003 through 2005 annual reports. Specifically, we compiled information on the methodology, data source, and baseline and performance year data. Detailed descriptions of the methods and results are provided elsewhere (Day et al. 2005; Rosenbach et al. 2006). Here, we summarize the trends in reporting and the implications for quality improvement in SCHIP.

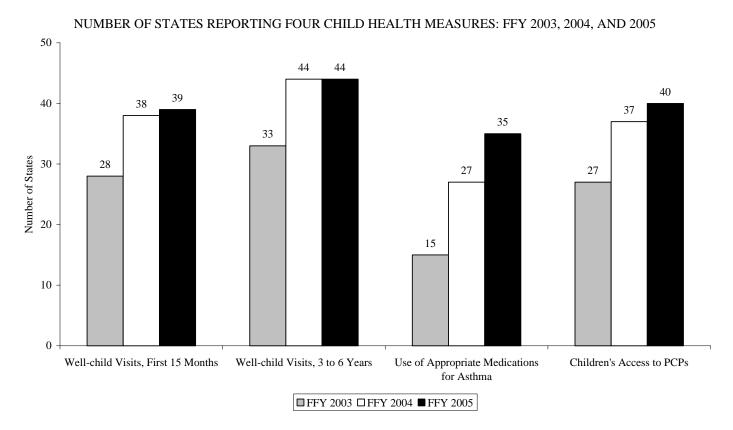
### 1. Trends in Reporting of SCHIP Performance Measures

To measure trends in reporting, MPR tracked three indicators over the three years: (1) the number of states that reported each of the four child health measures, (2) the number of measures reported by each state, and (3) the number of states reporting HEDIS or HEDIS-like data for each measure. We considered a state as having reported a particular measure if it reported any type of rate in a given year, regardless of the method used. We considered a state as having reported using HEDIS or HEDIS-like methods if it self-reported that its rates were modeled after HEDIS.

As Figure IV.5A shows, substantial progress has been made in the number of states reporting the four measures. The largest increase occurred between FFY 2003 and 2004, when CMS and MPR began providing training and technical assistance to states to improve the quality and completeness of state reporting. In addition, in FFY 2004, CMS made substantial improvements to the annual report template. The most dramatic increase occurred for the measure on the use of appropriate medications for children with asthma; the number of states reporting this measure more than doubled from FFY 2003 to 2005. State reporting on children's access to PCPs increased by 50 percent.

Figure IV.5B shows the substantial increase in the number of measures that states reported in each of the three years. Whereas 8 states reported all four measures in FFY 2003, 30 states reported all four measures in FFY 2005. The number of states reporting zero measures decreased from 14 in FFY 2003 to 3 in FFY 2005.

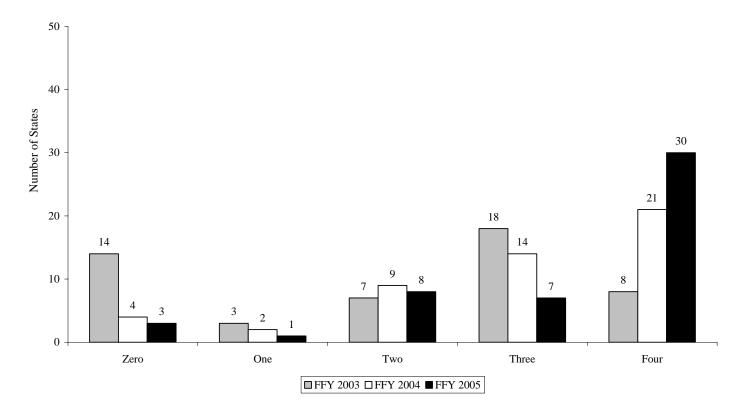
### FIGURE IV.5A



- Source: Original analysis of state SCHIP annual reports from FFY 2003 through 2005 by Mathematica Policy Research, Inc.
- Notes: FFY 2003 and 2004 counts include 49 states and the District of Columbia. FFY 2005 counts include 48 states and the District of Columbia. Hawaii did not report in FFY 2005. Tennessee did not cover any children under its SCHIP program during the study period.

### FIGURE IV.5B

### NUMBER OF CHILD HEALTH MEASURES REPORTED BY STATES: FFY 2003, 2004, AND 2005



- Source: Original analysis of state SCHIP annual reports from FFY 2003 through 2005 by Mathematica Policy Research, Inc.
- Notes: FFY 2003 and 2004 counts include 49 states and the District of Columbia. FFY 2005 counts include 48 states and the District of Columbia. Hawaii did not report in FFY 2005. Tennessee did not cover any children under its SCHIP program during the study period.

As the number of states reporting each measure has increased, so too has the number that used HEDIS or HEDIS-like methods (Figure IV.5C). In FFY 2005, at least three-fourths of the states reporting each measure used HEDIS or a variant of HEDIS. The advantages of the HEDIS framework are that it provides (1) a common set of definitions, and (2) a set of benchmarks that can be used to compare SCHIP plan performance to Medicaid and commercial plan performance. We turn now to results for FFY 2005, the most recent and most complete year for which data were available.

### 2. SCHIP Performance in FFY 2005

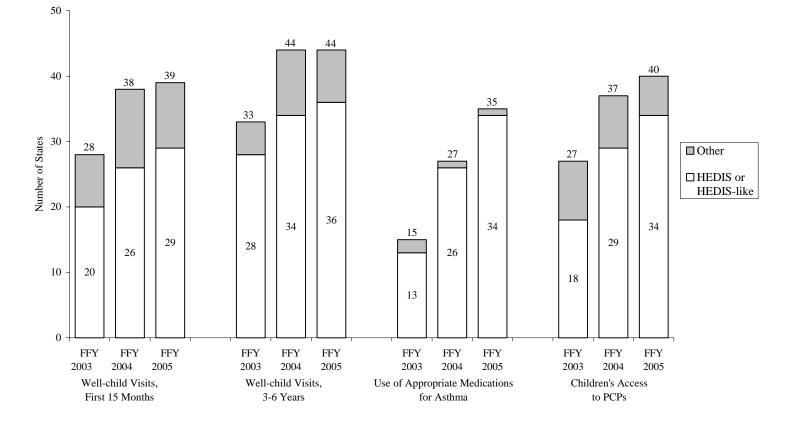
To analyze SCHIP performance in FFY 2005, we followed the approach used by the National Committee for Quality Assurance (NCQA) to report on health plan performance. We calculated the means, medians, and 25th and 75th percentiles for each measure, restricting the analysis to states that reported HEDIS or HEDIS-like data. As Table IV.4 shows, the median SCHIP rates were highest for children receiving a PCP visit. This measure also had the least amount of variation—that is, the tightest interquartile ranges—across states.<sup>6</sup> The lowest median rates were for the well-child visits for children in the first 15 months of life, followed by the rates for well-child visits for children ages 3 to 6. In addition, the interquartile ranges were large for the two well-child measures, demonstrating that the rates varied substantially across states.

To inform CMS's quality improvement efforts, we compared the FFY 2005 SCHIP medians for each of the four child health performance measures to the 2005 medians produced by NCQA for Medicaid and commercial health plans.<sup>7</sup> These comparisons are presented in Figures IV.6A to 6D. The children's access to PCPs measure showed the most similarity across programs, with two to five points separating the medians across the three programs (Figure IV.6A). Although the median rates were high across the board, the highest rates were for children ages 12 to 24 months, while the lowest rates were for children ages 12 to 19 years. The SCHIP medians on use

<sup>&</sup>lt;sup>6</sup> The interquartile range is the difference between the 25th and 75th percentiles on a given measure. This range shows the spread among states in the rates reported at the first and third quartiles. For example, the interquartile range on the rate of children ages 12 to 24 months with a PCP visit was three points (97 minus 94). Similarly, the interquartile range on the rate of children ages 3 to 6 years with one or more well-child visits was 24 points (65 minus 41).

<sup>&</sup>lt;sup>7</sup> The measures produced by NCQA include a subset of the total number of health plans in operation in the United States. The NCQA data presented in this memo include health plans that (1) submitted HEDIS data to NCQA for the specified reporting periods; (2) agreed to publicly report the data they submitted; and (3) were in either the HMO, point-of-service (POS), or HMO/POS combined line of business. That is, fee-for-service, preferred provider organization, fully insured, and other plan types were not included in the data (personal communication with Jennifer Benjamin, July 10, 2006). All health plans that have NCQA accreditation must publicly report HEDIS data to NCQA. However, nonaccredited plans may choose to (1) submit data to NCQA, and publicly report those data; (2) submit data to NCQA, but not publicly report them; or (3) not submit any data to NCQA. Most Medicaid and commercial health plans submitting data to NCQA, 95 chose to publicly report these data. Of the 367 commercial plans submitting data, 252 chose to publicly report (personal communication with Jennifer Benjamin, June 1, 2006).

### FIGURE IV.5C



### NUMBER OF STATES REPORTING CHILD HEALTH MEASURES USING HEDIS OR HEDIS-LIKE METHODS VERSUS OTHER METHODS

- Source: Original analysis of state SCHIP annual reports from FFY 2003 through 2005 by Mathematica Policy Research, Inc.
- Note: FFY 2003 and 2004 counts include 49 states and the District of Columbia. FFY 2005 counts include 48 states and the District of Columbia. Hawaii did not report in FFY 2005. Tennessee did not cover any children under its SCHIP program during the study period.

### TABLE IV.4

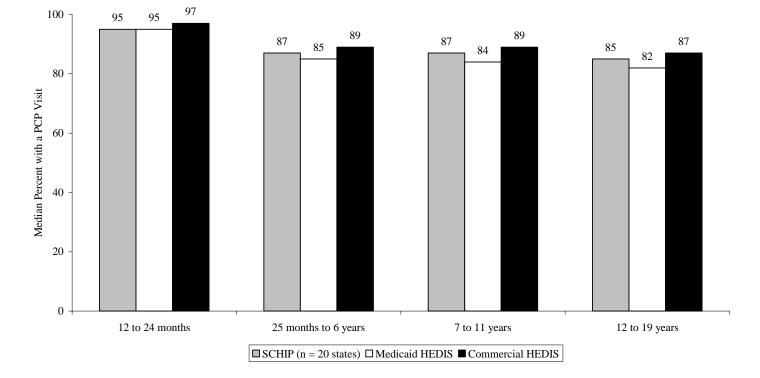
| Measure                   | Age Group            | Number of<br>States | Mean | Median | 25th<br>Percentile | 75th<br>Percentile |
|---------------------------|----------------------|---------------------|------|--------|--------------------|--------------------|
| Well-Child Visits         |                      |                     |      |        |                    |                    |
| Percent with 6+ visits    | First 15 months      | 20                  | 41   | 41     | 29                 | 52                 |
| Percent with 1+ visits    | 3 to 6 years         | 36                  | 54   | 55     | 41                 | 65                 |
| Use of Asthma Medications |                      |                     |      |        |                    |                    |
| Percent receiving         | 5 to 9 years         | 19                  | 72   | 73     | 67                 | 80                 |
| appropriate medications   | 10 to 17 years       | 19                  | 69   | 70     | 64                 | 75                 |
| Access to PCPs            |                      |                     |      |        |                    |                    |
| Percent with a PCP visit  | 12 to 24 months      | 20                  | 91   | 95     | 93                 | 97                 |
|                           | 25 months to 6 years | 20                  | 86   | 87     | 83                 | 90                 |
|                           | 7 to 11 years        | 20                  | 85   | 87     | 79                 | 92                 |
|                           | 12 to 19 years       | 20                  | 83   | 85     | 80                 | 89                 |

### STATE REPORTING OF CHILD HEALTH MEASURES IN FFY 2005: MEANS, MEDIANS, AND PERCENTILES

Source: Original analysis of state SCHIP annual reports from FFY 1999 through 2003 by Mathematica Policy Research, Inc.

Note: These calculations are based on a subset of all states reporting HEDIS or HEDIS-like measures.

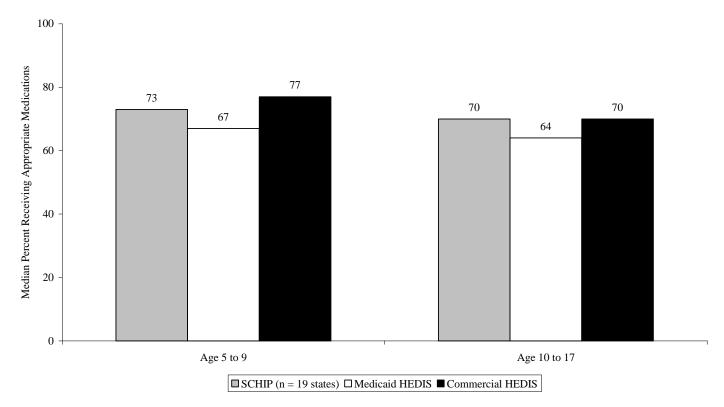
### FIGURE IV.6A



### CHILDREN'S ACCESS TO PRIMARY CARE PROVIDERS: COMPARISON OF MEDIAN SCHIP, MEDICAID, AND COMMERCIAL RATES

Source: Original analysis of FFY 2005 state SCHIP annual reports by Mathematica Policy Research, Inc.

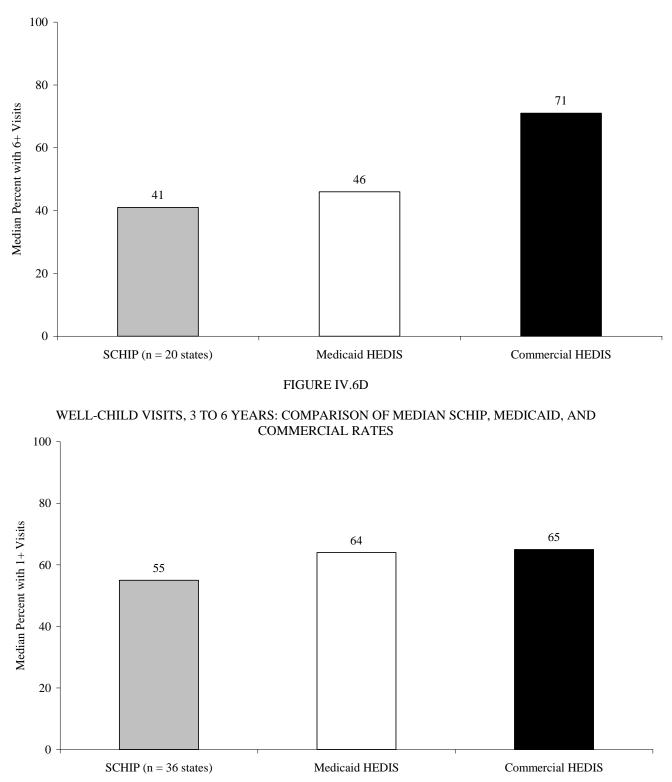
### FIGURE IV.6B



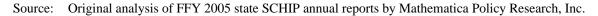
### USE OF APPROPRIATE MEDICATIONS FOR ASTHMA: COMPARISON OF MEDIAN SCHIP, MEDICAID, AND COMMERCIAL RATES

Source: Original analysis of FFY 2005 state SCHIP annual reports by Mathematica Policy Research, Inc.

### FIGURE IV.6C







of appropriate medications for children with asthma were similar to the commercial medians, whereas the Medicaid medians were lower (Figure IV.6B). The median rates exhibited a 10-point difference across programs for children ages 5 to 9 and a 6-point difference for children ages 10 to 17.

For the two well-child measures for infants and preschool children, the SCHIP medians are substantially lower than those for commercial plans (Figures IV.6C and IV.6D). The SCHIP median is also substantially lower than the Medicaid median for the preschool measure. The reasons for these differences are not immediately apparent and highlight the importance of viewing the SCHIP performance measures in the context of this benchmark comparison. It is unclear whether the variation across programs is a function of variations in program design, practice patterns, or barriers to care or an artifact of the data and methods. Whereas the commercial and Medicaid medians are based on audited data to ensure they conform with HEDIS specifications, the SCHIP medians have not been audited and states may have adapted the HEDIS methodology. For example, some states may not have required 12-month continuous enrollment to be included in the SCHIP rate.<sup>8</sup>

### 3. Implications for SCHIP Quality Improvement Efforts

These results suggest that quality improvement efforts might vary according to the type of utilization under consideration. For one of the measures—access to PCPs—the median rates were similar across programs, suggesting that quality improvement efforts might be more cost-effective at the *population* level rather than at the *program* level. In contrast, for the well-child visit rate (15 months), the SCHIP rate was markedly different from the commercial rate, while the SCHIP well-child visit rate (3 to 6 years) was slightly lower than both the Medicaid and commercial rates. This comparison suggests that further exploration of the source of variation within SCHIP and between SCHIP and other programs is warranted as part of CMS's quality improvement initiatives.

### 4. Caveats of This Analysis

Although the completeness and quality of the SCHIP performance measurement data have continued to improve, two important caveats affect the interpretation and use of these data. First, the SCHIP means, medians, and percentiles are not representative of the SCHIP program at the national level. Many states were excluded from the SCHIP summary statistics because they did not report data that met the inclusion criteria (such as use of HEDIS or HEDIS-like methods). Second, states' methods varied along many dimensions, including the populations in their measures (such as inclusion or exclusion of Medicaid enrollees), the data source (such as survey versus claims data), and the measurement year (such as 2003 versus 2004). Adaptations of HEDIS methods were common as well.

<sup>&</sup>lt;sup>8</sup> In general, measures that lack a continuous coverage criterion would lead to lower estimates of utilization than measures requiring continuous coverage, because infants with shorter lengths of enrollment would generally have fewer visits (at least as captured in claims/encounter data).

Several caveats also affect the comparison of SCHIP medians to NCQA HEDIS medians. First, the NCQA medians were not meant to be used as "benchmarks" per se. Instead, NCQA has indicated that these data are meant primarily for "checking reasonability in the audit process" (National Committee for Quality Assurance 2005). Second, the NCQA measures do not include all Medicaid and commercial plans in their measures, only those that submitted data to NCQA and agreed to the data being publicly reported (personal communication with Jennifer Benjamin, June 1, 2006). Finally, the NCQA HEDIS data are audited, whereas the SCHIP performance measurement data are not.

### **D.** CONCLUSION

The recent literature provides compelling evidence that access to care has improved for children enrolled in SCHIP, particularly those who had been uninsured for six or more months before enrolling in SCHIP. Evidence from the literature and state monitoring efforts suggests that SCHIP increased the likelihood of having a usual source of care, reduced the level of unmet need, and improved access to dental care. Fewer studies examined the effects of SCHIP on provider visits and preventive care. Among those that did, however, there is some positive evidence that SCHIP expanded access to these services. With the expansion of access through a usual source of care, there is evidence that access gains were accompanied by reductions in emergency department use in several states. There is little indication of changes in access to specialty care.

Substantial variation was observed among states across all the measures and studies. For example, states varied in their progress toward meeting national Healthy People 2010 goals on such indicators as usual source of care, unmet need, and dental care. Similarly, state performance on the four core child health performance measures was wide-ranging, both across states and, in some cases, compared to commercial and Medicaid benchmarks. The lack of consistent methods to measure SCHIP performance across states may account for some of this variation, but the magnitude and direction are unknown. States maintain considerable flexibility, as specified in Title XXI, to monitor and assess their performance using state-specific data sources and methods.

Recent progress in reporting on the four core child health performance measures signifies an important milestone for the SCHIP program. As the completeness and quality of the SCHIP performance measurement data have improved, so have the opportunities for using these measures in conjunction with SCHIP performance improvement efforts. Beginning with the FFY 2006 annual report template, states were asked to report data for the three most recent years and to set performance objectives for the next three years. This effort will require states to critically evaluate their methods of reporting from year to year to ensure consistency in their data. In addition, it is likely to stimulate discussions about promising strategies for improving the quality of care for children in SCHIP and the level of improvement that is realistic to expect each year. CMS and the states will also be better positioned to engage in broader discussions about improving the quality of care for *all* children nationally.

### V. LESSONS FROM THE FIELD

The State Children's Health Insurance Program (SCHIP), although national in scope, is tailored to each state's unique context, resources, and needs. The program is dynamic and has evolved continuously over the past decade. States used the flexibility available under SCHIP to design and modify their programs, building on their own lessons, as well as on the experiences of other states. Certain themes, however, stand out for each state, because they signify a major feature, event, or transition that shaped that state's program. In this chapter, we highlight one theme for each of the eight states that participated in the case study component of the CMS national evaluation of SCHIP. The themes are as follows:

- *Georgia: Creating a Seamless Public Insurance Program.* This profile highlights the strategies Georgia used to coordinate outreach, application, and renewal efforts between its separate SCHIP program and traditional Medicaid.
- *Kansas: Centralizing Program Administration to Create the Image of Private Coverage.* This profile highlights the strategies Kansas used to unify the Medicaid and SCHIP programs under the HealthWave umbrella.
- *Kentucky: Changing Application and Renewal Procedures to Increase Program Efficiency.* This profile highlights the changes Kentucky made to its application and renewal procedures to control program costs, improve program integrity, and educate families about coverage under SCHIP.
- *Maryland: Attempting to Coordinate SCHIP with Employer-Sponsored Insurance* (*ESI*). This profile highlights the experience with, Maryland's ESI premium assistance program, which the state eventually decided to discontinue.
- *Ohio: Making Medicaid More Accessible Through County Partnerships.* This profile highlights Ohio's strategy to decentralize responsibility for outreach, enrollment, and renewal to county social service agencies.
- *Pennsylvania: Building a Partnership with Private Health Plans.* This profile highlights the long-standing role of health plans in providing health insurance to low-income children in Pennsylvania and how their role evolved under SCHIP.
- South Carolina: Reinventing Medicaid as a User-Friendly Program. This profile highlights the steps South Carolina took to create a new program, Partners for Healthy Children, to make Medicaid more user friendly.
- *Utah: Controlling Costs Through an Enrollment Cap.* This profile highlights Utah's experiences with implementing an enrollment cap under SCHIP and the implications for outreach activities, application procedures, and renewal efforts.

The eight states capture a range of program types but are not meant to be representative of programs nationally. Nevertheless, their experiences illustrate common themes that many states

encounter. These themes are relevant to the future structure of the SCHIP program, as Congress considers reauthorization of the program. In addition, the lessons may be instructive for states as they seek to implement other health care reforms to expand insurance coverage to uninsured people in their states.

This chapter contains a brief profile for each state, including a program overview and experience related to the selected theme. The profiles are based on information gathered through site visits conducted in 2002 and 2003 and focus groups conducted in 2003 and 2004. Table V.1 and Figure V.1 track each state's enrollment history for federal fiscal years (FFYs) 1998 through 2005. Appendix C describes the methods used to select the eight states and conduct the case study.

### A. GEORGIA: CREATING A SEAMLESS PUBLIC INSURANCE PROGRAM

### **1. Program Overview**

PeachCare for Kids, Georgia's separate child health program, exemplifies state-level innovation in designing seamless public insurance programs. Georgia faced the challenge of creating an eligibility and service delivery system for SCHIP that would blend easily with that of The design of the PeachCare program reflected the the traditional Medicaid program. compromise struck between the governor's office, the state legislature, and advocates. The governor wanted a separate program based on commercial health plans. The state legislature did not want to expand an entitlement program and wanted the new program to be administered by an agency other than the one responsible for Medicaid. Advocates preferred an expansion of Medicaid. As a compromise, the legislature decided on a separate, Medicaid "look-alike" program. The PeachCare program is considered a Medicaid look-alike program because it adopted most Medicaid policies and procedures and used the Medicaid provider network, the Medicaid Primary Care Case Management (PCCM) program known as Georgia Better Health Care. After the state legislation for PeachCare was passed, the governor consolidated the stateadministered health insurance programs into the Department of Community Health (DCH). The four health insurance programs operated by this department-the plans for state and university employees, in addition to Medicaid and PeachCare-cover 2 million of the state's 8 million residents.<sup>1</sup>

Georgia began enrolling children in PeachCare for Kids in January 1999. The program initially provided coverage to uninsured children through age 18 with family income up to 200 percent of the federal poverty level (FPL). Eighteen months later, the income threshold was raised to 235 percent of the FPL. Enrollment growth was rapid, exceeding the expectations of state staff. Enrollment increased from about 48,000 children in FFY 1999 to nearly 121,000 children in FFY 2000, double the number of children the state had anticipated serving at the end

<sup>&</sup>lt;sup>1</sup> Title XXI prohibits covering state employees and their dependents under SCHIP. Georgia SCHIP officials raised concerns about the equity of this provision. In Georgia, all public school staff are state employees, and several categories of staff, such as bus drivers and cafeteria workers, are believed to earn income that would qualify their children for coverage through PeachCare. Children of these state employees are not eligible for PeachCare coverage and are at risk of being uninsured as premiums for dependent coverage through the state employee plan increase.

of the second year of operation (Table V.1; Figure V.1). Since then, enrollment has continued to grow, although at a slower rate. Factors associated with this growth include (1) expansion of the income threshold from 200 to 235 percent of the FPL; (2) state-level outreach efforts to build program awareness among families; (3) reliance on Right from the Start Medicaid (RSM) outreach workers who disseminated applications and provided application assistance; and (4) simplified enrollment and renewal processes, such as mail-in applications and reduced verification requirements, which made it easy to enroll and stay enrolled. The rest of this profile discusses Georgia's strategies to create a seamless public insurance program—encompassing traditional Medicaid and SCHIP—through coordination of (1) outreach activities, (2) the application process, and (3) the renewal process.

### 2. Strategies to Create a Seamless Public Insurance Program

### a. Outreach Strategies

PeachCare outreach combined highly successful statewide media campaigns with local efforts conducted by well-established Medicaid outreach workers and community-based organizations (CBOs). Part of the program's success is attributed to an effective collaboration between DCH, the agency responsible for the implementation of PeachCare, and the Department of Human Resources (DHR), the agency responsible for Medicaid eligibility determination and enrollment.<sup>2</sup> DCH handled all media advertising, brochure development and production, and the administration of outreach mini-grants. Based on extensive market research, PeachCare adopted the slogan "Now You Can Afford Peace of Mind." Medicaid was indirectly publicized through the PeachCare advertisements and brochures.

DHR incorporated PeachCare outreach into its RSM outreach program when PeachCare was implemented in 1999, "outstationing" about 200 Medicaid outreach and eligibility workers in local communities. These workers conducted one-on-one outreach for Medicaid and PeachCare in many community settings (such as hospitals, clinics, health departments, health fairs, health classes, and CBOs). Despite state budget concerns in 2002, the PeachCare program chose to continue the collaboration with RSM, because it was viewed as instrumental in raising community awareness, answering questions, and helping families with the application process. At that time, however, most of the emphasis shifted to educating families of current enrollees about the renewal process and proper health care use.

### **b.** Application Process

The PeachCare application process is seen as consumer friendly. PeachCare has a joint Medicaid/SCHIP application and a single point-of-entry system that is managed through a centralized state enrollment broker. The broker is responsible for processing applications,

<sup>&</sup>lt;sup>2</sup> In addition to the collaboration between DCH and DHR, PeachCare collaborated with other agencies and organizations, including the state's Covering Kids grantee, March of Dimes, Family Connections (a nonprofit organization that helps communities develop and implement community-based social support systems), the Pan-Asian Community in Atlanta, and employers (such as K-Mart).

|                       | Type of SCHIP | Date   | 1998                                 | 1999   | 2000    | 2001    | 2002    | 2003    | 2004    | 2005    |  |
|-----------------------|---------------|--|--------------------------------------|--------|---------|---------|---------|---------|---------|---------|--|
| State                 | Program       | Implemented  | Ever Enrolled in Federal Fiscal Year |        |         |         |         |         |         |         |  |
| Georgia               | S-SCHIP       | 11/1/1998  | NI                                   | 47,581 | 120,626 | 182,762 | 221,005 | 251,711 | 280,083 | 306,733 |  |
| Kansas                | S-SCHIP       | 1/1/1999   | NI                                   | 14,443 | 26,306  | 34,241  | 40,783  | 45,662  | 44,350  | 47,323  |  |
| Kentucky <sup>a</sup> | COMBO         | 7/1/1998   | 5,779                                | 18,197 | 55,593  | 66,796  | 93,941  | 94,053  | 94,500  | DNS     |  |
| Maryland              | COMBO         | 7/1/1998   | 27,880                               | 69,452 | 93,081  | 109,983 | 125,180 | 130,161 | 111,488 | 120,316 |  |
| Ohio                  | M-SCHIP       | 1/1/1998   | 49,565                               | 83,688 | 111,436 | 158,265 | 183,034 | 207,854 | 220,190 | 216,495 |  |
| Pennsylvania          | S-SCHIP       | 5/28/1998  | 57,481                               | 82,893 | 119,710 | 141,163 | 148,689 | 160,015 | 177,415 | 179,807 |  |
| South Carolina        | M-SCHIP       | 10/1/1997  | 43,074                               | 56,819 | 59,853  | 66,183  | 68,928  | 90,764  | 75,597  | 80,646  |  |
| Utah                  | S-SCHIP       | 8/3/1998   | 2,752                                | 14,898 | 25,294  | 34,655  | 33,808  | 37,766  | 38,693  | 43,931  |  |
|                       |               | Percentage Change in Ever Enrolled Compared to Previous Year |                                      |        |         |         |         |         |         |         |  |
| Georgia               | S-SCHIP       | 11/1/1998  |                                      | n.a.   | 153.5   | 51.5    | 20.9    | 13.9    | 11.3    | 9.5     |  |
| Kansas                | S-SCHIP       | 1/1/1999   |                                      | n.a.   | 82.1    | 30.2    | 19.1    | 12.0    | -2.9    | 6.7     |  |
| Kentucky <sup>a</sup> | COMBO         | 7/1/1998   |                                      | 214.9  | 205.5   | 20.2    | 40.6    | 0.1     | 0.5     | DNS     |  |
| Maryland              | COMBO         | 7/1/1998   |                                      | 149.1  | 34.0    | 18.2    | 13.8    | 4.0     | -14.3   | 7.9     |  |
| Ohio                  | M-SCHIP       | 1/1/1998   |                                      | 68.8   | 33.2    | 42.0    | 15.7    | 13.6    | 5.9     | -1.7    |  |
| Pennsylvania          | S-SCHIP       | 5/28/1998  |                                      | 44.2   | 44.4    | 17.9    | 5.3     | 7.6     | 10.9    | 1.3     |  |
| South Carolina        | M-SCHIP       | 10/1/1997  |                                      | 31.9   | 5.3     | 10.6    | 4.1     | 31.7    | -16.7   | 6.7     |  |
| Utah                  | S-SCHIP       | 8/3/1998   |                                      | 441.4  | 69.8    | 37.0    | -2.4    | 11.7    | 2.5     | 13.5    |  |

### TRENDS IN SCHIP ENROLLMENT IN EIGHT CASE STUDY STATES, FFY 1998-2005

TABLE V.1

Source: FFY 1998 to 2001: Ellwood et al. 2003; FFY 2002 to 2005: Available online from the Centers for Medicare & Medicaid Services, Number of Children Ever Enrolled in SCHIP by Program Type, FFY 2002 to 2005..

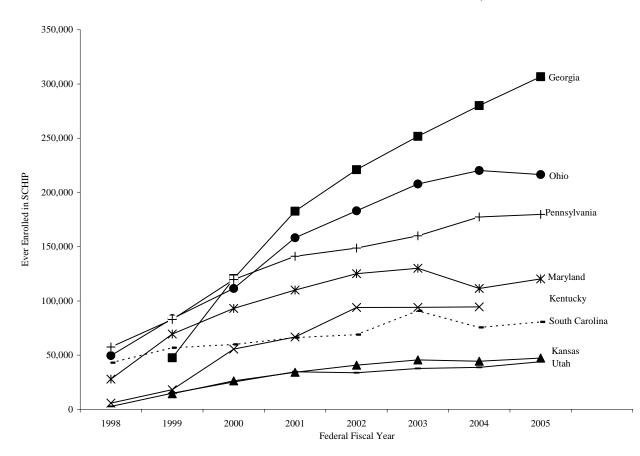
<sup>a</sup>Kentucky's enrollment figures are overstated due to double counting of children enrolled in both the Medicaid expansion and separate child health program in the same quarter. In FFY 2005, the state began producing unduplicated estimates of annual and quarterly enrollment. The estimate of the number of children ever enrolled in KCHIP in FFY 2005 was 63,728, which is one-third lower than the estimate of the number ever enrolled in FFY 2004.

NI = not implemented.

n.a. = not applicable.

DNS = Data not shown. See note a for details.

### FIGURE V.1



### TRENDS IN SCHIP ENROLLMENT IN EIGHT CASE STUDY STATES, FFY 1998-2005

Source: Centers for Medicare & Medicaid Services, Number of Children Ever Enrolled in SCHIP by Program Type, FFY 1998-2005.

Note: Kentucky's enrollment figures are overstated due to double counting of children enrolled in both the Medicaid expansion and separate child health program in the same quarter. In FFY 2005, the state began producing unduplicated estimates of annual and quarterly enrollment. The estimate of the number of children ever enrolled in KCHIP in FFY 2005 was 63,728, which is one-third lower than the estimate of the number ever enrolled in FFY 2004.

determining eligibility, and conducting renewals. Families may apply by mail and, beginning in April 2001, applications could be submitted through PeachCare's internet site. To apply by mail, families must complete the single-page, double-sided application and mail it to a post office box in Atlanta. Although families were not required to submit any documents with the application, they had to submit the first premium payment (initially, \$7.50 for one child; \$15 for two or more children).<sup>3</sup> Applications filed on the internet would not be accepted until all fields contained valid information and would not be considered complete until the family mailed in the first premium payment.

The state has worked hard to unify and simplify the PeachCare and Medicaid eligibility systems. When PeachCare was implemented, these systems were separate, and the "screen-and-enroll" process was not automatic. If a child was found to be ineligible for PeachCare, the application would be forwarded to Medicaid only if the family had checked the release statement on the PeachCare application. In August 2000, the state improved coordination when it transferred the screen-and-enroll process to the PeachCare enrollment broker. For children determined to be eligible for Medicaid, the broker became responsible for managing their Medicaid enrollment and ongoing eligibility. Internally, these children were known as "PeachCare Plus" enrollees. Because of these simplifications, every PeachCare application is now reviewed for Medicaid and SCHIP eligibility, regardless of its source (mail-in or internet). The broker uses an algorithm that matches the one DHR uses to determine Medicaid eligibility. In addition, the broker continuously submits electronic files to DHR to verify that applicants are not currently enrolled in Medicaid.

In August 2001, the state further enhanced coordination when application requirements for Medicaid and PeachCare were aligned more closely. The Medicaid program adopted PeachCare's self-declaration of income and passive renewal process. In addition, children whose Medicaid eligibility was managed by the PeachCare enrollment broker began receiving the PeachCare identification card. Regardless of the program for which the child is determined eligible, the broker sends the family a confirmation letter, along with a PeachCare card indicating the child's primary care provider (PCP). Consequently, families who use the PeachCare application do not know whether their child is covered by Medicaid or PeachCare.<sup>4</sup> When families report changes in income or family structure, the enrollment broker changes the child's eligibility status internally and notifies them only if their premium requirements change.

These changes have created a system of public insurance that is seamless for children who apply for coverage through PeachCare. As a result, PeachCare's simplification strategies have had a substantial "spillover effect" on traditional Medicaid enrollment. Initially, the state found that, among those applying for PeachCare, one child would be determined to be Medicaid eligible for every three children determined to be eligible for PeachCare. When the state introduced the web-based application, half of all eligible PeachCare applications were determined to be Medicaid eligible; in other words, one child was found to be Medicaid eligible

<sup>&</sup>lt;sup>3</sup> In July 2003, Georgia increased monthly premiums from \$7.50 to \$10.00 for families with one child and from \$15 to \$20 for families with two or more children and income from 151 to 235 percent of the FPL.

<sup>&</sup>lt;sup>4</sup> Children who apply for Medicaid through a local social service office (rather than through the PeachCare enrollment broker) receive a monthly Medicaid card.

for every child determined to be eligible for PeachCare. The state estimates that PeachCare's enrollment broker has identified more than 140,000 children who enrolled in Medicaid as a result of applying for PeachCare. The perceived success of the PeachCare simplification strategies has also influenced the Medicaid program's decision to drop face-to-face interview requirements for Medicaid-only cases.

Families who applied for Medicaid coverage through a local social service office (rather than through the PeachCare enrollment broker) had more challenges navigating between Medicaid and PeachCare. For example, if a child was found to be ineligible for Medicaid, the family was given a PeachCare application and referred to the toll-free information line and PeachCare website. There was no direct link between the two programs. Similarly, when Medicaid coverage ended, a child who was enrolled in Medicaid through a local social service office was not automatically referred and screened for PeachCare coverage. In 2003, the state implemented a new management information system that, for the first time, integrated electronic records (including eligibility files) for PeachCare and Medicaid and permitted the state to track children between the two programs.

### c. Renewal Process

To address concerns about turnover and retention, Georgia introduced a preprinted renewal form and passive renewal process in July 2001. This process is used for PeachCare enrollees, as well as Medicaid enrollees who applied through PeachCare. Eligibility is renewed every 12 months for children enrolled in PeachCare and every 6 months for those in Medicaid. The enrollment broker mails a letter to the family indicating that the child's eligibility needs to be renewed. The letter includes preprinted information on family income and composition and other information the family has supplied. Families need only to call the hotline to update incorrect information or to disenroll the child. Otherwise, eligibility continues as long as the family submits the monthly premium payment. Because Georgia does not provide continuous coverage for either PeachCare or Medicaid enrollees, families are supposed to submit information about any relevant changes in income or family composition as they occur. The only families that are thought to find the renewal process confusing are those that have children enrolled in both Medicaid and PeachCare, because renewals occur at different times. In addition, the local social service office and the PeachCare enrollment broker use different forms.

### d. Summary

PeachCare for Kids is seen as an extremely successful and popular program. Its success is demonstrated by the impressive growth in enrollment, from 48,000 in FFY 1999 to more than 300,000 in FFY 2005. Many factors contributed to the seamless enrollment and retention of Medicaid and SCHIP enrollees who used the single point of entry through PeachCare, including (1) close collaboration between DHC and DHR regarding outreach through the RSM program, (2) the joint Medicaid/SCHIP application, (3) centralized processing of PeachCare applications through an enrollment broker, (4) the implementation of a web-based application, and (5) the passive renewal process. The substantial number of children who applied for PeachCare but were found eligible for Medicaid attests to the effectiveness of PeachCare's efforts to more closely align Medicaid and SCHIP application and enrollment procedures. Some challenges in

coordinating between Medicaid and SCHIP remain, particularly for those applying through the traditional Medicaid program. For example, children found ineligible for Medicaid were not automatically screened for PeachCare eligibility. The state took a major step to address these barriers by implementing a new management information system to integrate administrative data (especially eligibility records) between the two programs.

# B. KANSAS: CENTRALIZING PROGRAM ADMINISTRATION TO CREATE THE IMAGE OF PRIVATE COVERAGE

### 1. Program Overview

Kansas viewed the implementation of HealthWave as an opportunity to establish a program that has the look and feel of private coverage. The state legislature's concern about expanding an entitlement program led to the design of a separate child health program with premium requirements and a six-month waiting period.<sup>5</sup> To control program costs, the legislature also required that all SCHIP benefits be provided through capitated managed care.

HealthWave was designed to appear as a separate program from families' perspectives but to share behind-the-scenes administrative structures with Medicaid. Because program administrators found that children with fluctuating income levels frequently moved between SCHIP and Medicaid managed care, the Kansas legislature brought the two programs under the umbrella "HealthWave" name in 2001. The state refers to the SCHIP component as HealthWave 21 and the traditional Medicaid component as HealthWave 19.

As the agency responsible for administering SCHIP and Medicaid, the Department of Social and Rehabilitative Services (SRS) constructed a single streamlined and seamless health insurance product for low-income children that capitalized on the HealthWave name. Enrollment and renewal procedures were made more consistent between the two programs. In addition, the Medicaid managed care program piggybacked on the established SCHIP managed care delivery system under HealthWave. Positive feedback that the state received about HealthWave contributed to the decision to blend Medicaid and SCHIP. By aligning HealthWave with private insurance and then aligning Medicaid with HealthWave, the state helped reduce the stigma associated with Medicaid. According to stakeholders in the state, these developments have distanced SCHIP and Medicaid from the stigma associated with social services, while streamlining program administration and improving the predictability of costs.

HealthWave enrollment began in January 1999, when the state transferred approximately 3,000 children from the Blue Cross/Blue Shield Caring Program. The program extended public insurance to children through age 18 with family incomes up to 200 percent of the FPL. SCHIP enrollment increased by more than 80 percent from FFY 1999 to 2000 and by 30 percent the following year. SCHIP enrollment continued to grow at double-digit rates the next two years and then leveled off. The state set a SCHIP enrollment goal of 60,000 children, which it

<sup>&</sup>lt;sup>5</sup> After observing little substitution of coverage, the state eliminated the waiting period requirement in May 2001.

surpassed when the growth in traditional Medicaid enrollment is also taken into account (see Table II.3 in Chapter II).

### 2. Strategies for Centralizing Program Administration

### a. Outreach Strategies

When HealthWave was implemented, Kansas primarily used a centralized outreach approach.<sup>6</sup> SRS relied on a private contractor, Maximus, and the Robert Wood Johnson Foundation Covering Kids grantee, Kansas Children's Service League (KCSL), to spread the word about HealthWave across the state. KCSL provided application assistance and promoted HealthWave in three pilot areas in Kansas, while Maximus maintained the HealthWave toll-free assistance number, created statewide television and billboard advertisements, and developed marketing items (such as school supplies and stadium cups bearing the program logo).

Although these organizations had distinct responsibilities, they initially lacked coordination in developing HealthWave materials and messages. With the integration of SCHIP and Medicaid under the HealthWave name, Maximus and KCSL joined forces to design a streamlined application packet, consisting of a shortened application form (reduced from 14 to 2 pages), an information flap that lists qualifying income thresholds, and a return envelope. The revised application packet, completed in July 2001, was the first product that used the HealthWave name to market the program. It became the basis for all other outreach materials. While observers reflected that developing the joint application was as hard as "putting a man on the moon," it provided an opportunity to change the perception of Medicaid in Kansas. The application included a cover page that asked, "How Will You Qualify if You Don't Apply?" HealthWave was universally marketed as "health insurance coverage for kids" and excluded references to "government programs" or "Medicaid." The use of consistent themes and visuals (including the same children in photos) presented a unified message about HealthWave. In addition, the application's return address was changed from SRS to HealthWave. The applications were widely available in communities, at local SRS offices, and by request through the state HealthWave toll-free line. They were produced in the 10 most common languages in Kansas (Arabic, Chinese, English, French, German, Japanese, Korean, Russian, Spanish, and Vietnamese). Focus group families described the application as "self-explanatory," "a simple, short form." The simplicity of the application prompted families to apply. Many families reported that they did not think they would be eligible for HealthWave, but they applied because they had "nothing to lose." The application was considered a successful outreach tool.

<sup>&</sup>lt;sup>6</sup> The state also engaged in activities to institutionalize HealthWave outreach in other organizations' initiatives. This involved (1) holding statewide HealthWave training sessions for those who would be performing one-on-one outreach in their communities, (2) working with specific community organizations to develop targeted initiatives, and (3) distributing applications to providers and local entities. The state also pursued interagency collaborations (for example, partnering with the Department of Revenue to send HealthWave postcards to low-income families). The state also worked with school nurses to distribute a two-part postcard to all Kansas families with schoolchildren; school nurses worked with families who returned the postcard indicating an interest in the program.

HealthWave outreach activities were restructured in 2002. Maximus continued to conduct broad-based statewide marketing; however, the Covering Kids grant ended. Thus, Kansas opted to redirect primary outreach responsibility to its local SRS offices, intending to "institutionalize" HealthWave within communities. This shift to a community-based focus was consistent with the evolution of outreach in other states (discussed in Chapter II, Section C). SRS distributed a total of \$250,000 to 11 local offices as a one-time grant to build their outreach infrastructure.<sup>7</sup> Because many local offices had previously focused on keeping people out of public programs, this new responsibility as a HealthWave promoter required a new approach. Therefore, the state provided social marketing training to the local SRS staff. The state also gave the local offices substantial decision-making authority about how to structure outreach in their communities. Local SRS offices' responses to this new responsibility varied across the state; about half the offices appreciated the responsibility, while the other half saw it as a burden. Several offices outsourced this responsibility to local marketing firms.

Outreach messages and tactics focused on dissociating the HealthWave insurance program from "social services." SRS staff indicated that they separated HealthWave materials from other SRS materials at health fairs. They emphasized how easy and noninvasive the application process is. They also informed potential eligibles about the high-income and age cutoffs in HealthWave, the extensive benefit package (dental and pharmaceutical benefits are "key attractors"), and the lack of co-payments. These aspects of HealthWave often surprised people, particularly those facing layoffs who were not familiar with public insurance programs.

As enrollment in HealthWave leveled off, the state recognized that it needed to increase its focus on finding and enrolling "hard-to-reach" uninsured children. For example, frontier populations in western Kansas are often not interested in accessing government programs. The growing Hispanic and Asian populations face language barriers and may have a different cultural understanding of the importance of health insurance. Several stakeholders suggested it would be useful to expand outreach and application assistance efforts to point-of-service sites (such as hospitals and clinics), either by outstationing SRS staff or by compensating other organizations to process applications on-site. Because CBOs have their clients' trust, they offer an alternative to the social service offices.

### b. Application Process

The HealthWave application process underwent significant changes in 2001, as Kansas unified the SCHIP and Medicaid programs under the HealthWave name. Coincident with streamlining the HealthWave application, Kansas centralized its application processing by contracting with Maximus to be its enrollment broker. With this new system, HealthWave applicants could mail applications to the Maximus clearinghouse, rather than submitting them to the local SRS office or applying in person at that office.<sup>8</sup> The state found that the mail-in option was very popular, as most HealthWave applications were processed at the central clearinghouse. State and Maximus eligibility staff are colocated at the clearinghouse to ensure that HealthWave

<sup>&</sup>lt;sup>7</sup> These funds were from the 10 percent administrative allowance under Title XXI.

<sup>&</sup>lt;sup>8</sup> In some counties, families can submit applications to outstationed SRS staff in providers' offices.

applicants are enrolled in the appropriate program. Maximus staff review applications and collect all necessary documentation, such as income and pregnancy verification. State staff first determine eligibility for Medicaid, and Maximus then determines eligibility for SCHIP.

Applications submitted to the local SRS offices are processed in a manner similar to that at the clearinghouse. Both the local and central offices enter applicants' information into KAECSES, the automated state eligibility system. After applications are approved for either Medicaid or SCHIP, families are notified by mail that their children are eligible for HealthWave. Families between 150 and 200 percent of the FPL are informed of their premium payment requirements.<sup>9</sup> In addition, families receive materials from the HealthWave managed care plan to help them in their selection of PCPs.<sup>10</sup> Families who applied at a local SRS office received an additional notice from the state saying that their cases had been shifted to the central clearinghouse.

The centralization of HealthWave enrollment was a structural shift for SRS staff, and the transition was challenging. Observers recalled that some local SRS staff initially felt their expertise in application processing was undermined. The local SRS staff and the clearinghouse also struggled with administrative complexities related to exchanging information about specific cases, particularly in emergency circumstances (such as pregnancy cases). Some medical providers also expressed a preference that all applications be processed at the local SRS office so that applicants and providers would have a single local contact to address coverage and emergency care issues. Because cases are maintained only at the clearinghouse, local offices cannot make changes to particular case files after they have been enrolled in HealthWave. With hindsight, the state, local SRS staff, and Maximus acknowledged that a higher level of coordination was essential. The development of a Centralization Advisory Team brought the entities together to improve communication.

After the initial transition issues were addressed, most local SRS staff agreed that the clearinghouse had several benefits. First, the widespread availability of applications in the community reduced barriers to applying. One local SRS office noted that the centralized system made it easier for many unemployed families to apply to the program when the economy weakened despite their lack of previous experience with SRS services. Second, centralization led to a caseload reduction for some local SRS offices, which helped them manage with tighter budgets. Third, Maximus staff became experts in the HealthWave enrollment procedures, whereas local SRS offices could not have focused as intently on the details of the program. The

<sup>&</sup>lt;sup>9</sup> Families between 151 and 175 percent of the FPL pay \$20 per month, while families between 176 and 200 percent of the FPL pay \$30 per month. Upon enrollment in HealthWave 21, families are notified of their premium responsibilities in their acceptance letter if they apply by mail, or by their SRS worker if they apply in person. About 30 to 35 percent of the HealthWave population pays premiums. Enrolled families benefit from HealthWave's flexible payment schedule in which families can pay on a monthly, quarterly, or annual basis. The only requirement is that families be current in their payments when they renew HealthWave coverage for the following year. Families receive monthly invoices and additional notices as they near the renewal deadline to remind them of outstanding premiums.

<sup>&</sup>lt;sup>10</sup> At the time of our site visit, all HealthWave 21 enrollees were enrolled in a single managed care plan. As of January 1, 2007, HealthWave contracted with two managed care plans.

high level of mail-in applications (about two-thirds of all HealthWave applications) provided evidence of the appeal of the centralized approach from the applicants' perspective.

Based on the positive outcomes of streamlining the HealthWave program, the state has tried to simplify other aspects of the Medicaid application process, including eliminating the assets test for families. State advocates claim that the removal of the assets test made the application process less invasive for applicants. However, slight distinctions remain between the two programs' policies and procedures. For example, SCHIP enrollees receive a plastic identification card that is good for one year, whereas Medicaid enrollees receive a monthly paper identification card. In addition, SCHIP does not offer retroactive coverage, whereas Medicaid does. Thus, families can submit less extensive income documentation when they apply for SCHIP.

#### c. Renewal Process

Soon after HealthWave's implementation, the program faced a 30 percent annual turnover rate among its SCHIP enrollees. The state also found that nearly three-quarters of "new" enrollees had been enrolled in public insurance before (Allison et al. 2001). State officials eventually determined that "churning" occurred because the KAECSES computer system was tied to the eligibility systems of other social programs (such as cash assistance and food stamps). This led Kansas to delink HealthWave eligibility redeterminations from those of other programs and establish the Maximus clearinghouse as the sole processor of HealthWave renewals. By processing all renewals at the clearinghouse, the state intended to prevent HealthWave enrollees from being dropped from the program prematurely.

The renewal form, requirements, and processing were the same as the original application procedures. The KAECSES system generated a list of Medicaid and SCHIP enrollees who were 75 days away from their renewal. The clearinghouse first sent a postcard telling these families to look for the renewal form in the mail and, later, sent a letter and a blank application. To obtain a renewal form in Spanish, families must call the Maximus toll-free number before their renewal deadline. Fifteen days before that deadline, the KAECSES system generated reminder notices to families who had not returned their renewal forms. Families who owed premium payments were notified how much they owed 75 days before their renewal deadline. Those who did not pay their outstanding premiums could be reenrolled in SCHIP if they made their full payment before renewal. Those who qualified for Medicaid because their income declined during the year were not required to pay the outstanding premium.

Renewal forms were accepted up to 30 days after the renewal deadline had passed. After that point, the forms needed to be processed as new applications. About one-third of HealthWave renewal forms were not returned by the deadline. Kansas reports that HealthWave retention has improved since the state centralized all renewals through the clearinghouse. The state concedes, however, that an unintended consequence of the streamlined renewal process is that it places responsibility on families to complete the form and provide documentation. In 2003, the state shifted its outreach emphasis to informing families about the importance of renewing their coverage. While Kansas considered a preprinted renewal form and passive renewal, it decided not to adopt these mechanisms because of concerns about program integrity and the high cost. Stakeholders offered other suggestions for improving the renewal process and retention rate: (1) the notification postcard should include a specific deadline by which families must renew, (2) the renewal materials should be sent to families earlier so they have more time to complete them, (3) local SRS caseworkers should be alerted about upcoming HealthWave renewals because families enrolled in more than one SRS program may overlook renewing HealthWave if they do not see immediate help from these services (in contrast to other forms of assistance, such as food stamps).

## d. Summary

HealthWave continues to enjoy broad support in Kansas. Its strategy to model SCHIP after a private insurance model has been well received. The state streamlined administrative functions by entering into contracts with outside vendors for outreach activities, premium collection, eligibility determination and redetermination, and service delivery through a managed care organization. When SCHIP and Medicaid were consolidated under the HealthWave name, the state initiated additional changes in the application and renewal processes—such as developing a shorter, simpler joint application for SCHIP and Medicaid, accepting mail-in applications through an enrollment broker, and processing all renewals through a central clearinghouse. These initiatives were intentionally designed to delink HealthWave from public assistance and make the program more attractive to working families (or those who had been recently laid off), especially those in rural areas. The large share of mail-in applications shows that families responded positively to efforts to simplify the application process. The changes in the renewal procedures appeared to improve retention, but stakeholders believe retention rates could be improved further if families were given more advance notice and the instructions were clearer.

A common theme as Kansas delegated more responsibility to vendors was the need for enhanced communication and coordination. The state created a Centralization Advisory Team comprised of SRS and clearinghouse staff—to enhance communication about application processing and enrollment maintenance. Lack of communication among vendors ultimately led the state to reverse its course and decentralize selected outreach functions to the local SRS staff. This shift coincided with the end of the state's Covering Kids grant, as well as the general trend among outreach programs nationally to place greater emphasis on local community-based collaborations. Increased reliance on local SRS staff held the promise of improving outreach to hard-to-reach populations through approaches tailored to each community.

## C. KENTUCKY: CHANGING APPLICATION AND RENEWAL PROCEDURES TO INCREASE PROGRAM EFFICIENCY

#### 1. Program Overview

The design of Kentucky's Children's Health Insurance Program (KCHIP) reflects a blending of interests: state legislators wanted a program that looked like private insurance, and advocates sought to extend the rich benefits of the Medicaid program to more children. When Kentucky implemented KCHIP in 1998, the Kentucky legislature requested that the program be fully implemented within one year. At that time, the overall vision for KCHIP included a small Medicaid expansion, combined with a larger separate child health program that would look like private insurance and cover all children under age 19 with family income up to 200 percent of

the FPL. With the legislature's deadline approaching, state administrators and the KCHIP Planning Council elected to expand Medicaid coverage further and implement a smaller separate child health program designed as a Medicaid look-alike program. The resulting program was easy to roll out and had wide support.

Implemented within the state's existing Medicaid infrastructure, KCHIP is designed to be fully integrated with traditional Medicaid. The Department for Medicaid Services (DMS) has oversight responsibilities for traditional Medicaid and KCHIP, and the department essentially administers the two programs as a single unit. In collaboration with DMS, the Department for Community Based Services (DCBS) manages the traditional Medicaid and KCHIP eligibility determination processes. Local DCBS offices conduct all aspects of the screen-and-enroll process for traditional Medicaid and KCHIP.<sup>11</sup> A system of regional offices coordinates and oversees local office operations. Once enrolled, KCHIP enrollees use the Medicaid delivery system to access services. The only differences between KCHIP and traditional Medicaid are (1) different program names, (2) premiums (introduced in 2003 to the separate program component), and (3) slight differences in benefits.<sup>12</sup>

KCHIP enrollment began in July 1998 with a modest Medicaid expansion covering children ages 14 to 19 up to 100 percent of the FPL. One year later, Medicaid eligibility was expanded to 150 percent of the FPL. Four months later, Kentucky transformed KCHIP into a combination program, covering children between 150 and 200 percent of the FPL through a separate child health program. Enrollment in KCHIP tripled from 18,000 in FFY 1999 to nearly 56,000 in FFY 2000, after the program expanded eligibility and established its separate program (Table V.1; Enrollment continued to grow through FFY 2002 to almost 94,000 children ever Figure V.1). enrolled in the year, despite the elimination of eligibility simplification strategies, including the mail-in application and self-declaration of income and child care expenses. Enrollment leveled off the next few years, coinciding with the introduction of a monthly premium in November 2003.<sup>13</sup> According to the state's FFY 2005 SCHIP annual report, 12 percent of the children exiting the KCHIP premium component left because of nonpayment of the premium. The state also noted that its enrollment figures for FFY 1998 through 2004 are overstated due to doublecounting of children enrolled in both the Medicaid expansion and separate child health program in the same quarter. In FFY 2005, the state began producing unduplicated estimates of annual and quarterly enrollment. The estimate of the number of children ever enrolled in KCHIP in

<sup>&</sup>lt;sup>11</sup> DCBS caseworkers also manage eligibility for Kentucky's Temporary Assistance for Needy Families (TANF) program (known as the Kentucky Transitional Assistance Program [KTAP]), food stamps, and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). A system of regional offices coordinates and oversees local office operations.

<sup>&</sup>lt;sup>12</sup> KCHIP enrollees are not eligible for Early and Periodic Screening Diagnosis and Treatment (EPSDT), special services (such as private-duty nursing and extended institutional care for mental health services), and nonemergency transportation.

<sup>&</sup>lt;sup>13</sup> In November 2003, KCHIP began requiring families in the separate KCHIP program (those with incomes between 151 and 200 percent of the FPL) to pay monthly premiums of \$20 per family per month. The first two payments are due upon enrollment into the program. Subsequent payments are due by the fifth of each month and must be paid in advance. Families failing to pay their monthly premiums will be disenrolled after notification. Families paying ahead either quarterly or semiannually receive a 10 percent discount on the monthly premium.

FFY 2005 was 63,728, which is one-third lower than the estimate of the number ever enrolled in FFY 2004.

#### 2. Changes in Application and Renewal Procedures

Like most states, Kentucky implemented several approaches to simplify application and renewal procedures when KCHIP was first implemented. However, the state decided to reverse many of the simplifications to control program costs, increase program integrity, and provide opportunities to educate families about the program. For example, Kentucky tested a short mail-in application and self-declaration of income and child care expenses. The state soon eliminated these simplification strategies when it could not ensure the integrity of the caseload. The state eventually settled on in-person interviews at the initial application and a mail-in process for renewals. With each change, local agencies adapted their approach to outreach and application assistance. Table V.2 chronicles the sequence of initial simplifications and subsequent changes. The rest of this profile describes the changes, their consequences, and lessons learned.

## a. Outreach Strategies

Initially, the state pursued a multifaceted outreach strategy that involved broad-based, statewide media campaigns and local grassroots organizations building awareness at the community level and providing one-on-one application assistance. Observers praise the state for its initial efforts to build program awareness and point to the program's enrollment numbers as evidence of the effectiveness of the state's approach. Combining a memorable media campaign with local efforts was considered by many to be an extremely successful approach.

Almost all funding for outreach at the state level ended in July 2002, when the application process changed from a mail-based process to an in-person interview process. At that time, DMS held "train-the-trainer" sessions for state personnel, providers, and advocates to educate them on the program's new application requirements. Today, outreach focuses on the "front lines." Families learn about KCHIP through contact with local social service caseworkers, staff at school-based Family Resource and Youth Services Centers (FRYSCs), local health departments, county extension agents, advocates, and providers.<sup>14</sup>

When the application procedures changed, local outreach entities had to adjust the type of application assistance they provided. Previously, they kept a supply of the KCHIP applications and handed them out at any opportunity. The mail-in application allowed them to be proactive and help families complete and mail the form. One local public health official noted that 2000 and 2001 were the most active years for this type of work. Now, their approach is more reactive, and they focus on educating families and helping with transportation. Those offering application

<sup>&</sup>lt;sup>14</sup> FRYSCs help families meet their basic needs by providing services directly (such as after-school child care, employment counseling, parent education, and transportation) or linking families to services in the community. Each school, or consortium of schools, hires its own staff and selects the center's site. The size of the center depends on the number of children eligible for the school lunch program.

## TABLE V.2

## CHANGES IN SCHIP APPLICATION AND RENEWAL PROCEDURES AND COST-SHARING REQUIREMENTS IN KENTUCKY, FFY 1999-2003

| Program Feature                            | Changes to Simplify Procedures   | Changes to Control Costs or<br>Improve Program Integrity  |
|--|--|---|
| Application Procedures                     |  |   |
| Mail-in application                        | Mail-in application introduced to M-SCHIP and S-SCHIP (11/99)                              |   |
| In-person interview at initial application |  | In-person interview at initial application introduced (7/02)  |
| Documentation requirements                 | Self-declaration of income and<br>child care expenses allowed<br>(7/00)                    | Self-declaration of income and<br>child care expenses eliminated<br>(6/01)  |
| Renewal Procedures                         |  |   |
| Renewal form                               | Preprinted renewal form<br>introduced (7/00)   | Preprinted renewal form eliminated (6/01)   |
| In-person interview at renewal             | In-person interview at renewal<br>eliminated and mail-in renewal<br>form instituted (7/02) | In-person interview at renewal introduced (6/01)  |
| Cost-sharing requirements                  | Cost-sharing requirements eliminated (10/00)   | Cost-sharing requirements of \$1<br>for prescriptions and \$2 for office<br>visits for dental, chiropractic,<br>podiatry, vision, and hearing<br>services instituted for enrollees<br>age 18 (8/02) |
| Premium                                    |  | Monthly premium of \$20<br>per family introduced to the<br>separate component (11/03)   |

Source: Kentucky SCHIP annual reports from FFY 1999 through 2003.

assistance find it challenging to encourage families to complete the entire process, and they believe their work is less effective.

Social service caseworkers provide information about KCHIP to all families who come into a local office seeking assistance. Working one-on-one with families, caseworkers educate them about the availability of all social service programs, including KCHIP. They emphasize the services provided and the necessity of having a medical card. To enhance the help that caseworkers provide, a DMS-produced video about the program and its benefits plays in the waiting rooms of local social service offices. State administrators believe that localized outreach, supported by informational videos and brochures, has been effective. They cite survey results showing that word of mouth about the program is very effective. They report that many families are pleased with KCHIP and share information about the program with others.

#### b. Application Process

KCHIP application procedures have undergone several changes since the program's initial implementation as the state tested different strategies. When the program began in July 1998, families had to submit an application in person at a local social service office. When Kentucky expanded coverage and began the separate program in November 1999, a two-page, mail-in application was introduced. KCHIP's mail-in application was the first of its kind in Kentucky. DMS and its collaborators made the English-only application available at local health events and at locations such as local health departments, social service offices, providers, and CBOs. In addition, families could request applications and get assistance by calling a state-operated toll-free number. Families mailed the completed application and documentation for one month's worth of income and child care expenses to a central clearinghouse managed by the Department of Public Health (DPH). The clearinghouse routed each application to the appropriate local social service office for caseworkers to process.

About eight months after Kentucky introduced the mail-in application, DMS further simplified the KCHIP application process by instituting self-declaration of income and child care expenses. Agency staff audited the self-reported information by matching tax and social security data, but, within a year, they were dissatisfied with this strategy. Reporting lags in the data used to verify self-reported information meant that children were enrolled for six months before the state could determine the accuracy of self-reported income. They found that families improperly calculated yearly income, and many did not understand the difference between gross and net income.

In July 2001, self-declaration of income and child care expenses was eliminated, just one year after its introduction. The application process was changed again in July 2002, coinciding with cutbacks in state and local outreach activities. The state discontinued use of the mail-in application and began requiring an in-person interview at the local social service office when the initial application was submitted. At the same time, the state began to require verification of two months (rather than one month) of income.

The new KCHIP application procedures required families to arrange an in-person interview with a caseworker at a local DCBS office, the agency that determines eligibility for Medicaid and SCHIP. To complete their application, families must document the last two months of income and child care expenses. Caseworkers use the statewide computer eligibility system, called the Kentucky Automated Management Eligibility System (KAMES), to determine eligibility for KCHIP, Medicaid, and other social service programs. State agency personnel described the KCHIP eligibility process as a decentralized-centralized approach—applications are made at the local level, but data are managed centrally. Local social service offices are simply "stations for the online application." In the Louisville area, families can satisfy the interview requirement by meeting with an outstationed worker at one of six provider sites, although the final eligibility determination is conducted by caseworkers at a local social service office. During the interview, the outstationed worker completes a hard-copy application that is sent to the appropriate local social service office for processing and eligibility determination.

State administrators and caseworkers in the local social service offices are satisfied with KCHIP's current application procedures. They believe the in-person process is more efficient and results in well-informed families. Caseworkers reported that the process provides the assurances they need to know that they are "working the case correctly," and they issue fewer denials because in-person applications are more likely to be complete. Caseworkers also believe the in-person process speeds enrollment. Mail-in applications were mailed to a central location in Louisville and then sent to the local social service office for processing.<sup>15</sup> At the local office, eligibility could be further delayed if the application was incomplete and the caseworker had to notify the family regarding the steps needed to complete the process. In comparison, the inperson interview, which typically lasts between 30 minutes and an hour, allows same-day determination if the family has brought all the necessary documents. Staff reported that approximately 40 to 50 percent of families come to the interview with all the necessary documentation and learn their eligibility status during the interview. Those whose application is initially incomplete have 10 days to mail, fax, or personally deliver any missing information and documentation. Families can request a 30-day extension to this deadline before being denied coverage because of incomplete documentation.

State and local social service staff also like the current in-person process because they believe families are better educated. Caseworkers reported educating families on the importance of selecting a PCP as soon as possible and how to access services. One caseworker commented that the in-person interview makes the process more personable, and families know someone at the local social service office they can call with questions.

Social service staff noted some barriers in KCHIP's eligibility determination process. Local social service offices typically are not open during nontraditional hours, which makes applying in person difficult for working parents. Caseworkers can arrange to conduct the interview during hours when the office is normally closed. In addition, they acknowledged that some families perceive a sense of stigma associated with visiting a local social service office, particularly in smaller communities, where maintaining privacy is more difficult. Advocates also raised concerns about the obstacles to enrollment and stigma associated with the new procedures, especially when social service staff do not conduct their work in a customer-friendly manner. In

<sup>&</sup>lt;sup>15</sup> The state allowed applications to be dropped off at local social service offices, thereby eliminating the lags associated with the mail. At least one caseworker noted that the local health department commonly did this to speed up the process.

Louisville, advocates use the slogan "accuracy, access, and attitude" to describe their efforts to minimize any barriers created by the in-person interview. In addition, they use secret-shopping techniques to monitor the treatment families receive and report their findings to the state during meetings of the statewide KCHIP coalition organized and managed by the Covering Kids grantee. In addition to this system-level advocacy work, advocates provide direct application assistance to families. They educate families on the process, help them copy documents, and provide transportation to the interview.

#### c. Renewal Process

KCHIP also experimented with simplified renewal processes. The state has changed the renewal process for KCHIP four times since the program's initial implementation in 1998 (see Figure V.2). Initially, the renewal process required an in-person interview at a local social service office. When the state introduced the separate program in November 1999, it replaced the in-person interview with a mail-based renewal process that featured a preprinted form. Families verified the information on the form and returned it to the local social service office for processing. In July 2001, the state reinstituted the in-person interview requirement at renewal. A year later, when it began requiring in-person interviews at application, it reverted to a mail-based renewal process.

KCHIP eligibility must be renewed every 12 months. Only those enrolled in managed care have continuous coverage for the first six months of their enrollment period. Otherwise, coverage is not continuous, and families must contact their local social service office when income or the family's composition changes. One week before the last month of enrollment, the family receives written notification that it is time to renew eligibility. Included in the notification is a form that the family uses to report changes in income, household composition, address, and health insurance status. Families may respond by mailing in the form, calling the local social service office, or visiting the office in person. Families have until the 10th of the last month of coverage—about two weeks—to return the form, along with documentation for the last two months of income and child care expenses. When families do not respond by the 10th, a written reminder is sent and families have another 10 days to complete the renewal. When the family fails to make this second deadline, a local caseworker disenrolls the child, and the family must reapply using the procedures required of new applicants.

Through its outreach contract with DMS, DPH follows up with families who do not complete the renewal process. The local health department receives a list of families who do not complete the renewal process. Staff work with CBOs, including schools and providers, to locate families on the list and encourage them to reenroll. Public health workers who follow up with families report that many of them have alternative sources of coverage or are not interested in reapplying because they do not want to go to the local social service office.

State administrators, social service staff, and advocates are generally satisfied with the current renewal system. One local social service supervisor stated that the mail-in process has improved program retention rates. One advocate credited the current process for maintaining overall enrollment levels after the introduction of in-person interviews at application. Nevertheless, stakeholders believe the retention process can be improved. They are critical of the mail-in renewal form—it is available only in English and requires a fairly high literacy level.

If it is lost, another form cannot be used because of unique identifiers on the form, and the family has to reapply as a new applicant. Advocates and at least one regional social service administrator believe that some families need more time to complete the process and that the deadlines are impossible to achieve if the family's address changes and mail must be forwarded.

## d. Summary

Kentucky experimented with many approaches to structuring its application and renewal processes for KCHIP. Initial changes simplified the application process, with the introduction of a mail-in application and, subsequently, self-declaration of income. Preprinted renewal forms were designed to simplify the renewal process. State officials rolled back these simplifications in 2001 and 2002, amid concerns about program costs and the accuracy of the eligibility determination and redetermination decisions. The state briefly required an in-person interview at renewal (from June 2001 to June 2002), but it recognized that retention was suffering because of this. Many families were choosing to reapply through the mail after coverage lapsed to avoid visiting a local social service office. The state reverted to a mail-in renewal process in 2002, at the same time it decided to discontinue mail-in applications and require an interview at a local social service agency (or an outstationed location). Caseworkers viewed the initial interview as an opportunity to educate families about KCHIP. Grassroots organizations adapted their outreach and application assistance efforts to these changes, and they now provide transportation to help families apply at the local social service agency. With the adoption of a streamlined mail-in renewal process, the state became more proactive in working with its partners to promote retention. In particular, it trains local outreach workers to provide education about the retention process, and public health workers follow up on nonrenewed cases. KCHIP enrollment has stabilized over the past few years, reflecting, in part, the state's focus on improving retention of current enrollees.

## D. MARYLAND: ATTEMPTING TO COORDINATE SCHIP WITH EMPLOYER-SPONSORED INSURANCE

#### 1. Program Overview

Maryland has undertaken one of the most generous SCHIP expansions, covering children up to 300 percent of the FPL. Recognizing that higher-income children are more likely to have access to ESI coverage, Maryland implemented a premium assistance program under SCHIP alongside its Medicaid expansion and separate child health programs. Coverage under SCHIP was phased in over time, beginning with Phase I, which was launched as a Medicaid expansion on July 1, 1998. The Maryland Children's Health Program (MCHP) offered coverage for children to 200 percent of the FPL and relied on the existing structure of HealthChoice, the state's mandatory Medicaid managed care program. Three years later, Maryland launched Phase II, a separate child health program called MCHP Premium, which offered coverage for children between 200 and 300 percent of the FPL. Families were required to pay a small monthly premium for their coverage. For families with access to ESI, subsidization of the ESI premium, rather than enrollment in HealthChoice, was required whenever it was cost-effective.

Maryland's initial eligibility expansion generated an early, and greater than expected, surge in enrollment. Between FFY 1998 and 1999, enrollment increased nearly 150 percent, followed by two more years of steady increase (Table V.1; Figure V.1). By June 2001, the actual number of enrollees—88,694—was nearly 150 percent greater than the state's projected enrollment. In implementing its Phase II expansion, Maryland anticipated that 19,600 children would enroll in MCHP Premium. As of September 2002, however, enrollment in the premium component was only 3,517.

By combining a Medicaid expansion with a separate child health program, Maryland has been able to adjust its coverage in response to changing fiscal circumstances. The state has provided steady coverage to low-income children (below 200 percent of the FPL), and, in good financial times, it has maintained open enrollment for families up to 300 percent of the FPL. During a state budget crisis in 2003, however, Maryland capped enrollment in MCHP Premium for families above 200 percent of the FPL. At the same time, it lowered the income threshold for premiums from 200 to 185 percent of the FPL. The ESI premium assistance component was eliminated in July 2003, and enrollees were transferred to HealthChoice at the end of their plan benefit year, if their parent chose to pay the MCHP premium.

In FFY 2004, enrollment in the original MCHP expansion declined for the first time in the program's history. This decline occurred for two reasons: (1) the state undertook a mass eligibility review, and many children were found eligible for traditional Medicaid and transferred out of SCHIP; and (2) the state decided to implement a premium requirement for families with incomes between 185 and 200 percent of the FPL; about 25 percent of the children in this income group disenrolled because their families did not pay the premium. In July 2004, Maryland raised the income threshold for premiums back to 200 percent of the FPL and eliminated the enrollment cap for MCHP Premium. The ESI premium assistance component of MCHP Premium, however, was not revived.

#### 2. Features of Maryland's ESI Premium Assistance Program

Maryland's ESI premium assistance program began on July 1, 2001. Children between 200 and 300 percent of the FPL who were uninsured—and who had not been covered by ESI in the previous six months—were eligible for the MCHP Premium program.<sup>16</sup> Families had to pay a premium to obtain coverage through a qualifying ESI plan, if one was available and cost-effective, or through direct coverage by HealthChoice if ESI was not available. To qualify for the premium assistance program, an ESI plan had to offer benefits comparable to those of Maryland's benchmark Comprehensive Standard Health Benefit Plan, and the employer had to contribute at least 30 percent of the cost of family coverage (which was reduced from 50 percent). The state also enrolled children in a secondary plan that covered excess cost sharing related to the ESI plan. The family paid a premium of \$40 to \$50, depending on family income level.

<sup>&</sup>lt;sup>16</sup> Exceptions to the waiting period included involuntary loss of coverage due to employer termination of ESI, job change, and unemployment.

The Department of Health and Mental Hygiene (DHMH) oversees the administration of the SCHIP program in Maryland. Local health departments (LHDs) are responsible for eligibility determination, and they coordinate the cases of families with incomes under 200 percent of the FPL who are enrolled in MCHP. A separate and centralized administrative unit is responsible for collecting premiums and coordinating the cases of families who are enrolled in MCHP Premium. In addition, a third-party broker (Fidelity) determined whether it would be cost-effective for applicants to MCHP Premium to be enrolled in an ESI plan rather than HealthChoice.

Enrollment in the MCHP ESI program fell short of expectations, with 203 children and 27 adults ever enrolled in FFY 2003. The program was terminated in July 2003. Maryland's experiences reflect the challenges that many states had implementing ESI buy-in programs under SCHIP or other subsidy programs (Williams 2003). This section highlights the features of Maryland's MCHP Premium and ESI components, as well as the implementation challenges. These lessons may inform other state efforts to develop programs that offer premium assistance programs for those who have access to ESI coverage but cannot afford it.

## a. Outreach Strategies

LHDs are at the core of the outreach and application process for MCHP. The state conducted some statewide media outreach, but the program relied primarily on a decentralized approach to outreach through the state's 24 LHDs. The Administrative Care Coordination Unit (ACCU) of each LHD was responsible for developing and implementing its county's particular approach to MCHP outreach. During the first four years of the program, specific outreach grants to LHDs supported a wide range of strategies that included visiting face-to-face with prospective applicants, distributing flyers at community events, and empowering partners in the education, health provider, and faith communities to encourage uninsured families to apply for MCHP. No specific outreach efforts targeted the MCHP Premium or ESI components.

After outreach grants were eliminated in 2003, LHDs continued to spend approximately 10 percent of their overall ACCU funding on MCHP outreach, ranging by county from \$100,000 to \$3 million. Because many MCHP outreach activities had become institutionalized within the LHDs, ACCU staff in many counties continued to incorporate MCHP outreach into their activities even without state funding.

## **b.** Application Process

The LHDs also play a central role in the application process. Mail-in applications are directed to one of 24 LHDs for processing, but families may also apply for MCHP in person at an LHD or at a local DSS office. Eligibility determination is performed by LHDs or DSS offices using a centralized computer system. The implementation of Accelerated Certification of Eligibility in October 2000 allowed LHDs to screen applications with pending Medicaid, TANF, and food stamp cases and to give three months of temporary MCHP eligibility certification. If a family applying for MCHP at an LHD expresses interest in other forms of assistance offered by DSS, the LHD will determine eligibility and then transfer the case to DSS.

If a family applying at either an LHD or local DSS office qualified based on income for MCHP Premium (between 200 and 300 percent of the FPL) and indicated on their application that they would be willing to pay a premium, they were sent a letter informing them that they had been denied MCHP eligibility. Nevertheless, the letter explained that their application had been forwarded to the MCHP Premium unit for processing. A DHMH case manager then contacted the parent to explain the program, emphasizing the requirement to pay the premium to enroll the child. When enrollment for MCHP Premium was capped between July 2003 and July 2004, a DHMH case manager would follow up on the MCHP denial letter to explain that enrollment for MCHP Premium was temporarily closed.

Between July 2001 and July 2003, additional steps were required to determine whether applicants to the MCHP Premium program would be enrolled in the premium assistance component. After receiving a forwarded case from an LHD or DSS office, the DHMH sent families a letter to inform them that they were being considered for the ESI component and inviting them to contact the MCHP Premium unit. The case manager and the family would establish a mutually agreeable time for a telephone call or interview to discuss the availability of ESI coverage for the child. If a case manager could determine immediately that ESI coverage would not be available, the child would be enrolled in HealthChoice upon payment of the premium. If, however, the case manager could not rule out the possibility of ESI coverage, the family's case would be forwarded to Fidelity, a third-party insurance broker, to determine whether the employer offered a qualifying plan.

### c. Employer Qualification Process

Fidelity examined the employer-sponsored health benefit plans that were available to a family to determine whether the benefits offered were equal to, or greater than, the benchmark coverage, and whether the employer contributed at least 30 percent of the cost of family coverage.<sup>17</sup> Fidelity had 30 days to make this determination. When a qualifying plan was identified, Fidelity would then determine if it was cost-effective to enroll the child in the ESI plan. If the ESI coverage was cost-effective, the child would be enrolled in the ESI plan. Alternatively, the child would be enrolled in HealthChoice if the ESI plan's benefits and/or employer contribution did not meet state guidelines or if Fidelity was unable to obtain necessary information from a family's employer(s).

A significant barrier to enrolling children in the premium assistance component was the lack of employers qualified to participate. Of the 2,200 employers that Fidelity had contacted (or attempted to contact), about 400 offered one or more plans that qualified. The most common reason employers did not qualify for participation was because they did not respond to requests for information about their plans. Even with 400 employers qualified to participate, only about 200 children enrolled in the program at the height of its enrollment. Focus groups revealed that most employers were unaware of the program, and most employees were uncomfortable asking their employers to participate (Center for Health Program Development and Management 2003).

<sup>&</sup>lt;sup>17</sup> In July 2002, this requirement was reduced from 50 to 30 percent to better reflect the typical contribution among employers.

### d. Renewal Process

Renewal of MCHP coverage in Maryland requires families to submit a new application. For children enrolled in MCHP Premium, the state sent a letter to families 70 days before the expiration of coverage instructing them to submit a new application to the LHD by the end date or their case would be closed. Their application was stamped "redetermination for MCHP Premium." State administrators explained that requiring LHDs to process renewal applications ensured that applications received a "full MCHP eligibility determination." If a case was closed before a redetermination was made, a family could submit information within four months and have their case reopened with retroactive coverage effective from the original date of expiration. Upon redetermination of eligibility for MCHP Premium, the case would be referred to the MCHP Premium unit. When the premium assistance component was discontinued at the end of June 2003, the state continued coverage through the end of the plan benefit year. At that time, families were given the option of transferring to HealthChoice to continue their children's coverage. The premium contribution was the same (\$40 or \$50, depending on the family's income).

#### e. Summary

Many states are considering ways to build on ESI coverage for children who have access to such coverage. Maryland's experience has highlighted the complexity of this endeavor. Maryland is not alone in recognizing the challenges of finding an efficient and cost-effective strategy to buy into ESI premiums, rather than directly covering children through SCHIP. The premium assistance component involves distinct administrative tasks related to screening employees about access to ESI, qualifying employers' plans, coordinating wraparound benefits (if applicable), and handling subsidy payments to employers or employees. The low level of employer awareness in Maryland suggests that education and outreach about premium assistance may be required to increase employer participation. Additional strategies may also be required to increase employees to approach their employers.

Maryland's experience demonstrates the administrative challenges of operating a premium assistance program within the constraints of the federal SCHIP regulations, specifically the regulations related to the minimum employer contribution and benchmark benefit package. The state hired an outside vendor to handle coordination with employers. The state also sponsored a secondary insurance plan to cover cost sharing. A separate unit was set up within the state to coordinate these and other administrative tasks.

An independent assessment of the cost-effectiveness of the premium assistance component revealed that the costs were considerably higher than those associated with the direct coverage option under MCHP Premium. Two factors were primarily responsible: (1) the ESI premium costs included elements that were not part of HealthChoice costs, such as marketing and sales; and (2) the per-capita administrative costs (including subcontractor costs) for the premium assistance component were much higher than those for the HealthChoice component, given the much lower enrollment in the premium assistance component. The assessment concluded that the premium assistance component was a financial loss to the state (Center for Health Program Development and Management 2003).

## E. OHIO: MAKING MEDICAID MORE ACCESSIBLE THROUGH COUNTY PARTNERSHIPS

#### 1. Program Overview

Ohio's Healthy Start program focused on making Medicaid coverage more accessible and consumer friendly. The state relied on partnerships with county social service agencies to implement multifaceted outreach efforts to build awareness of SCHIP. The counties also helped with renewals to keep children enrolled in Healthy Start. Healthy Start, which was already poised to expand poverty-related Medicaid coverage for children when SCHIP was enacted in August 1997, began covering children through age 18 with family income up to 150 percent of the FPL in January 1998. At the same time, Ohio expanded traditional Medicaid (Title XIX) eligibility to fill additional coverage gaps. The state chose to provide wraparound Medicaid benefits to children with family incomes up to 150 percent of the FPL who have health insurance coverage and thus are not eligible for SCHIP.<sup>18</sup> In addition, the state raised the income eligibility threshold for family coverage under Section 1931 of Title XIX (known in Ohio as "Healthy Families"), making Medicaid coverage available to all parents with family income below the FPL.

Plans to further expand SCHIP coverage were under way almost immediately. Shortly after January 1998, the governor appointed a task force that included representatives of the Ohio Department of Health, other state agencies, and the insurance industry to consider the options for expanding coverage. The task force recommended that the state implement a separate child health program, with Medicaid benefits and cost sharing, for children with family incomes between 150 and 200 percent of the FPL. After weighing the administrative burden of establishing a separate program, the governor and state legislature chose instead to expand Medicaid coverage and raised the income eligibility threshold for the SCHIP Medicaid expansion to 200 percent of the FPL. State policymakers decided not to implement a separate program because it would have involved financing another insurance program and its bureaucratic structure, including contracting procedures, enrollment systems, and consumer and provider outreach and support mechanisms.

The SCHIP program is administered by the Ohio Department of Job and Family Services (ODJFS). This agency administers Medicaid and most social service programs in Ohio, including Ohio Works First (Ohio's TANF program), WIC, and food stamps. Reflecting Ohio's overall philosophy of decentralization, county ODJFS offices are responsible for implementing SCHIP (including outreach, eligibility determination, and renewals) and other social services. By decentralizing the operation of social services, the state gave counties considerable autonomy in how they implemented program policies and procedures.

Enrollment in Ohio's Healthy Start program was slower than expected during the first year, according to state officials, but picked up in subsequent years (see Table V.1; Figure V.1). The

<sup>&</sup>lt;sup>18</sup> Children with other health insurance are ineligible for SCHIP. However, Ohio extended traditional Medicaid eligibility to these children. Medicaid becomes the payer of last resort, providing wraparound benefits to cover expenses not paid for by the other health insurance plan.

state attributes this enrollment growth not only to the enrollment expansion in July 2000, but also to refinements in its retention strategies. The state extended the redetermination period from 6 to 12 months and implemented procedures designed to retain children in Medicaid and SCHIP even when they have lost eligibility for other benefits (such as cash assistance or food stamps). Ongoing state and local outreach efforts, including the school-based enrollment efforts launched in fall 2000, also contributed to enrollment growth. State Medicaid agency staff believe the state may have reached the saturation point in Healthy Start enrollment. They note that enrollment is now growing more rapidly in the traditional Medicaid eligibility categories than in the Title XXI Medicaid expansion.

## 2. Strategies to Make Medicaid More Accessible Through County Partnerships

#### a. Outreach Strategies

Ohio used a county-level approach to outreach spearheaded by the county social service offices. County outreach efforts have been financed primarily by the state's allocation from the federal TANF/Medicaid "delinking" fund.<sup>19</sup> The state Medicaid agency lacked the funds required to draw down the federal funding, which was available at a 90 percent match rate, and most of its \$16.9 million allocation was available only to counties willing to provide the state's 10 percent match, which nearly all did. Counties pursued a variety of outreach initiatives and used some of their outreach funds to finance initiatives of local community groups. The two counties we visited, Cuyahoga and Richland, both mounted multifaceted campaigns that were widely viewed as effective in raising awareness of the program. Both counties conducted mass media campaigns that included radio and print advertising and billboards. County staff also played an active role in promoting the program locally. In Cuyahoga County, four full-timeequivalent staff members were dedicated to outreach, and another 15 eligibility specialists spent time marketing the program to schools, county agencies, and other groups. In Richland County, eight staff members made presentations to local groups and managed the county information hotline. Both counties also financed outreach activities of local groups. Richland County used a competitive proposal process to award outreach grants to local community groups. Cuyahoga County paid "finder's fees" to community groups that identified and enrolled children eligible for Healthy Start. In addition, the county contracted with a large hospital to operate a Healthy Start hotline and hire outreach workers to help patients complete Medicaid applications, including the Combined Programs Application for Healthy Start.

State-level outreach was limited to a few key activities. The state Medicaid agency produced public service announcements and educational videos, dispatched its three community educators to promote Healthy Start in collaboration with various state programs (for example, Head Start, WIC, and the Children with Medical Handicaps program [Title V]), and established a statewide school-based initiative to distribute information through the National School Lunch Program. These efforts promoted the Medicaid consumer hotline, which provides information on all Medicaid eligibility guidelines and benefits. The managed care plans that serve Healthy Start enrollees are prohibited from approaching individual families, but they can promote plan

<sup>&</sup>lt;sup>19</sup>Authorized under Section 1931(h) of the Social Security Act, the \$500 million fund was created to help states improve their Medicaid enrollment and eligibility determination processes in light of welfare reform.

services. CareSource, a Medicaid-only plan and the largest plan in the state's Medicaid managed care program, has eight community education representatives who conduct state-approved presentations to communities, providers, local social service offices, and families who approach them. Interested families can call the plan's hotline, which refers callers to the state's Medicaid consumer hotline.

The state's decentralized, county-based approach to outreach reflects its philosophy that counties know their own populations best and, thus, are best equipped to customize outreach strategies to meet their local needs. The decentralized approach to outreach is credited with promoting some creative and highly successful grassroots campaigns, such as those in Cuyahoga and Richland counties. Most observers, including state agency staff, believe outreach could have been even more effective had the state played a larger coordinating role to ensure that "the face of the program" was presented uniformly across the state. The reasons offered for the state's limited involvement in county outreach activities include (1) the agency's inexperience conducting outreach before Healthy Start, (2) insufficient staff and resources to monitor counties' activities, and (3) a preference on the part of the Medicaid agency to not dictate a uniform outreach strategy. As a result, say advocates, counties used some outreach dollars to "reinvent the wheel," experimented with approaches that had failed elsewhere, and promoted the program under different names, thus undercutting efforts to create brand recognition. It was not until July 2000 that the state required all counties to use the "Healthy Start" name and logo. Until that time, both Cuyahoga and Richland counties had promoted the program as "CHIP." In retrospect, state agency administrators think that it would have been useful to hire a communications firm at the outset to create a single set of promotional materials and toolkits for counties to use. Advocates believe the state could have enhanced the effectiveness of county efforts by identifying and promoting counties' "best practices."

Most groups involved in outreach agreed that the stigma attached to Medicaid as a welfare program posed a significant challenge to promoting Healthy Start. However, steps the state has taken to improve families' experience with the application process—eliminating face-to-face interviews, reducing verification requirements, and creating more attractive materials—have been credited with reducing stigma. Marketing the program under a new name, such as "CHIP" or Healthy Start, and making no mention of the Medicaid agency in promotional materials, further reduced the stigma attached to the program. As one advocate put it, "'Medicaid' is not on the marquee." Some efforts to dissociate SCHIP from Medicaid have backfired, however; advocates and county staff reported that some families who thought they had applied for a new program felt deceived when they received a Medicaid card.

Ohio recently cut back its outreach because the state exhausted its allocation from the federal TANF/Medicaid delinking fund in 2002. State agency staff indicated that "high-profile" outreach would have been curtailed, in any case, because the state was facing a budget crisis and the Medicaid caseload had already exceeded projections by some 120,000 enrollees.

#### b. Application Process

Ohio had already streamlined the Medicaid application process before it implemented its SCHIP Medicaid expansion, by shortening the application form and eliminating the requirement for a face-to-face interview. In July 2000, the state further streamlined the process by reducing

verification requirements. Advocates and others applauded the state's efforts to simplify the application process, although some cited a need for greater consistency in county implementation of eligibility policies and procedures, such as uniform documentation requirements.

The Combined Programs Application serves as an application for Healthy Start, Healthy Families, WIC, and two Title V programs (Child & Family Health Services and Children with Medical Handicaps). Implemented in 1991, the form was shortened to two pages in 1999 and revised again in 2000. The form is available in English and Spanish and can be obtained at a variety of sites, including WIC clinics, county social service offices, local health departments, hospitals and other provider sites, or by calling state or county hotlines. The state Medicaid agency eliminated the face-to-face interview requirement for most categories of Medicaid coverage in 1991 when it introduced the Combined Programs Application. Most applications are mailed, although families can still apply at county social service offices, at provider sites with on-site eligibility workers, or by telephone with hotline staff (who mail the completed form to the applicant to sign and submit with the required verification). With the eligibility expansion in July 2000, the state reduced verification requirements for Healthy Start, eliminating the need for applicants to document age, identity, or social security number. Currently, families must attach documentation of one month's income and, if applicable, confirmation of pregnancy and thirdparty insurance coverage. Each county social service office determines what type of income documentation it will accept.

Although the state does not directly support application assistance delivered by CBOs, some counties have used TANF outreach dollars to compensate organizations that help families complete applications. Until June 2002, for example, Cuyahoga County paid contracted organizations \$42 for each person they helped enroll.<sup>20</sup>

State Medicaid agency staff believe that the mail-in application was a key to making the process easy and less stigmatizing for families applying for coverage under SCHIP. In the words of one county caseworker, "A lot of people don't want to walk through the door of the county office and be seen here. Having a mail-in process eliminates the humiliation." Most eligibility workers and people who help families with applications praised the two-page application form. However, some said that the 10-page booklet in which the application appears (along with a list of required documentation, an explanation of applicants' rights and responsibilities, and other information) is daunting. Income documentation is the item most commonly missing from applications lack documentation of earnings and require followup by caseworkers (typically consisting of one or two reminder notices). Staff in both counties reported that most of these applications eventually are completed.

As with outreach, advocates viewed county-level variation in eligibility policies and procedures as a significant problem. Several respondents mentioned instances of caseworkers asking for more information or documentation than the state required—a problem one advocate attributed to caseworkers' concerns about food stamp sanctions. (The U.S. Department of Agriculture previously had sanctioned the state because of its high error rates.)

<sup>&</sup>lt;sup>20</sup>This program was terminated when TANF outreach funding began to dry up.

### c. Renewal Process

The renewal process is essentially a reapplication. Families must complete the same form and provide the same documentation as they did at application. Renewal packets typically are sent out during the 11th month of coverage, but the number and timing of reminder notices vary by county. Richland County sends the initial notice 30 days before the termination date and follows up with a reminder notice before closing the case. Cuyahoga County starts the process 45 days before termination and sends up to three reminder notices. Caseworkers must review Medicaid/SCHIP eligibility before terminating coverage (this is called "ex parte" review).

In response to the high level of enrollee turnover early in its SCHIP program, Ohio extended the redetermination period from 6 to 12 months, beginning in July 2000. Enrollee retention improved slightly as a result. In its 2001 annual report to CMS, the state reported that the percentage of children who retained coverage a full year increased from 74 to 82 percent after the policy change.<sup>21</sup> In addition, the state redirected its outreach efforts to focus on retention of current enrollees. The state developed education materials for enrollees, county agencies, and advocates.

### d. Summary

SCHIP provided momentum for Ohio to expand Medicaid coverage beyond levels already under consideration at the time. Moreover, the state expanded eligibility not only for children, but also for low-income adults. The state relied on the infrastructure of its county social service system to conduct outreach and process applications and renewals. This strategy was consistent with the state's goal to not design new administrative structures or systems for SCHIP. The counties were charged with developing outreach approaches tailored to their communities, and they were required to provide the funding to support their efforts. This strategy resulted in multifaceted outreach efforts at the local level. In retrospect, however, most stakeholders, including state officials, agree that more coordination at the state level would have been desirable. Some counties perceived they were reinventing wheels and they would have benefited from sharing of best practices across counties. In addition, counties vary in how they administer the application and renewal processes (for example, what kind of income documentation they accept and how frequently they follow up with families during the renewal process). The emphasis of state and county outreach has now shifted to retention of current enrollees. State support of Healthy Start remains strong, despite Medicaid cutbacks for coverage of adults.

<sup>&</sup>lt;sup>21</sup>The state compared two cohorts—one whose eligibility was redetermined in October 1998 and another whose eligibility was redetermined in July 2000, when the 12-month eligibility period was implemented—and calculated the percentage still enrolled 11 months after redetermination.

## F. PENNSYLVANIA: BUILDING A PARTNERSHIP WITH PRIVATE HEALTH PLANS

#### **1. Program Overview**

Pennsylvania's Children's Health Insurance Program (CHIP) began in 1993 as a statefunded program, predating the federal SCHIP program.<sup>22</sup> Limited state funding resulted in waiting lists in every county and an artificial ceiling on payment rates. Health plans were selected through a grant process and viewed participation in CHIP as part of their social mission. After Title XXI was passed, the state created a separate child health program and built its CHIP program on the successful partnership with private health plans. The availability of federal funds led to several changes in the program's features. First, the state expanded eligibility from 185 to 200 percent of the FPL for children up to age 19 and opened the door to children on the waiting list. Second, the state instituted a competitive procurement process to contract with health plans and raised the payment rates. The state entered into contracts with seven health plans, of which two were also Medicaid managed care contractors. Third, the state expanded the CHIP benefit package. The original CHIP benefit package covered preventive care, outpatient visits, outpatient diagnostic tests, outpatient surgery, emergency care, prescription drugs, dental care, vision care, hearing care, inpatient hospitalization, and mental health treatment. (However, many of these services were subject to benefit limits, similar to those in commercial plans.) The new CHIP benefit package eliminated the \$5 co-payment on prescription drugs and added coverage for substance abuse treatment, home health care, durable medical equipment, rehabilitation therapies, and partial hospitalization for mental health conditions. The CHIP benefit package was widely viewed as more generous than typical commercial coverage but more limited than Medicaid coverage. However, most children with special health care needs qualified for Medicaid in Pennsylvania because of higher income thresholds for children with disabilities.

Although many of the program features changed as a result of the influx of Title XXI funding, the basic philosophy remained the same. The program was operated as a public/private partnership with health plans. The Department of Insurance (DOI) administered CHIP as a separate program with its own administrative structure—a decision considered key to reducing the stigma associated with other government programs, including Medicaid. One of the early media campaigns emphasized "CHIP: It's not welfare" to differentiate the program from other public assistance programs.

The DOI aimed to avoid the complexities of the Medicaid program. As such, it delegated considerable responsibility to health plans and viewed them as partners in implementing the expanded CHIP program. In addition to their usual function of providing health insurance, health plans were responsible for marketing the CHIP program, distributing and processing applications, determining and renewing CHIP eligibility, and coordinating with Medicaid. The public/private partnership was manifest by the "effective and collegial relationship" between the health plans and DOI. They met monthly to discuss implementation challenges and identify

<sup>&</sup>lt;sup>22</sup> CHIP was modeled after the Blue Cross/Blue Shield Caring Program, which began in western Pennsylvania in 1989 after the steel industry layoffs.

strategies for overcoming challenges. Observers commented that the "enormous cooperation and collaboration" was key to making the program work.

CHIP was implemented under Title XXI beginning in July 1998. About 55,000 children who were enrolled in the grandfathered pre-SCHIP program transferred to the Title XXI program (Ellwood et al. 2003). Enrollment grew steadily, especially in the early years, as the state continued to refine its outreach and marketing efforts and streamlined its application and renewal procedures (Table V.1). The rest of this profile describes the unique role that health plans played in the implementation of Pennsylvania's CHIP program as it evolved under Title XXI.

## 2. Features of the Partnership with Private Health Plans

## a. Outreach and Application Assistance

The state viewed CHIP marketing as a three-pronged effort involving "air wars" that relied on statewide mass media advertising campaigns and "ground wars" that used community-level outreach, with health plan activities "in the middle." Each health plan dedicated staff for CHIP marketing and outreach. Their customer service staff answered the 1-800 CHIP line, responded to questions about program eligibility, and helped families with the application on the telephone. Their community outreach staff engaged in activities to build name recognition, generate applications, and create referral networks. Common health plan strategies included the dissemination of print materials (such as brochures, newsletters, flyers, and tear-off information cards), use of bus advertisements, participation in community events, and distribution of promotional items bearing their logos. In addition to reaching out to families, health plan outreach staff educated professionals in the field (including school nurses, hospital financial staff, and social workers) about CHIP. Health plan outreach staff remained in close contact with the local Medicaid liaison about upcoming community events they should attend.<sup>23</sup>

Several health plan marketing staff noted that their focus was shifting from building awareness to building knowledge. One health plan, for example, indicated that it was placing greater emphasis on hiring outreach workers with an educational (rather than marketing) approach. The goal was for the outreach workers to become more visible in communities and more hands-on, rather than "just throwing information out there." Another health plan mentioned that the focus of its presentation has shifted from "This is CHIP" to "Here's how you can apply and what you need to send and what you need to do when you renew." Observers commented that the health plans believed in their message and their product. They also brought credibility because they have been doing outreach for a long time and have established trusting relationships with school nurses and hospital/clinic staff.

To supplement the application assistance available from health plans, the state set up a tollfree helpline to distribute applications and answer questions about the CHIP application process.

<sup>&</sup>lt;sup>23</sup> Health plans with both Medicaid and CHIP lines of business are not permitted to conduct direct marketing or determine eligibility for Medicaid. All cases that are potentially eligible for Medicaid must be referred to the County Assistance Offices (CAOs). This "firewall" between Medicaid and CHIP is a protection against Medicaid health plan marketing abuses that occurred in other states (Families USA 1997).

The helpline counselors had an application for each health plan at their desk. If a caller requested information about a specific health plan, the counselor would send the appropriate form; otherwise, the counselor would send all the forms for the health plans in the area and encourage the caller to talk with the child's doctor about which plans they accept. The helpline counselors did not have access to individual health plan provider directories and could not help callers select a plan based on the affiliation of the child's PCP. The helpline staff had no further communication with families after an application was submitted to the health plan. They referred callers directly to the health plan's toll-free line if they were inquiring about their application status.

#### b. Application Process

Health plans are responsible for processing applications and determining eligibility for CHIP. Initially, each contractor had its own one-page CHIP application form. The forms had a common structure and a common set of data elements, but they differed slightly. Health plans had 15 days to process applications (although they needed more time during peak application periods). All applications required verification of one month of income, except that self-employed people could use their last year's tax return. To prevent substitution of CHIP for other coverage, the larger health plans matched CHIP applications against their commercial enrollment to ensure that CHIP applicants were not currently covered through another private or employer-sponsored policy.

The lack of a centralized eligibility determination system posed several challenges. First, the reported lag time from application to enrollment in CHIP was three to four months at one point, longer than the time for Medicaid. Second, the systems for making eligibility decisions were bound to vary from one plan to another. Third, the state did not have access to individual-level data on health plan enrollment. In 2003, after much training, testing, and refinement, the DOI launched an electronic enrollment and eligibility system to standardize and integrate health plan processing of CHIP applications.

The Title XXI requirements for coordination with Medicaid—especially the screen and enroll provisions—highlighted the need to modify certain procedures and forms. The local CAOs were responsible for handling Medicaid applications. The Medicaid application form was 30 pages long. An interagency coalition collaborated on the development of an 11-page common application for CHIP and Medicaid. This effort led to a minimum data set that would support eligibility determination for the two programs. (For example, Medicaid needs information on child support and car insurance, but CHIP does not.) Other changes were made to bring Medicaid and CHIP eligibility determination into alignment. CHIP changed the way it counted income (from gross to net income) to be compatible with Medicaid. Medicaid adopted the 12-month renewal period used by CHIP.

The state recognized that the multiplicity of forms was confusing to prospective applicants, as well as to those providing application assistance. In February 1999, the state adopted a policy called "any form is a good form." Applicants could use the common application or one of the health plan applications; any form would be accepted by a health plan or CAO. The reaction to this policy was generally positive, although some confusion remained. For example, some

families thought they were applying to a specific plan, but they used another plan's form. When this happened, health plans transferred applications between each other.

Health plan officials and advocates believe the "any form" policy was a "back door way" for families to apply to Medicaid. Some families who were reluctant to apply directly to Medicaid could apply to CHIP using the short form and be referred to Medicaid if their income was too high for CHIP. As one stakeholder commented, "Sometimes you have to sell Medicaid through CHIP."

The "any form" policy also made it easier for families to gain access to CHIP. However, the common application did not designate the name of the health plan to which the family wanted to apply, nor the name of the PCP selected for the child. Thus, the CAOs implemented an algorithm, based on the last four digits of the case number, to assign cases to health plans. When an application was received from the CAO, health plans varied in how they designated a PCP for the child. Some health plans auto-assigned a PCP and allowed families to change, while some contacted the family by mail or telephone and had them select a PCP for their child. The key for DOI was prompt enrollment—that is, ensuring that health plans did not hold up enrollment if a PCP had not been designated. The DOI left it up to the health plans to decide how to handle the PCP selection.

#### c. Coordination with Medicaid

To ensure that children were enrolled in the appropriate program, the health plans and CAOs prescreened their respective applications for income and health insurance status. If a Medicaid applicant appeared to have income over the Medicaid threshold but below the CHIP limit (and the child did not have other health insurance coverage), the case was forwarded to a health plan based on an algorithm using the case number. Conversely, if a health plan determined that the income was too low to qualify for CHIP, the application was referred to the local CAO office for a Medicaid eligibility determination. The applicant was sent a CHIP denial letter and notified that the application had been forwarded to the CAO. The CAOs frequently needed to follow up with families to obtain more detailed income information to determine Medicaid eligibility. Health plans noted that they refer many cases to the CAOs for a Medicaid eligibility determination. Some cases come back to the health plans because further investigation by the CAOs reveals that families underreported their income on the CHIP application.

The state continued to streamline and consolidate the application process when it introduced the COMPASS system (which stands for <u>Com</u>monwealth of <u>Pennsylvania Access to Social Services</u>) in October 2001. COMPASS is an integrated online application system for many public assistance programs, initially focused on Medicaid and CHIP, but later expanded to include cash assistance, energy assistance, food stamps, child care assistance, and other social service benefits. The COMPASS system automatically routed CHIP applications to the DOI, which would print out the application and send it to the appropriate health plan. To complete the online application, health plans needed to obtain a signature page, as well as income

documentation.<sup>24</sup> (Occasionally, applicants would send the signature page and income information to the health plan before DOI forwarded the application.)

Although health plans retained primary responsibility for processing initial applications and renewals, the automated features of COMPASS increased the efficiency of the process (for example, by routing applications to CAOs and health plans based on an initial screening of eligibility). COMPASS also required that certain fields be complete before an application could be submitted, reducing the time devoted to following up on incomplete applications. COMPASS also made it easier for community partners (including CBOs and community health workers) to help families with applications and track their status.<sup>25</sup>

#### d. Renewal Process

All health plans had a 90/60/30-day renewal notification policy, where the first notice was mailed 90 days before coverage was scheduled to end, a second notice was mailed at the 60-day mark, and a final notice was mailed at the 30-day mark indicating coverage would automatically be terminated if the family did not reapply. The 90-day letter included a preprinted renewal form that instructed families to verify or update the information and submit it with one month of income documentation. The state and health plans acknowledged that there was a substantial amount of turnover each month. Each health plan used various strategies to improve its renewal rate. One health plan used telephone outreach at 90 and 60 days and conducted a home visit if it had not heard back by 30 days. It hired one outreach worker specifically to "chase down" renewals. This health plan described its strategy as focused on the "personal care model" rather than the "media model." Another health plan commented "phone calls matter." When they stopped making telephone calls for a while, renewals dropped. The lack of income documentation was the biggest barrier to completing the renewal process. To reduce this barrier, one health plan accepted three weekly pay stubs (rather than requiring four). Another developed an attestation form that it used as the basis for renewal if there had been no change in income. This form eliminated the burden of collecting income documentation for verification purposes. The DOI was supportive of the need to streamline and modify renewal procedures and gave health plans considerable flexibility in the early years.

Coordination of renewal between Medicaid and CHIP was time-consuming. Cases were transferred back and forth between health plans and local CAO offices—just like in the initial application process—to reassess eligibility due to changes in income. Some delays were inevitably encountered because of the decentralized review process, and, as a result, Medicaid coverage was often terminated before CHIP eligibility had been established. To minimize the hardship on families, some health plans provided retroactive coverage under CHIP for the lapsed period of coverage. (For example, if Medicaid coverage closed on October 4, normally CHIP

<sup>&</sup>lt;sup>24</sup> Subsequently, COMPASS allowed an electronic signature, but it still required that applicants submit income documentation.

<sup>&</sup>lt;sup>25</sup> Recognizing that a high proportion of applications were missing income information, the partners also explained the need for pay stubs.

coverage would begin on November 1, but some plans made coverage retroactive to October 1.) CHIP recently implemented this retroactive coverage policy programwide.

Although health plans maintain responsibility for determining eligibility for continued participation in CHIP, many aspects of the renewal process have become more centralized and streamlined. With the gaining acceptance of the COMPASS system, online renewals began in 2004. Telephone renewals are also taken through the state CHIP helpline. In addition, health plan renewal forms and letters have been simplified.

## e. Summary

The central involvement of health plans in Pennsylvania's CHIP program precedes the enactment of Title XXI. The state-funded program provided grants to health plans to offer coverage to low-income children and was designed explicitly to "look different from Medicaid." With the expansion of CHIP under Title XXI, the state recognized that the decentralization of certain procedures was inefficient and, moreover, that coordination with Medicaid was not as smooth as it could be. This led to the development of a common application, an integrated online application system, a centralized eligibility determination system, and streamlined renewal procedures. Yet, the state has retained its fundamental partnership with health plans. Observers consistently noted that health plans are well respected in their communities, and they have a spirit of collaboration around building enrollment in the CHIP program.

# G. SOUTH CAROLINA: REINVENTING MEDICAID AS A USER-FRIENDLY PROGRAM

## 1. Program Overview

Before SCHIP was enacted, South Carolina had planned to expand Medicaid to 133 percent of the FPL. After SCHIP was enacted, the state chose to use Title XXI funding to expand Medicaid to 150 percent of the FPL for children through age 18, and was one of six states (along with Idaho, Indiana, Massachusetts, Rhode Island, and Tennessee) to implement its program on October 1, 1997.<sup>26</sup> The state held two public hearings, in which it received strong support for the Medicaid expansion, particularly from providers, advocates, and consumers. Proponents of the Medicaid expansion approach were pleased with the comprehensive benefit package under Medicaid. They felt it was more important to offer an array of services than to avoid any possible stigma that might be associated with Medicaid. In addition, the state was planning a public-private partnership to develop medical homes for Medicaid children, and staff did not want to jeopardize their progress by implementing a separate program. Additional advantages of the Medicaid expansion model included swift program implementation using the preexisting infrastructure and general program familiarity among providers, enrollees, and state administrators.

<sup>&</sup>lt;sup>26</sup> The expansion was implemented in August 1997, but the state did not receive the enhanced federal match under Title XXI until October 1997.

Concurrent with this expansion, the state renamed its entire child Medicaid program "Partners for Healthy Children" (PHC). The state used this opportunity to revamp Medicaid by marketing it as a health insurance program and streamlining administrative procedures. South Carolina's SCHIP enrollment ramped up very quickly. In the first year alone, 43,000 children were enrolled (Table V.1). At its height, enrollment reached just over 90,000 in FFY 2003. Enrollment showed a one-time decline from to 76,000 in FFY 2004 with the elimination of passive recertification, and it then climbed slightly to about 81,000 in FFY 2005. In addition, traditional Medicaid enrollment grew every year because of the program's "woodwork" effect. The state estimates that approximately three children have enrolled in traditional Medicaid for every one in the Medicaid SCHIP expansion program.

#### 2. Strategies to Reinvent Medicaid as a User-Friendly Program

The South Carolina Department of Health and Human Services (SC DHHS), PHC's leading state administrative agency, strove to change aspects of Medicaid that clients could see rather than modify internal systems that were invisible to clients. By changing outreach and enrollment procedures, the state marketed the program as user friendly and differentiated it from the welfare mentality. SC DHHS's partnerships with other state agencies—the Department of Health and Environmental Control (DHEC) and the Department of Social Services (DSS)—have reduced administrative hassles and promoted enrollment.

### a. Outreach Strategies

South Carolina conducted very little Medicaid outreach before PHC's implementation. When PHC was implemented, South Carolina initiated a substantial outreach effort to promote the new program. While the state sponsored some mass media campaigns, it primarily focused on community-based, one-on-one initiatives to spread the word. However, as state fiscal challenges arose in 2002, SC DHHS redirected its efforts from outreach to in-reach to promote responsible utilization and streamline programmatic costs.

South Carolina's initial outreach strategy was to distribute the PHC application as widely as possible and teach CBOs how to help families apply. The state adjusted its long-standing administrative contract with DHEC to include outreach and family education about proper utilization. By training local health department staff about PHC, DHEC integrated its outreach initiatives into all aspects of its organization. Local health departments focused on linking this program to the importance of preventive care ("do it now to save money down the road") and education ("healthy children learn better"). To promote PHC among families, they used the basic messages of "free health insurance" and "you might be eligible so apply now—don't wait."

SC DHHS and DHEC collaborated to distribute PHC applications to schools, doctors' offices, unemployment offices, advocacy groups, laundromats, stores, child care centers, health fairs, and religious organizations. The state found that families were more receptive to PHC when information was distributed through trusted community sources, such as ministers or school officials. With this in mind, the state actively promoted PHC in schools and sent

applications to every public school in the state.<sup>27</sup> School-based outreach was designed to be as simple as possible by stressing the importance of good health for learning.

The state relied on external organizations to promote PHC as well. The Covering Kids grantee was active in marketing PHC by creating billboards, brochures, and radio spots. The grantee did mail-outs to every school in the state on "how to insure kids." In addition, the state distributed materials to other CBOs, which conducted presentations to other community service organizations. The CBOs, in turn, distributed materials to local outlets (such as pharmacies and beauty parlors) and families in their area. The state's primary care association and other advocacy groups funded outreach workers at health centers and hospitals to inform people about Medicaid and help them complete the application process. Many of these outreach workers also encouraged families to come in for screenings and establish medical homes after they were enrolled.

Outreach entities used straightforward messages to distance the program from the stigma associated with Medicaid. The perceived stigma, though reportedly shrinking across the state, was especially evident among laid-off families in need for the first time. To counter this, some organizations shifted away from thinking of people as "Medicaid covered" to thinking of them as "clients." By stressing that families' taxes are used to support this program and that their children "deserve to have good health care," outreach workers strove to present a positive message. However, outreach workers reported that it was challenging to enroll certain populations (such as rural, higher-income, Hispanic, and Mennonite families) because of their lack of information about, or distrust of, the program.<sup>28</sup> Local outreach entities have worked to reach these communities by establishing trust through one-on-one interactions and offering interpreter assistance at points-of-service.

Most stakeholders reported that South Carolina's outreach strategy was effective in reaching a substantial portion of the eligible population. The widespread distribution of mail-in applications was found to be the most valuable outreach tactic, particularly at locations where informed sources (such as physicians, outreach staff, or school nurses) were available to answer families' questions about the program. South Carolina's outreach organizations, including providers, advocates, and state employees, agreed that one-on-one assistance was the best way to reach families who were potentially eligible for PHC. They also found that partnering with other community organizations allowed them greater access to the target population and more resources to dedicate to PHC outreach.

The state halted PHC outreach efforts in early 2002 due to budget constraints. In addition to discontinuing its own initiatives, SC DHHS sent letters to the Covering Kids grantee and other active outreach organizations requesting they discontinue their outreach activities at that time. Although disappointed by this suspension, many advocates and outreach organizations found ways to perpetuate their low-profile one-on-one efforts. The Covering Kids grant, however,

<sup>&</sup>lt;sup>27</sup> Schools also had an incentive to promote PHC because, as Medicaid providers, they were reimbursed for services of enrolled students.

<sup>&</sup>lt;sup>28</sup> In general, the media outreach strategy did not tailor the message to specific populations. The state relied on community-based outreach activities to reach these populations.

came to an end in June 2002. Applications remained widely available, but there was concern among outreach groups that the restrictions on outreach were preventing them from reaching all who may be eligible, particularly as unemployment grew across the state.

SC DHHS altered its contract with DHEC in July 2002 to reflect its new goals of managing utilization and reducing health care costs by finding medical homes for existing enrollees. These efforts were complemented by advocates' and providers' initiatives. For example, a family advocacy group educated parents of children with special health care needs about the importance of a medical home and proper management of asthma care. Likewise, community health centers emphasized the importance of having a relationship with a single provider.

## b. Application Process

Several factors contributed to South Carolina's early success in enrolling children in PHC: (1) development of a shorter application, (2) availability of a mail-in option, and (3) availability of application assistance by telephone and at point-of-service locations. The state developed a "goldenrod" application consisting of a one-page, double-sided form with a cover letter from the governor that outlined the income guidelines for the program.<sup>29</sup> Stakeholders broadly supported the application form because it used language that was easy for families to understand and it could be mailed in for processing. The state's philosophy was to distribute the application as widely as possible and make it easy for applicants to complete it on their own. The state established a telephone line to offer assistance to applicants and taught grassroots organizations how to help families complete the application. CBOs and local agencies distributed applications in English and Spanish throughout their communities. Because some families preferred to apply in person, hospitals, clinics, and other providers and advocates had outstationed Medicaid staff to help families complete applications. Families also could apply through a local social service office, either by mailing their application to a local office or applying in person.

Families applied for PHC by completing an application and mailing it to either the Central Processing Unit (CPU) or to a county services office. DHSS quickly established the CPU in 1997 as a temporary solution while it recruited a private contractor. However, because of the high cost of contracting for this work, SC DHHS chose to continue running the CPU itself. Approximately 36 state workers determined eligibility for all applications mailed to the state. Most applications the CPU received were complete, but eligibility workers telephoned families who submitted incomplete applications to obtain missing information (most frequently, pay stubs). Families could either mail or fax missing information; state staff also contacted families' employers to request this information.<sup>30</sup> Denials were rare; however, the most common reason

<sup>&</sup>lt;sup>29</sup> The goldenrod application was discontinued in 2003, when the state began to require more detailed information on income. The current application is seven pages long.

<sup>&</sup>lt;sup>30</sup> In January 2003, the state eliminated assumptive eligibility for the PHC program and mandated that all earned and unearned income be verified (including child support and alimony payments). Before this time, applicants who appeared to be eligible could be approved for 30 days (pending income verification) and were allowed to declare child support and alimony payments. SC DHHS was also working with the state revenue agency to obtain withholding data and speed up the income verification process.

for denial was excess income, because the state encouraged everyone to apply. The state tried to process applications within 45 days from the date of application to notification. The effective date of enrollment was the month of application, and families received their plastic medical swipe card within approximately 10 days of approval.<sup>31</sup> Children in PHC had continuous eligibility for 12 months and could obtain retroactive coverage for medical bills for the three months before enrollment.

#### c. Renewal Process

When PHC was first implemented, the state found that, for every two new children that enrolled in PHC, one child lost coverage. Anecdotal reports suggested that families dropped off the program to avoid county DSS offices and reapplied by mail soon after they were disenrolled. South Carolina countered this problem of "churning" within PHC by implementing passive renewal in September 2001 and shifting renewal responsibility from county DSS offices to a centralized state eligibility office. Passive renewal allowed families who did not return their renewal forms to stay enrolled, with the assumption that their eligibility status had not changed during the year. Stakeholders were generally supportive of passive renewal because it reduced administrative costs associated with churning and improved continuity of coverage. However, they acknowledged that some families did not report income changes that would affect their continued eligibility for the PHC program.

The passive renewal policy was overturned in February 2003 as the state tried to control program costs and prevent fraud. (This program change led to the large one-time drop in SCHIP enrollment shown in Table V.1 and Figure V.1.) However, responsibility for the renewal process remained centralized at the state level and was handled primarily through the mail. Families received renewal forms 60 days before their eligibility expired. They had to provide income and resource information on this form and return it to either the state or county office within 30 days, depending on the location of their eligibility worker. A second form was sent to families who failed to renew within 30 days. Caseworkers contacted families who did not return this second form; however, cases were closed if the caseworkers' efforts were not fruitful. Disenrolled families were required to reapply to access PHC services.

## d. Delivery System Options

When PHC was implemented, the state created a delivery system consisting of fee-forservice (FFS), PCCM, and health maintenance organization (HMO) options that were shared with Medicaid.<sup>32</sup> This system design fit well with the state's growing interest in moving PHC toward a "health insurance" program model with a focus on providing medical homes and

<sup>&</sup>lt;sup>31</sup> The plastic swipe card was designed to reduce stigma among PHC families because it resembles a private insurance card.

<sup>&</sup>lt;sup>32</sup> SC DHHS was unable to establish mandatory managed care because the state lacked substantial managed care penetration, and PHC failed to appeal to HMOs because of its low capitation rates (the state uses FFS rates to determine HMO capitation rates).

managing care. As a few stakeholders suggested, this delivery structure also recognized that the "one size fits all" approach may not work for providers and enrollees.

PHC and Medicaid provide medical care to nearly half of all South Carolina children. The state depends heavily on the provider community's support and participation. Yet providers expressed frustration about the programs' low reimbursement and administrative hassles. As the state was "losing providers right and left" in recent years, it opted to raise rates for dentists, PCPs, pediatric specialists, and obstetricians. The introduction of the plastic swipe cards was also designed to reduce administrative hassles by helping providers easily determine eligibility. In addition, the state has worked to swiftly process claims as a means of compensating providers for PHC's lower rates.

South Carolina has struggled to recruit HMOs to PHC because the state uses its FFS reimbursement rates to determine capitation rates. During the early years of SCHIP, the HMO option was offered through the Select Health HMO, a subsidiary of the AmeriHealth Mercy Health Plan, which serves only Medicaid enrollees.<sup>33</sup> The plan maintained a wide range of providers for all services other than family planning (which was carved out) and dental care (which was paid on a FFS basis directly by SC DHHS). Most participating PCPs were capitated for evaluation and management office visits; they were at risk for most services in their own offices, but not for emergency services or hospital visits. Enrollee participation in Select Health increased over time but remained low and was not statewide.<sup>34</sup>

PHC has offered a variety of PCCM options. The Physicians Enhanced Program (PEP) paid PCPs a capitated rate for providing case management and most office-based services. Physicians functioned as gatekeepers, providing referrals for specialty care; however, they were only at risk for the services they provided, but not for specialty care, inpatient hospital care, or emergency care. Physician and enrollee participation in PEP was strictly voluntary. South Carolina phased out another PCCM program, known as the Healthy Options Program (HOP), which paid PCPs a monthly case management fee and reimbursed all other services on a FFS basis. Because HOP did not hold PCPs at risk for any services, the state observed that PCPs had an incentive to enroll their healthy children in PEP and their sicker children in HOP. One PEP provider used the capitation rate to employ a full-time nurse/social worker who helped patients manage their care. The state found that the PEP program controlled costs and generally ensured medical homes for enrollees.

#### e. Summary

South Carolina used SCHIP as the impetus to "reinvent Medicaid" as a more user-friendly program. The state focused on implementing changes that would be tangible and visible to families, such as the introduction of a simplified application, ability to bypass the local social

<sup>&</sup>lt;sup>33</sup> PHC currently offers a second option, Unison Health Plan of South Carolina.

<sup>&</sup>lt;sup>34</sup> In 2000, the state sanctioned Select Health for marketing violations, including cold-calling families, paying application assistors a per-enrollee fee to enroll Medicaid eligibles, reporting people as enrolled in the plan who later said they were never enrolled, and distributing "premium items" (gifts) that CMS said were not allowable.

service agencies through mail-in application and renewal procedures (including passive renewal), and creation of a "private model" of health system choices with a medical home for children and a plastic insurance card. These changes resulted in rapid take-up of coverage under SCHIP, as well as spillovers onto traditional Medicaid enrollment. Concerns about the economic slowdown, coupled with program integrity issues, led the state to roll back some of these simplifications—most notably, to eliminate the shortened application form, passive renewal, and streamlined income documentation and verification procedures. Enrollment declined substantially after a mail-in renewal process replaced passive renewal, but has begun to rebound after a one-year dip. The state continues to make applications widely available, offers application assistance by telephone, and maintains partnerships with CBOs to sustain awareness of the PHC program among low-income families.

## H. UTAH: CONTROLLING COSTS THROUGH AN ENROLLMENT CAP

### 1. Program Overview

Utah launched its Children's Health Insurance Program (CHIP), a separate child health program, in August 1998, providing coverage for children up to age 19 with family incomes at or below 200 percent of the FPL. The design included benefits and co-payments that mirrored private insurance, as well as anti-substitution measures (including a 90-day waiting period) to prevent families from dropping existing private coverage to enroll in CHIP. These features, along with the program's nonentitlement nature, secured the support of Utah's fiscally conservative state legislature, and CHIP became widely popular in the state. Enrollment grew from 15,000 in FFY 1999 to more than 25,000 in FFY 2000, and it approached 35,000 in FFY 2001 (Table V.1; Figure V.1). In implementing a separate child health program, Utah retained the ability to carefully manage the growth of its CHIP program enrollment in relation to available state funding.

After three years of greater than anticipated enrollment in CHIP, major policy changes were introduced to control program costs. The most significant of these changes occurred in December 2001, when Utah became one of a handful of states to freeze enrollment (Pernice and Bergman 2004).<sup>35</sup> The Department of Health (DOH) implemented an enrollment cap limiting the number of enrollees to 24,000, a number that available state funding could support. In April 2003, the state legislature allocated an additional \$1.5 million to raise the cap to 28,000. In FFY 2005, the cap was raised to a monthly average of 40,000 children.

Open enrollment has been held periodically since implementation of the enrollment cap. The state offered several short periods of open enrollment to replace children who left the program. These periods were during June 2002, November 2002, July/August 2003, May 2004, and January 2005. When the cap was raised to 40,000, enrollment remained open for 13 months from July 2005 through August 2006. There is no limit to the number of children who may enroll in CHIP during these periods. For this reason, program participation peaked dramatically following periods of open enrollment and surpassed the number of children that can be supported

<sup>&</sup>lt;sup>35</sup> In addition to capping enrollment, Utah cut certain preventive and restorative dental benefits in 2002, but these benefits were restored in 2003.

based on available funding. Enrollment then fell as children left the program. DOH uses actuarial estimates of disenrollment to predict when enrollment may be opened again.

Utah's enrollment cap was initially implemented without any exceptions, such as for new babies born into families enrolled in CHIP, children with special health care needs, or children losing Medicaid eligibility. Gradually, the state phased in exceptions, allowing certain categories of children to enroll outside of the open enrollment period. The exceptions include (1) newborn or newly adopted children in currently enrolled families within 60 days of birth or adoption, (2) children who lose Medicaid coverage because their family income exceeds the Medicaid eligibility thresholds when they reach age 1 or age 6, and (3) children who lose Medicaid coverage because they are no longer deprived of parental support. In addition, the state extended eligibility during open enrollment to two categories of children: (1) children in families that purchased nongroup coverage between periods of open enrollment if they met the CHIP eligibility requirements at the time of purchase and time of application, and (2) newborns of women who applied for coverage in the third trimester of pregnancy during an open enrollment period.

Utah implemented a premium requirement in February 2002, shortly before the first open enrollment period. Notification was sent to families in December 2001 regarding cost-sharing changes to the CHIP program, and families had to start paying premiums monthly beginning the following February. Due to the administrative cost of collecting monthly premiums, the state switched to quarterly premiums in June 2002. For families in Plan A (those with incomes between 101 and 150 percent of the FPL), the quarterly premium is \$13 per family. For families in Plan B (those with incomes between 151 and 200 percent of the FPL), the quarterly premium is \$25 per family. Enrollees are sent an invoice one month before their premium is due. Families are given one month to pay and are sent a late notice before their case is closed. If coverage is dropped for nonpayment of a premium, a family must pay the balance due or wait 90 days before signing up again during a period of open enrollment.

## 2. Implementation of the Enrollment Cap

#### a. Outreach Strategies

Outreach efforts for the Utah CHIP program have been transformed by the suspension of continuous enrollment. Before implementation of the enrollment cap in December 2001, DOH coupled statewide media advertising with grassroots organizing strategies to promote the program and reduce the stigma associated with government assistance. The shift in December 2001 from continuous to periodic open enrollment required an accompanying shift away from continuous outreach. The DOH relied heavily on paid advertising in print, radio, and television media during the weeks leading up to open enrollment. Blitz-style campaigns began with a press release issued one month before the first day of open enrollment announcing the dates to the general public and to community partners who provided in-kind publicity. Campaigns continued during the 10 days before the first day of open enrollment with "teaser ads" publicizing the dates of open enrollment in print, radio, and television media. On the first day of open enrollment, these were replaced with ads informing families that they should "enroll now." All ads promoted a hotline telephone number and website as sources of additional information. In addition to using paid media, DOH was successful in drawing unpaid media attention to promote periods of

open enrollment. For example, in the first three days of the November 2002 open enrollment period, 11 stories were aired on radio and television programs, including the local news. During the 2003 open enrollment, more than 40 print stories provided free publicity for the CHIP program.

Another key element in fostering publicity around open enrollment was support from advocacy organizations, health care providers, and CBOs that serve low-income families. DOH provided promotional materials and alerts about open enrollment to a network of community partners who conducted outreach within their established constituencies. Among these partners, Utah Children directed significant outreach as a Covering Kids & Families grantee, targeting minority and non-English-speaking children in two school districts. Because there was no state-sponsored waiting list, Utah Children also maintained a notification list to inform interested families about open enrollment.

DOH and many advocates regard the overwhelming response during periods of open enrollment as evidence that statewide outreach efforts have been successful. The state attributes this success to effective paid advertising and to the popularity of the online application format. In addition, the intermittent nature of CHIP enrollment is credited with helping to create a "buzz" that is less easily achieved in states with continuous enrollment. Some observers, however, are not satisfied that the media approach is effectively reaching minority and Spanish-speaking populations. In response, DOH hired a new advertising agency to expand media outreach to Hispanic, Native American, and rural populations. Program officials also acknowledge that community partners are an important asset in publicizing open enrollment among hard-to-reach populations. While DOH has been successful in leveraging in-kind support from community partners, some say that more advance notice about upcoming periods of open enrollment would help these partners "gear up" and allocate sufficient resources for outreach. Others suggested that DOH should contract with CBOs for targeted outreach among minority and Spanish-speaking populations, rather than relying on in-kind support.

#### b. Application Process

Applications for Utah's CHIP program are accepted only during periods of open enrollment. To facilitate the submission of thousands of applications during these brief windows of opportunity, Utah simplified the CHIP application form to one double-sided page and eliminated the requirement that families provide proof of income upfront. An electronic version of the simplified application form is available at the Utah CHIP website, enabling families to apply online or to print the form and use it to apply by mail, by fax, or in person. During the first open enrollment period in June 2002, 18 percent of applications were submitted online. This increased to 45 percent during the next open enrollment period in November 2002. In addition to applying online, families may obtain and submit the application form at local offices of the Utah DOH and Department of Workforce Services or to outstationed eligibility workers in hospitals and schools. A Spanish version of the CHIP application form is available at these locations and may be printed from the CHIP website, but online applications may only be submitted in English. The CHIP application form is not distributed or available online when enrollment is closed. Many believe that the online application option has increased enrollment, especially among working parents who can access the CHIP website at their convenience.

The shift from continuous to periodic open enrollment has been accompanied by a decline in application assistance and an increase in application processing times and denial rates. The volume of applications submitted during brief periods of open enrollment has limited the ability of the CHIP program to provide application assistance. DOH continues to operate a toll-free hotline to answer questions, but it eliminated its telephone application for CHIP in June 2002 because it was too time-consuming.

#### c. Coordination with Medicaid and Private Insurance Coverage

The CHIP enrollment cap presented a significant challenge to coordination between Medicaid and CHIP. Before the cap, children were able to move seamlessly between Medicaid and CHIP if their family income fluctuated or if they lost Medicaid eligibility at age 6. With the cap in place, children who lose Medicaid eligibility cannot automatically transfer to CHIP and must wait until the next period of open enrollment to apply. Because periods of open enrollment have occurred infrequently, it has been difficult to prevent gaps in coverage for these children. Before the cap, a transfer in the opposite direction from CHIP to Medicaid was performed when a family reported any decrease in income. However, family income stability over time is now carefully examined before children are transferred from CHIP to Medicaid, because these children cannot move back to CHIP and may lose coverage if their family income increases during periods of closed enrollment. Utah has not approved an exception to the CHIP enrollment cap for children who lose Medicaid eligibility.

The state relaxed its waiting period for families who purchase health insurance between periods of open enrollment. In FFY 2004, DOH approved a rule change to permit a family who purchases nongroup health insurance between periods of open enrollment to be exempt from the 90-day waiting period if it meets the eligibility requirements for CHIP at the time of purchase and at time of application. This policy was designed to increase coordination with private insurance and reduce gaps in coverage by enabling families to move from employer-sponsored insurance coverage to CHIP during the first open enrollment following the loss of private coverage.

#### d. Renewal Process

The renewal process evolved in response to the open enrollment process. Before June 2003, families received a preprinted renewal form and were required to contact the Bureau of Eligibility Services (BES) within 10 days to update information or confirm that the information had not changed. If they did not respond within 10 days, families would receive a notice informing them that their case would be automatically closed at the end of the month. If a family returned the form at any time in the following 30 days, a caseworker could manually reopen the case. Otherwise, the family would have to wait until the next period of open enrollment to rejoin the program. Frontline eligibility staff indicated that the preprinted renewal form was easy for families to use. However, they found that the timing of renewals following periods of open enrollment was hard to manage, and the state implemented a simplified renewal system in June 2003 to reduce staff workload and improve enrollee retention. This change addressed the challenge of managing redeterminations when an overwhelming number of enrollees come up for renewal at the same time, one year after enrolling en masse during open enrollment.

One month before their eligibility expires, families receive a preprinted renewal form and are asked to return the form only if the information has changed.<sup>36</sup> If no response is given, it is assumed that the family remains eligible. This policy works in conjunction with Utah's cost-sharing requirement, because payment of quarterly premiums provides verification that enrolled families are still living in the state. As an additional check, BES employees call a random sample of families every month to review eligibility information. They also review wage information with employers and with the Utah new-hire computer registry. Since the move to periodic open enrollment, caseworkers have been careful to examine family income stability over time before moving a case from CHIP to Medicaid. This is done to prevent loss of insurance among children in cases where family income may increase beyond Medicaid eligibility limits during a period of closed CHIP enrollment.

In addition to easing the workload for eligibility staff, passive renewal addressed a desire for simplification of the renewal process, to prevent families from falling off the program. Before the enrollment cap, program staff attempted to improve retention by sending newsletters to enrollees that emphasized the importance of renewal. In addition, the state at one time employed a staff member who provided followup with disenrollees and attempted to reenroll families who still wanted to participate in CHIP. These efforts came to an end with the enrollment cap, and the state looked toward passive renewal as a way to improve retention and reduce administrative burden. Both advocates and providers praised the simplicity of the passive renewal process combined with the 12-month continuous enrollment policy.

#### e. Summary

Enrollment in Utah's CHIP program substantially exceeded initial projections, resulting in the implementation of an enrollment cap and a periodic open enrollment process. This enabled the state to manage CHIP enrollment within the available funding. Concurrent with the enrollment freeze, Utah began to charge premiums. Implementation of the periodic open enrollment process required changes to the state's outreach approach, application process, and renewal process. Coordination of children's coverage with Medicaid became more challenging, as children who lost their eligibility for Medicaid would no longer be able to enroll in CHIP until an open enrollment period. Within CHIP, however, the implementation of a passive renewal process was intended to improve retention and continuity of coverage.

State officials opted for an enrollment cap as an alternative to significant cuts in eligibility or benefits. Open enrollment periods have taken place at least once annually, replenishing program enrollment. As additional funds became available, the state legislature raised the enrollment cap, demonstrating strong support in the state for CHIP.

<sup>&</sup>lt;sup>36</sup> The simplified renewal process is the default process for CHIP renewals. Eligibility workers may require a mandatory renewal if they are aware of any changes in the household, such as family composition or employment status. In such cases, families must update and return the preprinted renewal form to be eligible for continued participation in CHIP.

### I. CONCLUDING REMARKS

States used the flexibility under SCHIP to implement coverage expansions for low-income children that were tailored to their political, social, and economic context. Each program evolved in response to its local context. We selected one theme that stood out for each of the eight states that participated in the case study component of the CMS national evaluation of SCHIP (Georgia, Kansas, Kentucky, Maryland, Ohio, Pennsylvania, South Carolina, and Utah). The themes cut across state initiatives in four broad areas: (1) simplifying application and renewal procedures, (2) improving coordination between Medicaid and ESI coverage, (3) developing partnerships to strengthen the program's image and acceptance, and (4) implementing mechanisms to control costs.

SCHIP remains a very popular program at the state level. Each state, however, faced budget pressures because of declining state revenues, as well as budget uncertainty due to shortfalls in its SCHIP allotment. States were faced with tough choices during the early 2000s to maintain coverage for as many children as possible within their budget constraints. Most states responded by cutting back on outreach and shifting their emphasis to retention of current enrollees. Some states also raised premiums, rolled back eligibility simplifications, or froze enrollment. As SCHIP approaches the end of its first decade, states have learned many lessons from their own and other states' experiences. Drawing on the lessons of the past, states are well positioned to meet future challenges.

### VI. IMPLICATIONS OF THE EVALUATION

The national evaluation of the State Children's Health Insurance Program (SCHIP), sponsored by the Centers for Medicare & Medicaid Services (CMS), has shown that states' proactive efforts to raise awareness about SCHIP, simplify the application and enrollment process, and improve retention resulted in steady enrollment growth during the first six years of SCHIP. These efforts also have resulted in increased enrollment in traditional Medicaid, reversing declines that began during welfare reform with the delinking of eligibility for Medicaid and public assistance.

SCHIP helped low-income children achieve and maintain an increased level of health insurance coverage during the late 1990s and early 2000s. These trends are in stark contrast to coverage trends among nonelderly adults, including parents of children under age 19, who attained only marginal improvement through the economic expansion during SCHIP's early years, then experienced a significant erosion of coverage as the economy entered a recession during the early 2000s. This study provides compelling evidence that SCHIP offered a safety net to low-income children who otherwise would have been uninsured as the availability of employer-sponsored coverage continued to erode.

Access to care has also improved under SCHIP. After enrolling in SCHIP, children were more likely to have a usual source of care and less likely to have unmet need. There also is some evidence that SCHIP children were more likely to have a preventive visit and less likely to have an emergency room visit. The two groups with the greatest gains were children who had been uninsured for more than six months and adolescents. Children with special health care needs and children of minority race/ethnicity also showed some gains, but disparities remain, particularly with regard to higher levels of unmet need.

These gains were made within a culture of "continuous quality improvement" in the SCHIP program. This culture was manifest through forums in which state SCHIP program directors and staff, CMS and other federal officials, providers, advocates, and other stakeholders convened to discuss implementation challenges, review emerging evidence, and share promising strategies. As SCHIP approaches its 10-year anniversary, it is timely to reflect on the program's implementation and to suggest opportunities for continuing to improve the performance of the program. This chapter discusses the implications of the CMS national evaluation of SCHIP for ongoing monitoring of program performance (Section A), future research (Section B), and reauthorization of SCHIP (Section C). The chapter concludes with a recap of the major accomplishments of SCHIP (Section D).

## A. IMPLICATIONS FOR ONGOING MONITORING OF PROGRAM PERFORMANCE

The SCHIP program has made great strides in implementing a performance measurement system to track access to, and quality of, care among SCHIP enrollees. CMS currently gathers data on four core child health performance measures that reflect access to well-child visits (less than 15 months of age and ages 3 to 6), access to primary care providers (PCPs), and appropriate

use of medications by children with asthma. The completeness and quality of state reporting continues to improve, and, as a result, CMS now plans to use the information to formulate strategies for performance improvement in the SCHIP program. To make this shift from performance measurement at the state level to performance improvement at the national level, the federal fiscal year (FFY) 2006 annual report template has built in greater transparency in how states are constructing each measure.

As CMS examines the FFY 2006 measures, the next step may be to work with states to achieve greater consistency in their methods. For example, states vary in the "length-of-enrollment" criteria used to define the denominators. (HEDIS typically requires 12 months of continuous enrollment for the well-child and PCP measures and 24 months for the asthma measure, but states vary in how they define the population included in the SCHIP measures.) As another example, some states exclude certain populations from their measures. Some report only on their managed care enrollees, while excluding those in fee-for-service (FFS). Some report only on their S-SCHIP enrollees and exclude those in the M-SCHIP component. Conversely, some report on their full Medicaid population, even though the M-SCHIP component represents a small portion of the total. Working closely with states should continue to yield improvements in the completeness and quality of the performance measurement data.

Over the longer term, CMS—in consultation and collaboration with its state partners—may wish to consider incorporating additional measures that reflect populations or services that the four current core measures do not capture. One example would be to include a measure for adolescent (ages 12 to 19) well-child visits to parallel the measures for younger children. Such a measure would acknowledge the role of SCHIP in expanding coverage to adolescents. Another example would be to include an annual dental visit measure to parallel the annual primary care visit measure, in recognition that most states cover this service through the SCHIP program. Both of these measures are specified in HEDIS and could be readily adapted to the SCHIP performance measurement system.

Another longer-term initiative may be the development of reports on the status of access and quality in the SCHIP program, as reported in the SCHIP core child health performance measures. The report could also include additional items frequently reported in the state-specific performance measures—such as availability of a usual source of care and level of unmet need. Tracking against national HEDIS benchmarks and Healthy People 2010 objectives would further strengthen the usefulness of these data to monitor performance in the SCHIP program.

The experience with performance measurement in SCHIP may serve as a model for performance measurement in the Medicaid program, which serves the vast majority of low-income children. The four core child health measures can be constructed for Medicaid programs based on the claims-level data in CMS's Medicaid Analytic eXtract (MAX) files. The measures can be constructed by state, age, and category of eligibility, among other characteristics, using standardized algorithms across states. The main caveat is that encounter data often are not available for services provided by Medicaid managed care plans, restricting the measures to Medicaid children enrolled in FFS or primary care case management (PCCM) programs. Many states, however, already require their managed care contractors to report these measures. Developing parallel measures for children in FFS or PCCM programs would be an important step in advancing CMS's efforts to assess performance in the Medicaid program.

## **B. IMPLICATIONS FOR FUTURE RESEARCH**

SCHIP has been studied extensively, and much has been learned about its effects on expanding coverage and improving access for low-income children. Nevertheless, as SCHIP approaches the end of its first decade, knowledge gaps remain. We have prioritized four issues that emerged from this evaluation: (1) measuring health outcomes in SCHIP, (2) reducing disparities in SCHIP, (3) assessing the future of outreach in SCHIP, and (4) estimating the effect of SCHIP on Medicaid enrollment.

#### 1. Measuring Health Outcomes in SCHIP

One key unanswered question relates to health outcomes in SCHIP. While this evaluation, and other studies systematically reviewed by this evaluation, clearly demonstrate the link between expanded coverage and improved access to care, the link between improved access and improved health outcomes is less clearly demonstrated. Several factors may account for the limited evidence in this area, including the longer time required to demonstrate health outcomes and the more extensive data requirements for this type of research (such as claims/encounter data, medical records, or school attendance records). Nevertheless, to more fully demonstrate the "return on investment" from SCHIP requires going beyond measures of access and examining the effects of SCHIP on measures of health and functional status. Though not a direct measure of health status, school attendance (as captured by the number of missed school days), is another important indicator of the potentially wide-ranging effects of SCHIP on children's well being. Early evidence is promising, but more research is required to demonstrate the relationship between SCHIP coverage, access, and health outcomes.

### 2. Reducing Disparities in SCHIP

The existing literature shows that the long-term uninsured and adolescents made substantial and consistent gains in access associated with their enrollment in SCHIP. Two other groups—children with special health care needs and children of minority race/ethnicity—experienced gains, but disparities remain. Of course, it is not realistic to expect that SCHIP alone (or any kind of insurance coverage) would close the long-standing gaps in access to care between children with and without special health care needs or between minority and nonminority children. While expanded insurance coverage reduces financial barriers, it does not act upon other barriers that may affect access to care. Thus, an area for future research is to ascertain the factors that underlie disparities in access within the SCHIP population—including structural and cultural barriers—and the extent to which disparities in utilization, costs, and quality of care also exist.

#### 3. Assessing the Future of Outreach in SCHIP

This evaluation sought to fill gaps in knowledge on the evolution and effectiveness of state outreach and enrollment efforts in SCHIP. These lessons may be even more valuable today, as many states are prioritizing their outreach efforts because of budget constraints. Indeed, some states that decided to dismantle their outreach efforts in 2003 or 2004 recognized later that it was

more costly to rebuild their outreach infrastructure or to reestablish "brand recognition" than to sustain their efforts at a modest level. There is much to be learned about how to structure outreach and enrollment initiatives in a period of modest outreach activity. Using a "real-time" outreach surveillance tool, such as that developed in this evaluation, may help states detect communities experiencing "enrollment outbreaks" and identify promising approaches that other communities could adopt. By blending quantitative and qualitative information, states and communities can proactively design better outreach strategies, prioritize and allocate funds, and, ultimately, cover more children.

#### 4. Estimating the Effect of SCHIP on Medicaid Enrollment

Our analysis of insurance trends, together with state estimates on Medicaid spillover, suggest that SCHIP has had a strong positive effect on expanding enrollment in traditional Medicaid. This effect may be attributable to SCHIP outreach, application and renewal simplification efforts, and the legislatively mandated screen-and-enroll process. However, the magnitude of this effect is unknown. Moreover, the factors driving this effect are unknown. To what extent are these trends a function of unrelated events (such as rising unemployment) versus state SCHIP program design? How do these trends vary by state program design? Data from CMS's MAX files would be ideally suited to support this type of research. The results would have important implications for broadening the discussion about SCHIP's role in expanding coverage for low-income children.

## C. CONSIDERATIONS FOR SCHIP REAUTHORIZATION

As Congress approaches the reauthorization of SCHIP in 2007, this evaluation provides many lessons and implications. This section highlights evidence related to the features and structure of the program.<sup>1</sup> The evidence is drawn from the full range of analyses conducted under this evaluation, including the case studies in eight states and the synthesis of state evaluations.<sup>2</sup>

• *Maintain option of M-SCHIP and S-SCHIP program models.* States took advantage of the flexibility offered under SCHIP to implement programs tailored to their local environment. Some expanded Medicaid, others created separate programs modeled after Medicaid (known as Medicaid "look-alike" programs), and still others built on private models in their states. Many used a combination of approaches. The flexibility to choose a program model was often key to gaining "buy-in" from state legislators. Two features of S-SCHIP programs—the nonentitlement option and the

<sup>&</sup>lt;sup>1</sup> This section focuses on key themes addressed in the evaluation. Two themes not addressed in the evaluation are: (1) implications for SCHIP coverage of uninsured parents and childless adults, and (2) implications for refinement of the SCHIP allocation formula.

<sup>&</sup>lt;sup>2</sup> Chapter V contains "lessons from the field" based on the eight case studies. Appendix A contains the executive summary for the background to the report to Congress based on the initial state evaluations.

benchmark benefit package—gave states more choices to respond to changing budget situations (for example, by employing enrollment caps reducing benefits, or increasing cost sharing). Alternatively, as more resources became available, states were able to expand coverage. These two features are discussed in more detail below.

- Maintain the nonentitlement option of S-SCHIP plans. When SCHIP was • implemented, some state legislatures were more willing to support SCHIP because of the nonentitlement feature of the S-SCHIP programs. At least seven states capped SCHIP enrollment in the early 2000s because program costs exceeded available state funding. States cited higher-than-expected enrollment growth as evidence of the popularity of the SCHIP program. An enrollment freeze was considered preferable to other mechanisms that would reverse application and renewal simplifications and potentially reduce continuity of coverage. Nevertheless, many lessons have been learned about enrollment caps. These lessons include (1) the equity issues that may result from locking out all or most populations during an enrollment freeze (including children who become ineligible for Medicaid due to higher income, siblings of enrollees, and children with special health care needs); (2) the pent-up demand that can occur when children are enrolled through periodic open enrollment; (3) the need for "inreach" to encourage renewal among existing SCHIP enrollees in between open enrollment periods; and (4) the importance of strategies to handle renewals when they occur in "bulk" one year after an open enrollment period.
- Maintain flexibility of S-SCHIP benefit packages. Title XXI specified requirements for S-SCHIP benchmark benefit packages but, at a minimum, required coverage of inpatient and outpatient hospital services; physician, surgical, and medical services; emergency services; laboratory and X-ray services; and well-baby and well-child care, including age-appropriate immunizations. (M-SCHIP programs were required to cover the Medicaid benefit package.) In many states, the S-SCHIP benefit designincluding benefit limits and cost-sharing provisions—was an important mechanism to avert substitution (crowd out) of SCHIP for private coverage. Nevertheless, most states with S-SCHIP programs augmented their benchmark benefit package by offering dental care, vision services, and mental health services. As a result, the S-SCHIP benefit package frequently is more generous than the most common private benefit packages; however, it may be less generous than Medicaid benefit packages due to limits on the number of covered services. In addition, some states exclude such services as private-duty nursing, personal care services, and nonemergency transportation. Efforts to standardize the SCHIP benefit package across statesespecially adopting the generosity of traditional Medicaid benefit packages-could reduce states' flexibility to tailor their benefits to minimize substitution and would restrict their options to modify SCHIP benefits if funding shortfalls occur.
- *Provide more flexibility to states in developing premium assistance components.* Some families who enrolled in SCHIP may have had *access* to, but were not covered by, private insurance because they found it unaffordable. Under SCHIP, states had the option to "buy into" private coverage by subsidizing the cost of premiums paid by employers and/or employees. Few states, however, chose to implement premium assistance under SCHIP, and those that did found that administrative costs were very high and enrollment was very low. Among the challenges were the burden of

screening for employer-sponsored insurance (ESI) availability among employees and reviewing ESI plans offered by employers; coordination of benefits between SCHIP and ESI (including, in many cases, the provision of wraparound benefits under SCHIP); and obtaining employer support for the minimum employer contribution.<sup>3</sup> Subsequently, the Health Insurance Flexibility and Accountability (HIFA) initiative eased some of the SCHIP requirements. Three provisions, in particular, could be considered to make coordination with ESI easier through state plan premium assistance components: (1) reduction of the minimum employer contribution, (2) elimination of wraparound coverage for benefit packages not meeting SCHIP requirements, and (3) elimination of the six-month waiting period without coverage under a group health plan.

- Enhance coordination with Medicaid, especially at renewal. There is considerable evidence that implementation of SCHIP was associated with expanded Medicaid enrollment. This "spillover effect" came from several sources: (1) SCHIP outreach identified children who were eligible for Medicaid, (2) the "screen and enroll" provision required coordination between SCHIP and Medicaid during the initial application process, and (3) Medicaid enrollment and renewal procedures were streamlined in many states following SCHIP. In some states, however, coordination remains an issue during the renewal process, where a sizable proportion of children disenroll from public insurance at renewal, only to reenroll within a few months. (This phenomenon is often called "churning.") A process parallel to "screen and enroll," but that focuses on the renewal process, would facilitate transfers between SCHIP and Medicaid.
- Strengthen performance-monitoring capabilities through submission of detailed enrollment and utilization data. The lack of detailed data on program enrollment and utilization for enrollees in S-SCHIP programs limits the ability to produce standardized, aggregate statistics on program enrollment, disenrollment, reenrollment, access, utilization, and quality. Currently, M-SCHIP programs submit person-level enrollment data and claims/encounter data to the Medicaid Statistical Information System (MSIS), and some S-SCHIP programs voluntarily report SCHIP enrollment data to the MSIS. Requirements for all S-SCHIP programs to submit personal-level enrollment data and claims/encounter data would represent a substantial administrative burden to states, and the validation of such data would be burdensome to CMS. Nevertheless, the availability of detailed enrollment and utilization data for all SCHIP enrollees would improve the comparability of performance measures data across states (as discussed earlier). In addition, the availability of detailed data would provide more flexibility for special studies related to program performance.

One overall theme that has emerged from this review of SCHIP program features is the trade-off between increased standardization *across* states versus increased flexibility *within* states. On one hand, more flexibility enables states to tailor the SCHIP program to local market

<sup>&</sup>lt;sup>3</sup> The minimum employer contribution is specified by each state in its SCHIP plan. The federal government does not require a specific amount or percentage.

conditions. For example, providing flexibility regarding the scope of the SCHIP benefit package gives states the choice between covering more children with fewer services versus fewer children with more services. Similarly, increased flexibility in the design of premium assistance programs would provide more opportunity for states to build on existing private coverage offered by employers. On the other hand, more standardization may be warranted in certain situations. In particular, more standardization of renewal procedures—akin to the "screen and enroll" provisions during the application process—would enhance coordination with Medicaid and improve continuity of public insurance coverage. Similarly, new requirements for submission of individual-level enrollment and utilization data by S-SCHIP programs would improve program monitoring and accountability, although they would place a substantial burden on states. These trade-offs reflect the delicate balance in designing SCHIP as a national program, while at the same time, preserving flexibility for states to make program choices consistent with their political, economic, and social environment.

## **D. CONCLUDING REMARKS**

The CMS national evaluation of SCHIP has assessed states' progress in implementing SCHIP. As SCHIP approaches its 10-year anniversary, much has been accomplished. Among the important milestones are the following:

- SCHIP enrollment increased dramatically each year, reaching 6.2 million children ever enrolled in FFY 2005.
- SCHIP outreach and enrollment initiatives reversed declines in traditional Medicaid enrollment levels by reaching and enrolling many children who were eligible for Medicaid but previously uninsured.
- The number and rate of uninsured, low-income children declined significantly, particularly during the economic slowdown of the early 2000s. If SCHIP did not exist, we project that uninsured rates would have risen, rather than fallen, during this period.
- Access to care has improved significantly under SCHIP, although certain gaps remain for children with special health care needs and children of minority race/ethnicity.

Reauthorization of the SCHIP program will provide states with continued opportunities to cover low-income children who would otherwise be uninsured and to enhance their access to health care through the SCHIP program.

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## **APPENDIX A**

## IMPLEMENTATION OF THE STATE CHILDREN'S HEALTH INSURANCE PROGRAM: SYNTHESIS OF STATE EVALUATIONS

## **BACKGROUND FOR THE REPORT TO CONGRESS**

## **EXECUTIVE SUMMARY**

**MARCH 2003** 

### **EXECUTIVE SUMMARY**

The State Children's Health Insurance Program (SCHIP) provides funds to states to expand health insurance coverage for low-income children who are uninsured. States have a great deal of flexibility to design and implement SCHIP, resulting in considerable diversity across states. Moreover, SCHIP programs continue to grow and evolve, with state approaches being modified and expanded as states gain experience and knowledge. Enrollment in SCHIP more than doubled from one million children in Federal fiscal year (FFY) 1998, to two million children during FFY 1999. Enrollment reached 3.4 million in FFY 2000 and continued to climb to 4.6 million in FFY 2001.<sup>1</sup>

This report describes the early implementation and progress of SCHIP programs in reaching and enrolling eligible children and reducing the number of low-income children who are uninsured. The report presents a snapshot of states' early experiences with their SCHIP programs based on information contained within the state evaluations, which were submitted in March 2000. SCHIP is a dynamic program and many states have modified their SCHIP programs to take advantage of the flexibility offered under title XXI. This report, therefore, provides a snapshot of SCHIP in its early years.

#### I. BACKGROUND FOR THIS REPORT

Congress mandated that states evaluate the effectiveness of their SCHIP programs and submit a report to the Centers for Medicare & Medicaid Services (CMS) by March 31, 2000.<sup>2</sup> Congress further required that the Secretary of the Department of Health and Human Services (DHHS) submit a report to Congress by December 31, 2001, based on the states' evaluations. Recognizing these statutory requirements—as well as the need for more in-depth assessment of the performance of SCHIP programs—CMS contracted with Mathematica Policy Research, Inc. (MPR) to conduct a national evaluation of SCHIP,<sup>3</sup> which included summarizing the findings and recommendations from the state evaluations. This report provides background for the DHHS Secretary's Report to Congress.

<sup>&</sup>lt;sup>1</sup> In addition, three states (New Jersey, Rhode Island, and Wisconsin) used title XXI funds to cover 233,000 adults in FFY 2001.

<sup>&</sup>lt;sup>2</sup>The Centers for Medicare & Medicaid Services was formerly the Health Care Financing Administration (HCFA).

<sup>&</sup>lt;sup>3</sup>The Balanced Budget Refinement Act of 1999 (BBRA) appropriated additional funds for the evaluation of SCHIP. The Office of the Assistant Secretary for Planning and Evaluation (ASPE) oversees a separate study of 10 states, including a survey of the target population. The Secretary is submitting a separate report, as mandated under BBRA.

To assist states in evaluating their programs, the National Academy for State Health Policy (NASHP) convened a workgroup of state and Federal officials, policymakers, and researchers to develop a standardized framework that states could use to prepare their evaluations. The framework was intended to facilitate cross-state comparison, based on a common structure and format. In addition, the framework was designed to accommodate the diversity of state approaches to providing health insurance coverage and to allow states flexibility in highlighting their key accomplishments and progress (NASHP 1999).

The state evaluations provided a snapshot of the features and activities of SCHIP programs as of March 2000. However, given that states have used the flexibility allowed under title XXI to continue to adapt their SCHIP programs to meet the needs in their state, some of the information contained in this report may no longer be accurate.

The majority of the evidence presented in the state evaluations is descriptive in nature. Given the short timeframe between implementation and evaluation, most states had limited ability to gather quantitative information by the time that they submitted their evaluations.

# II. FACTORS AFFECTING THE PROVISION OF HEALTH INSURANCE TO LOW-INCOME CHILDREN

More than half the states implemented SCHIP in the context of preexisting, non-Medicaid health care programs. Of the 27 states with preexisting programs, one-third discontinued their programs and transferred enrollees to SCHIP, while two-thirds continued to serve children who were ineligible for Medicaid or SCHIP. States with preexisting programs were more likely to implement S-SCHIP programs.

Since the implementation of SCHIP, states reported many other changes that took place, which may affect the availability, affordability, and quality of children's health coverage.

- Thirty-nine states and the District of Columbia reported changes to their traditional Medicaid programs. The most common changes—easing of documentation requirements and elimination of face-to-face interviews—were designed to streamline the eligibility determination process and minimize barriers to enrolling in Medicaid.
- Thirty-seven states indicated that changes had taken place in the private insurance market, most often citing health insurance premium rate increases. Many states expressed concerned about the stability of the market, especially as the economy slows.
- Thirty-three states reported that welfare reform affected health coverage of children, primarily resulting in reductions in their Medicaid caseloads. States reported that some of the early declines in Medicaid coverage have been curtailed as a result of eligibility expansions and enhanced outreach under SCHIP, as well as efforts to reinstate coverage among Medicaid-eligible children whose coverage was inappropriately terminated.

Some of these changes may foster the availability and accessibility of insurance coverage (such as changes in the Medicaid enrollment process), while others may reduce the likelihood of coverage (such as private health insurance premium increases). It is important to recognize that these changes may have complex interactions with the availability and source of health insurance coverage for low-income children; however, their precise effects are difficult to quantify and isolate in evaluations of SCHIP.

## **III. SCHIP ELIGIBILITY CRITERIA AND POLICIES**

States took advantage of the considerable flexibility offered by title XXI to design their SCHIP eligibility criteria and policies so that they responded to local needs. Title XXI authorized states to establish income eligibility thresholds for SCHIP up to 200 percent of poverty, or 50 percentage points above the Medicaid thresholds in effect on March 31, 1997. States were able to set SCHIP thresholds above these limits through the use of income disregards, and several states have received approval to do so. States that used a net-income test in determining eligibility effectively raised the eligibility threshold by disregarding certain types of income. Forty-four states used net-income tests in one or more of their SCHIP programs. Few states required asset tests under SCHIP, in an effort to streamline the eligibility determination process.

As of March 31, 2001, 16 states had set thresholds below 200 percent of poverty; 25 states had established SCHIP eligibility at 200 percent of poverty, and the remaining 10 states had set eligibility thresholds above 200 percent of poverty. The average SCHIP state income threshold, as of March 31, 2001, was 206 percent of poverty. Title XXI permits states to amend their programs as needed. Since implementation, 23 states have raised their SCHIP eligibility thresholds: 14 expanded eligibility within an existing SCHIP program; 5 phased in an S-SCHIP component after initially implementing an M-SCHIP component; and 4 used both approaches to expand eligibility.

The level of coverage expansion brought about by SCHIP is a function, not only of the upper income eligibility for SCHIP, but also the "floor" where Medicaid coverage stops and SCHIP coverage begins. On average, SCHIP raised income thresholds by 61 percentage points among children ages 1 through 5, but among older adolescents (ages 17 and 18), SCHIP expanded coverage by an average of 129 percentage points. Equally important, SCHIP has enabled states to minimize the impact of the traditional "stair-step" approach to eligibility under Medicaid that, in most states, left some children within a low-income family without coverage.

Most states have implemented policies to improve the continuity of coverage, such as provisions for 12-month continuous eligibility and annual redeterminations.

- Twenty-nine states used annual redeterminations and offered 12 months of continuous eligibility (although this coverage was not extended to all children enrolled in SCHIP in eight of these states).
- Fifteen states redetermined eligibility annually, but had less generous policies related to continuous eligibility. Four of these states provided six months of continuous eligibility, while the other 11 provided no guarantee of continuous eligibility.

• Only 7 states determined eligibility more frequently than every 12 months.

State eligibility policies continue to evolve. In addition to covering children, states have expressed an interest in using SCHIP funds to cover adult populations. Six states have received approval under SCHIP section 1115 demonstrations to cover adults under SCHIP. It remains to be seen whether slowdowns in the economy will have any impact on states' ability to support SCHIP eligibility expansions in the future.

## IV. SCOPE OF BENEFITS AND COST-SHARING REQUIREMENTS

States were given flexibility—within certain constraints—to develop a benefit package consistent with that offered in the public or private insurance markets. The following general patterns were observed:

- All SCHIP programs reported that they offered a core set of benefits, such as inpatient, emergency, and outpatient hospital services, physician services, preventive services (including immunizations), inpatient and outpatient mental health services, X-ray and laboratory services, vision screening, and prescription drug benefits.
- Although S-SCHIP programs were granted more flexibility in the design of their benefit package (relative to traditional Medicaid), most said they covered dental services, corrective lenses, family planning, substance abuse treatment, durable medical equipment (DME), physical, speech, and occupational therapy, and home health services. Some states reported that they chose to augment their benefit packages with these services because of their importance to children's health and development.
- Certain services were less common in S-SCHIP programs than in M-SCHIP programs, such as over-the-counter medications, developmental assessments, rehabilitation services, private duty nursing, personal care, podiatry, and chiropractic services.
- Enabling services—such as case management/care coordination, interpreter services, and non-emergency transportation—were more often covered by M-SCHIP than S-SCHIP programs. These services are generally used to reduce nonfinancial barriers and to facilitate access to care among lower income populations.
- S-SCHIP programs were more likely than M-SCHIP programs to charge premiums, copayments, or enrollment fees, as is permitted by title XXI. S-SCHIP programs generally served higher income populations than M-SCHIP programs and cost-sharing requirements were often viewed as a strategy for preventing the substitution of public for private insurance coverage.

States also had the flexibility to structure benefit limits for specific types of services. For example:

- Fourteen states placed limits on the scope or quantity of preventive dental services, and 18 states placed limits on restorative services. Such limits were more common among S-SCHIP programs than among M-SCHIP programs.
- Twenty S-SCHIP programs had inpatient and/or outpatient mental health benefit limits; 5 M-SCHIP programs had limits on outpatient mental health services.
- Seventeen S-SCHIP and 6 M-SCHIP programs imposed benefit limits on physical, speech, and occupational therapy.

Given the variability and complexity of SCHIP benefits and cost-sharing provisions across states (and even, within states, across programs), it is difficult to grasp all the nuances and discern how the effective level of coverage varies for families. It appears, however, that states have structured their SCHIP cost-sharing requirements for covered services to assure that families do not exceed the 5 percent cap, as required under title XXI.

## V. STATES' CHOICE OF DELIVERY SYSTEMS TO SERVE SCHIP ENROLLEES

Title XXI allowed states considerable flexibility in designing a delivery system to serve SCHIP enrollees. As a result, SCHIP programs used a variety of approaches to deliver and pay for services, including traditional fee-for-service (FFS); primary care case management (PCCM), where care is managed by a designated primary care physician; and managed care with capitated payments. Many states also chose to carve out certain types of benefits and deliver them through a separate system. States reported that their choice of delivery system and use of carve-outs for certain benefits was based on several factors, including ease of implementation, costs, and conditions specified in state legislation.

Due to a variety of circumstances, managed care was not the dominant delivery system among SCHIP programs.

- Although 43 states had a managed care delivery system in place, it was the dominant system in 20 states, and the sole system in 8 states.<sup>4</sup>
- PCCM and FFS delivery systems played a dominant role in serving SCHIP enrollees in 14 states. In many of these states, managed care generally was not well established in smaller urban and rural areas.
- Seventeen states used a mix of delivery systems so that no one system dominated. In 9 of the 17 states, one type of system was used for the M-SCHIP component and another for the S-SCHIP component.

<sup>&</sup>lt;sup>4</sup>A dominant delivery system was defined as one that enrolled at least two-thirds of SCHIP enrollees; otherwise, the delivery system was considered a "mixed" system. The designation was based on data from the SCHIP Statistical Enrollment Data System for the fourth quarter of Federal fiscal year 2000.

- All M-SCHIP components relied on the Medicaid delivery system to serve their SCHIP enrollees; 16 of the 34 S-SCHIP programs used it as well. The remaining S-SCHIP programs established delivery systems separate from Medicaid. States reported that their Medicaid and S-SCHIP programs often attracted the same providers, facilitating continuity of care when children transferred between programs due to changes in family circumstances or when families had children in more than one program.
- Thirty-one states carved out at least one type of service, and most paid for carved-out services on a fee-for-service basis. Twenty-two states carved out behavioral health services and 15 states carved out dental services.

Many states reported that they faced challenges in establishing and maintaining provider networks, regardless of the type of delivery system that was used. These challenges included providing families with a choice of health plans and ensuring an adequate number of providers. Based on the state evaluations, it appeared that many states were proactive in meeting the challenges they faced in developing and maintaining their delivery systems. State efforts included monitoring network capacity, encouraging participation of safety net providers, and improving health plan and provider participation. Nevertheless, instability in the health care marketplace may continue to present challenges to SCHIP programs and their ability to meet the needs of enrollees and their families. Some specific concerns expressed by states were chronic shortages of dental and vision providers, and gaps in provider networks in rural areas. Most states reported that they plan to gather consumers' assessments of their health plans and providers to gain a better understanding of how well SCHIP delivery systems are meeting enrollees' needs.

## VI. COORDINATION BETWEEN SCHIP AND OTHER PUBLIC PROGRAMS

Successful coordination between SCHIP and other public programs—such as Medicaid, title V Maternal and Child Health (MCH) programs, the National School Lunch Program (NSLP), or the Special Supplemental Food Program for Women, Infants, and Children (WIC)—can contribute to a state's ability to provide health insurance coverage to as many uninsured, low-income children as possible. Effective coordination can also help avoid the confusion on the part of the general public that may result from having multiple programs that assist low-income families.

All states with S-SCHIP programs coordinated with Medicaid programs in multiple ways.<sup>5</sup>

• *Outreach*. Twenty-six of the 30 states with S-SCHIP programs reported that they coordinated outreach with Medicaid, such as marketing the programs under a single name, using the same eligibility staff for both programs, or providing assistance in filling out applications.

<sup>&</sup>lt;sup>5</sup>This analysis was based on the 30 states with S-SCHIP programs at the time the state evaluations were submitted.

- *Joint Applications*. Twenty-five of the 30 states with S-SCHIP programs reported that they used a joint application with Medicaid, which allowed states to streamline eligibility determination.
- *Administration*. Twenty-five of the 30 states with S-SCHIP programs reported that they coordinated administration between the two programs, in an effort to minimize administrative costs and make the programs seamless to families.
- **Data Collection and Quality Assurance**. Twenty-five of the 30 states with S-SCHIP programs reported that they coordinated data collection, and 24 reported that they coordinated quality assurance, in an effort to minimize the paperwork burden on providers and facilitate analysis of enrollment, access, and utilization patterns.
- *Service Delivery, Contracts, and Procurement*. States were slightly less likely to coordinate service delivery (23 states), contracts (19 states), or procurement efforts (18 states) between their S-SCHIP and traditional Medicaid programs.

Most states also coordinated with title V MCH programs, but less than half coordinated with schools or school lunch programs or the WIC program. The most common form of coordination was outreach. States appear to have focused less attention on coordinating their eligibility determination, service delivery, and monitoring/evaluation activities. As states continue to search for ways to reach children who are eligible for SCHIP but who remain uninsured (or become uninsured due to changes in family circumstances), enhanced coordination with other public programs may hold promise for the future.

## VII. STATES' REFLECTIONS ON THE EFFECTIVENESS OF THEIR SCHIP OUTREACH EFFORTS

State outreach efforts have been an important factor in raising awareness about enrolling eligible children in SCHIP and Medicaid. Since the implementation of SCHIP, states have placed an emphasis on "reaching out" to eligible children and their families to inform them about Medicaid and SCHIP, answer their questions, and help them enroll in the appropriate program. Evidence on the large proportion of uninsured children who are potentially eligible for Medicaid but not enrolled reinforced the need for effective outreach for SCHIP, as well as Medicaid.

To reach diverse populations, most states combined state-level, mass-media campaigns with local-level, in-person outreach. Statewide media advertising built awareness of the program, while local-level outreach provided "points of entry" where families could obtain in-depth program information and receive application assistance.

• *Outreach Activities.* Almost all states promoted SCHIP using a hotline, brochures or flyers, radio/television/newspaper ads, public service announcements, signs or posters, education sessions, or direct mail. Between one-half and two-thirds used nontraditional hours for application intake, public access or cable television programming, home visits, or public transportation ads. Fewer than half used billboards, phone calls by state staff or brokers, or incentives for enrollees, outreach staff, or insurance agents.

• *Outreach Settings.* Most states conducted outreach in community health centers, public meetings/health fairs, community events, schools or adult education sites, provider locations, social service agencies, day care centers, or faith-based organizations. A majority of states also used libraries, grocery stores, public housing, job training centers, homeless shelters, workplaces, fast food restaurants, or laundromats. States were less likely to use refugee resettlement programs or senior centers as outreach sites.

States assessed the effectiveness of their efforts on a five-point scale (where 1 is least effective and 5 is most effective). States' ratings were based on various types of quantitative and qualitative evidence.<sup>6</sup>

- Personalized outreach activities, such as hotlines and home visits, were rated as more effective than mass-media approaches. Direct mail, incentives for education/outreach staff, signs and posters, public transportation ads, and billboards were rated as the least effective activities.
- The most effective outreach settings, according to state ratings, were provider locations, community health centers, schools and adult education centers, beneficiaries' homes, and social service agencies. The least effective settings were those where health insurance for children would be the least relevant: senior centers, fast food restaurants, libraries, grocery stores, battered women's shelters, and laundromats.

The state evaluations also offered insights into the lessons states have learned in the early years of building the outreach and enrollment infrastructure for their programs.

- *Building Capacity for Outreach Activities*. SCHIP spurred states to enhance their capacity for outreach by modifying or creating new partnerships with Federal, state, and community programs and with organizations that served the target population.
- *Coordinating Outreach Activities*. State and local outreach efforts required centralization and coordination to ensure consistency in marketing and enrollment assistance.
- *Training State and Local Partners*. Many states increased enrollment opportunities for families by training state and local partners—such as providers, school officials, and community-based organizations—to conduct outreach and provide enrollment assistance.
- *Financing Outreach Activities*. Title XXI placed a 10 percent limit on Federal matching for administrative expenses under SCHIP. Several states reported foregone outreach opportunities in order to stay within the 10 percent administrative cap.

<sup>&</sup>lt;sup>6</sup>The most common sources of information were enrollment trends, hotline statistics, and application data. Other sources included surveys, contractor or agency reports, focus groups, and event data.

Some states, however, found other ways to fund outreach, such as state funds, health plan efforts, foundation grants, and partnerships with other organizations.

From the information reported in the state evaluations, it appears that some states are moving toward conducting more rigorous evaluation of the effectiveness of their outreach activities. A few states, for example, are planning to link enrollment, application, and referral source data to measure the effectiveness of various outreach efforts on actual enrollment.

## VIII. HOW STATES ARE AVOIDING CROWD-OUT OF PRIVATE INSURANCE

Title XXI required states to implement procedures to ensure that health insurance coverage through SCHIP did not displace, or crowd out, private coverage. This provision was included because SCHIP targets children with higher incomes than traditional Medicaid and there were concerns that these children might be more likely to have access to, or be covered by, employer-sponsored insurance. Crowd-out may occur when employers or families voluntarily drop existing private coverage in favor of SCHIP. SCHIP may provide two incentives for families to drop existing private coverage: one, SCHIP coverage often has lower costs (that is, premiums and/or copayments) compared to private coverage; and two, it may provide more comprehensive benefits. Employers, too, may face financial incentives to discontinue dependent coverage or reduce their contributions if SCHIP coverage is available for their low-wage workers. (Employers are not permitted to reduce benefit coverage for employees based on their eligibility for a public program.)

States have incorporated a variety of features into their SCHIP programs to prevent crowdout among applicants. As of March 31, 2000:

- Nearly three-fourths of all states reported that they implemented a waiting period without health insurance coverage. The most common duration is three to six months. All states with eligibility thresholds above 200 percent of poverty have instituted a waiting period.
- About one-third of all states indicated that they designed their benefit package to avoid crowd out.
- Many states implemented crowd-out prevention procedures as part of their eligibility determination process, such as collecting insurance information on the application (41 states), conducting record matches (17 states), and verifying application information with employers (13 states).

The information reported in the state evaluations suggests that states did not perceive crowd-out to be a major problem during the early years of SCHIP. Of the 16 states that presented evidence in their state evaluations, 8 reported that they detected no crowd-out, 5 reported rates of less than 10 percent, and 3 reported rates between 10 and 20 percent. Given the extent of crowd-out prevention and monitoring strategies used by states—especially waiting periods, record matches, and verification checks—most states reported that they were confident that substitution of public for private coverage was minimal.

Although states were almost unanimous in their belief that little or no crowd-out was occurring under SCHIP, the data must be examined carefully, considering the variation from state to state in defining, collecting data on, and monitoring crowd-out. Furthermore, states had limited experience upon which to base the assessments presented in their state evaluations. Ongoing monitoring of crowd-out will be necessary to detect whether substitution is occurring in the future, particularly as states raise their eligibility thresholds above 200 percent of poverty and extend coverage to parents.

# IX. STATE PROGRESS TOWARD REDUCING THE NUMBER OF UNINSURED LOW-INCOME CHILDREN

Title XXI required states to track their progress toward reducing the number of uninsured, low-income children. However, this is one of the most elusive outcomes to measure, due to the lack of precise, consistent, and timely data. Moreover, by March 31, 2000, when states were required to submit their evaluations, many SCHIP programs had been operational for only 18 to 24 months, further challenging states' efforts to document their progress.

To facilitate the tracking of state progress, CMS required each state to derive and report a baseline estimate of the number of uninsured, low-income children prior to SCHIP. Thirty states used the CPS to derive their baseline estimate, including 6 that used the three-year averages published by the Census Bureau and 24 that made statistical adjustments to CPS data to compensate for its limitations. Another 15 states opted to produce their baseline estimates based on state-specific surveys. Of the remaining 6 states, 5 did not provide enough detail to determine the primary source or methodology, and 1 did not report a baseline estimate in its state evaluation. State approaches to measuring progress varied, and each approach has important limitations.

- Aggregate Enrollment Levels. Most states used aggregate enrollment in SCHIP to measure state progress. However, because some children may have had other insurance coverage prior to enrolling in SCHIP, enrollment figures may overstate reductions in the number of uninsured children.
- *Penetration Rates*. Some states derived a penetration rate, measuring enrollment in relation to their baseline uninsured estimate. The penetration rates generally ranged from 30 to 50 percent. However, the methods of calculating penetration rates varied among the states.
- Uninsured Rates Over Time. A few states compared the number or rate of uninsured children before and after SCHIP. None of the states conducted significance testing to determine whether changes over time were statistically significant.

In discussing their progress toward reducing the number of uninsured, low-income children, many states emphasized the spillover effect of SCHIP outreach on the enrollment of eligible children in Medicaid. Some states reported that Medicaid enrollment attributable to SCHIP actually exceeded the level of SCHIP enrollment, indicating that SCHIP may be having a much more dramatic effect on reducing the number of uninsured, low-income children than would be reflected by analysis of SCHIP enrollment patterns alone.

## X. STATE RECOMMENDATIONS FOR IMPROVING TITLE XXI

Congress mandated that the state evaluations include recommendations for improving SCHIP. States recommended various changes in coverage, financing, administration, and program orientation, many of which reflected state concerns about the proposed rule for SCHIP.<sup>7</sup> A number of these concerns were addressed by the final rule, revised final rule, and later program guidance. The following recommendations were mentioned most frequently in the state evaluations:

- The most common concern among states was that the 10 percent administrative cap constrained many states' efforts to conduct outreach, particularly among states with S-SCHIP programs that cannot obtain regular Medicaid matching funds for excess expenditures. States offered a number of suggestions, ranging from changing the way the cap is calculated, to removing outreach costs from the cap, to raising the level of the cap.
- When the Notice of Proposed Rulemaking and Final Rule were released, many states perceived a shift in the direction of the title XXI program at the Federal level, signaling less flexibility, particularly for S-SCHIP programs. This concern was motivated by the perception that the SCHIP regulations reflected a Medicaid orientation, which could add to the costs and limit creativity among SCHIP programs. Specifically, states expressed concerns about the more stringent limits on cost sharing for lower-income families, requirements for fraud detection, and requirements to implement consumer protections in managed care programs.
- Many states reported that they faced significant barriers in coordinating with employer-sponsored insurance, an important vehicle for expanding insurance coverage among low-income children and for avoiding crowd-out of private insurance coverage. Areas for improvement included reducing requirements for employer contributions, minimizing waiting periods without health insurance coverage, and easing requirements for health plans (such as benefits and cost-sharing limits).
- Some states suggested that they cannot succeed in reducing the number of uninsured, low-income children until coverage is expanded to certain omitted groups, such as children of public employees, immigrant children, and uninsured parents. In addition, some states suggested extending SCHIP to children with catastrophic coverage only, because they may lack coverage for routine and preventive care.

As the SCHIP program enters its sixth year, states are continuing to strive to meet the goal of reducing the number of uninsured low-income children. These recommendations reflect state priorities for improving the SCHIP program.

<sup>&</sup>lt;sup>7</sup>The state evaluations were submitted a few months after the release of the proposed rule for the implementation of SCHIP (*Federal Register*, November 8, 1999). Subsequently, CMS issued the final rule (*Federal Register*, January 11, 2001) and revisions to the final rule (*Federal Register*, June 25, 2001). CMS also released a Dear State SCHIP Director letter on July 31, 2000 that discussed the guidelines for SCHIP 1115 demonstration waiver requests.

## **APPENDIX B**

## METHODS FOR ANALYSIS OF INSURANCE COVERAGE TRENDS

This appendix describes the data and methods used to analyze trends in insurance coverage from 1997 through 2003. Section A describes the data source, including recent changes in data collection and file construction. Section B describes how the analysis adjusted for these changes to create a consistent time series to track trends. Section C explains how we measured source of coverage. Section D presents detailed tables that augment the tables presented in Chapter III.

## A. DATA SOURCE

#### **1.** Overview of the Current Population Survey (CPS)

This analysis is based on data from the CPS, which is conducted by the U.S. Census Bureau for the Bureau of Labor Statistics. The CPS is a monthly survey whose primary purpose is to measure labor force participation in the United States. Data on health insurance coverage are collected in an annual supplement, which is also the source of official statistics on poverty in the United States. Known until recently as the Annual Demographic Supplement or, more commonly, the March Supplement, it has been renamed the Annual Social and Economic (ASEC) Supplement and is now (as of 2001) being administered in February and April in addition to March.

The analysis uses 1997 data (based on the March 1998 CPS) as the baseline year for estimating the changes in children's health insurance coverage that may be attributable to SCHIP. Although some states started enrolling children in SCHIP during the fourth quarter of 1997, most states did not do so until mid-1998 or later (Rosenbach et al. 2003). For this reason, and because uninsured rates had continued to rise between 1996 and 1997, we consider 1997 a more appropriate baseline than 1996 (Rosenbach et al. 2001). Along with the 1997 baseline, this analysis uses six years of post-SCHIP data—1998 through 2003 (based on the March 1999 through 2004 CPS)—to examine the changes in children's health insurance coverage since the establishment of SCHIP.

#### 2. Data Limitations

The CPS is widely used for estimating and analyzing health insurance coverage, despite well-known limitations in the data (Lewis et al. 1998). The two main concerns are that (1) there is uncertainty about the reference period of the uninsured episode, and (2) the CPS underestimates by a substantial margin the number of children enrolled in publicly sponsored health insurance.

The annual estimates of insurance coverage, collected in February, March, and April of each year, are intended to refer to the previous calendar year. Respondents are asked to indicate whether they were *ever* covered by specific types of health insurance during that period. Those who report that they had no insurance coverage are counted as uninsured for the entire year. Yet the CPS estimate of the number of uninsured children lies close to alternative survey estimates of the number who are uninsured at a point in time, or roughly twice the number estimated to be uninsured for an entire year.<sup>1</sup> In view of this, the estimates of uninsured children from the CPS

<sup>&</sup>lt;sup>1</sup>Ongoing surveys that provide point-in-time estimates that approximate the CPS estimate of the uninsured include the National Health Interview Survey (NHIS) and the Survey of Income and Program Participation (SIPP).

are commonly interpreted as representing the number who are uninsured at a point in time (see, for example, Bilheimer 1997). We employ this interpretation as well.

That the CPS and other surveys underestimate children's enrollment in Medicaid has been recognized for many years, and efforts are under way to determine the magnitude and causes of the Medicaid undercount and, in particular, its impact on counts of the number of uninsured (Kincheloe et al. 2006; Callahan and Mays 2005; Hoffman and Holahan 2005). The magnitude of the error in the CPS depends on whether the CPS estimates of Medicaid coverage are interpreted as the number who were ever enrolled during the reference year or the smaller number enrolled at a single point in time. If the CPS estimate of Medicaid enrollment is interpreted as referring to a point in time, then the Medicaid undercount for children is estimated to be less than 10 percent. If the CPS is considered to capture annual-ever enrollment, then the undercount may be as much as a third. Proposed explanations have focused on underreporting and misreporting of public coverage as the chief causes.<sup>2</sup> However, the undercount may also be symptomatic of a more general problem associated with household surveys-namely, underrepresentation of segments of the population, which could affect the uninsured even more than the insured. Some researchers have also suggested that the national Medicaid estimates based on administrative data may overstate total enrollment because of imperfect unduplication of enrollment counts within some states and no unduplication across states. Given this uncertainty about the reasons for the discrepancy between survey and administrative estimates of Medicaid enrollment, coupled with the additional uncertainty about the reference period for reported Medicaid and other public coverage in the CPS, we do not attempt to adjust the CPS estimates of health insurance coverage to be consistent with administrative estimates of Medicaid—or SCHIP—enrollment.

## 3. Recent Survey Changes

Over the period covered by this analysis, the Census Bureau introduced a number of changes to the annual supplement that have a potential impact on estimates of health insurance. These changes and, in parentheses, the dates they were introduced, include:

• Introduction of a "verification" question asking respondents who reported no coverage to confirm that they were indeed uninsured or to identify their sources of coverage; previously, the CPS asked if household members were *insured* by various sources during the previous year, but it did not ask if they were *uninsured*; this addresses a frequent criticism that the CPS does not identify the uninsured directly but only as a "residual" (March 2001).

#### (continued)

Estimates of the number of people uninsured for an entire year can be derived from the SIPP, a longitudinal survey much better suited than the CPS to measuring the incidence of yearlong spells without insurance.

<sup>&</sup>lt;sup>2</sup> Possible explanations for misreporting of Medicaid coverage include lack of awareness about current coverage, lack of name recognition for the Medicaid program, stigma about reporting public coverage, and confusion between public and private coverage, especially among those enrolled in managed care plans (see, for example, Blewett et al. 2005; Center for Health Program Development and Management 2005).

- Expansion of the CPS sample to increase the precision of state estimates of uninsured children; this was accomplished in part by administering the "March" supplement to CPS households interviewed in February and April (March 2001).
- Introduction of questions to measure participation in SCHIP among children with no reported Medicaid coverage (March 2001).
- Incorporation of 2000 census data into the population estimates used to "control" the CPS weights (March 2002).
- Revision of the methodology used to produce the survey weights (March 2003).
- Adoption of the new race classification issued by the Office of Management and Budget, which allows respondents to report multiple races (March 2003).

Congress mandated the first two changes and also gave the Census Bureau funding to implement the sample expansion. Changes in the population controls always follow a new census, while the change in the weighting methodology was designed to address a number of deficiencies in procedures that had been in place for years. As the following table shows, some of these changes had a nontrivial effect on estimates of the uninsured rate among both children and adults (Nelson and Mills 2001).

| Change in CPS Methodology                 | Impact on Uninsured Rates in 2000     |                                       |   |
|---|---------------------------------------|---------------------------------------|---|
| (Survey Year)                             | Children Under Age 19                 | Nonelderly Adults                     | Comments  |
| Verification question (March 2001)        | Decreased by 1.3 percentage points    | Decreased by 1.4<br>percentage points | Most of the additional coverage<br>identified by this question was<br>private coverage.   |
| Expanded sample size (March 2001)         | No change                             | No change                             |   |
| New population controls<br>(March 2002)   | Increased by 0.3 percentage points    | Increased by 0.3 percentage points    | Increased the size and share of the population identified as Hispanic.  |
| New weighting methodology<br>(March 2003) | Decreased by 0.1<br>percentage points | No change                             | Affected distribution of young<br>children by year of age; number of<br>infants dropped by more than<br>500,000 (14 percent), and number of<br>children ages 1 to 4 increased;<br>because infants have a higher<br>uninsured rate in the CPS, the<br>uninsured rate decreased. <sup>a</sup> |
| New race question (March 2003)            | No change                             | No change                             | Affected continuity of race<br>classification in surveys before and<br>after 2003; did not affect<br>identification of Hispanic versus<br>non-Hispanic people because<br>measurement of Hispanic origin is<br>separate from race.   |

<sup>a</sup>In fact, because of more generous Medicaid eligibility limits, infants almost surely have a lower uninsured rate than children ages 1 to 4. However, the health insurance questions in the CPS ask about coverage during the preceding calendar year, and some parents of infants born after the end of the calendar year may report no coverage during the preceding year for infants who had coverage at the time of the survey.

## B. ADJUSTMENT OF CPS ESTIMATES FOR CHANGES IN SURVEY DESIGN

To develop a consistent time series of estimates over the period 1997 to 2002, we adapted our estimation procedures to these changing features of the survey:

- *Choice of Weights.* We used the Census Bureau's 2000 census-based weights in place of the 1990 census-based weights for March 2000 and 2001—the two years for which the Census Bureau produced both sets of weights. We also elected to use the Census Bureau weights for the 2003 and 2004 supplements, despite their understatement of infants, after determining that the impact on our estimates would be small.
- *Verification Question.* We excluded coverage reported in response to the verification question introduced in March 2001; the resulting estimates from this and the later surveys yield higher uninsured rates but are consistent with earlier years.
- *Population Controls.* We developed alternative population controls for March 1998 and 1999 that incorporate the results of the 2000 census, and we used these population controls to derive new weights for the two surveys, which we substituted for the Census Bureau's 1990 census-based weights.

Adjustments for the introduction of the verification question and the new population controls are discussed in greater detail in the next two sections.

## 1. Impact of the Verification Question

The Census Bureau identifies the coverage reported in response to the verification question so that, if the user prefers, it can be removed to produce estimates consistent with earlier years. This is extremely important. Among children, the verification question reduced the overall uninsured rate by 1.0 to 1.3 percentage points over the period 2000 to 2003 (Table B.1). Among adults, the impact was marginally greater, at 1.4 to 1.5 percentage points. Clearly, there is a discontinuity in the trend in health insurance coverage when analysts mix the two alternatives. The percentage point increase in the adult uninsured rate between 2000 and 2003 is identical (at 2.4) with or without verification, but if we compare the 2000 uninsured rate *without* verification to the 2003 uninsured rate *with* verification, the net increase is only 1.0 percentage points.

Therefore, analyses of trends starting before 2000 should use estimates of the insurance coverage without the verification question for the years 2000 and later. Analyses starting at 2000 or later can use estimates of coverage with or without the verification question, although estimates *with* the verification question are to be preferred because they appear to reflect a more complete reporting of coverage and a more explicit identification of the uninsured. It remains unclear, however, whether the addition of the verification question affects the interpretation of the reference period for the CPS estimates of health insurance coverage (that is, whether the verification produces a better estimate of coverage at a point in time, or whether it simply increases the reported coverage during the preceding calendar year).

### TABLE B.1

|                         | Survey Reference Year |      |      |      |  |
|-------------------------|-----------------------|------|------|------|--|
| Population and Estimate | 2000                  | 2001 | 2002 | 2003 |  |
| Children                |                       |      |      |      |  |
| With verification       | 12.2                  | 12.1 | 12.0 | 11.8 |  |
| Without verification    | 13.5                  | 13.2 | 13.2 | 12.8 |  |
| Nonelderly Adults       |                       |      |      |      |  |
| With verification       | 17.9                  | 18.5 | 19.6 | 20.3 |  |
| Without verification    | 19.3                  | 20.0 | 21.0 | 21.7 |  |

## ESTIMATES OF THE PERCENT UNINSURED WITH AND WITHOUT THE CPS VERIFICATION QUESTION: CHILDREN AND ADULTS BY SURVEY REFERENCE YEAR

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 2001, and ASEC Supplement, 2002 to 2004.

#### 2. Introduction of 2000 Census-Based Controls

The final step in the creation of the March CPS sample weights is a "calibration" adjustment, in which the weights are aligned with the Census Bureau's independent estimates of the March 1 population by age, sex, race, Hispanic origin, and state of residence.<sup>3</sup> The Census Bureau develops its population estimates by starting with single year-of-age tabulations from the last census, incrementing the ages, subtracting deaths by age, and adding births and estimates of net international migration (also by age). Estimates of net interstate migration are introduced as well, and, for the CPS, counts of military personnel and estimates of people in institutions are subtracted. Two to three years after a new decennial census has been conducted, an entirely new series of population estimates are generated using the new census data as the starting point, and the new estimates are introduced into the population controls for the Census Bureau's many surveys.

Population controls based on the 2000 census were introduced into the CPS starting with the surveys conducted in 2002. That is, the 2002 CPS ASEC was the first annual supplement to use 2000 census-based weights. Shortly after the release of these data in September 2002, the Census Bureau released revised weights for the March 2000 and 2001 surveys that incorporated 2000 census data. With both the original and the new weights for the two years, we evaluated the impact of the new weights on estimates of health insurance coverage by poverty level and other characteristics and determined that the impact of the new decennial census data was sufficiently large that we should not ignore it.

To create new weights for the surveys that provided the data for the first two years of our analysis required that we first produce population controls based on the 2000 census and then recalibrate the original March 1998 and 1999 survey weights to these new population controls. We explored alternative ways to develop the population controls, which involved some form of backcasting from estimates based on the April 2000 census population. The Census Bureau's estimates of annual international migration-the prime driver of change in the size and composition of the Hispanic population—have been revised at least twice since the 2000 census and may be subject to periodic revisions because of the availability of data from the American Community Survey. A recent revision reduced the estimate of net international migration, suggesting that the migration assumptions built into the population controls for the 2001 through 2003 surveys were considered too high. Indeed, if we used the change in the Hispanic population controls incorporated into the March 2000 and 2001 weights to backcast the March 1999 and 1998 Hispanic populations, we ended up with fewer adult Hispanics in March 1998 than with the 1990-based weights. This is inconsistent with the evidence from the 2000 census that the Hispanic population grew more rapidly between 1990 and 2000 than the Census Bureau's intercensal population estimates suggested. As a result, to derive new population controls for March 1998 and 1999, we started with March 2000 population estimates that were

<sup>&</sup>lt;sup>3</sup> There are three population control matrixes, and all three refer to the civilian noninstitutional population, which is the CPS universe. Before 2003, when the Census Bureau changed its weighting methodology, the first was a vector of 51 state estimates of people 16 and older; the second broke down the total population into Hispanic and non-Hispanic people by age and sex, with very limited age detail; and the third broke down the population by race (white, black, and other), age, and sex, using very detailed age categories for whites, less detailed categories for blacks, and only six age groups for others.

based on the 2000 census, but we subtracted estimates of the change between March 1999 and 2000 and between March 1998 and 1999 based on earlier Census Bureau population estimates. To apply the new population controls, we replicated the Census Bureau's algorithm for calibrating the sample weights.

Table B.2 presents parallel estimates of the percentage and number of children without health insurance by poverty level for the four years 1997 through 2000 calculated with 1990 and 2000 census based-weights. The 2000 census-based weights add 0.1 or 0.2 percentage points to the estimated uninsured rate in nearly every cell. The smaller increments seem to occur more often in the tails than in the middle of the poverty distribution, but beyond this there are no obvious patterns in how the new weights affect the estimates. The magnitudes of the increments do not appear to vary by year.

Table B.3 replicates Table B.2 for nonelderly adults. Compared to children, the effects of the new weights among adults are more pronounced, and patterns are more evident. Below 300 percent of poverty, the 2000 census-based weights increase the uninsured rate by 0.3 or 0.4 percentage points in nearly every cell. Above 300 percent of poverty, the typical increment is only 0.1 or 0.2 percentage points, with occasional cells having no change. Above 400 percent of poverty, the magnitude of the increment never exceeds 0.1 percentage point. There are differences over time as well. In 1999, the uninsured rate in every cell below 250 percent of poverty is increased by at least 0.4 percentage points (one rises by 0.5 percentage points, as does the overall uninsured rate below 200 percent of poverty). Two years earlier, however, only one of these cells changes by as much as 0.3 percentage points.

This analysis has demonstrated the impact of the 1990 and 2000 census-based weights on uninsured estimates in the late 1990s. Using the 2000 population controls to adjust the sample weights for the 1997, 1998, and 1999 estimates increased the estimated uninsured rates for both children and adults (though the effect was larger for adults). Changes in international net migration accounted for in the 2000 census-based weights were among the primary drivers.

# C. MEASURING THE SOURCE OF COVERAGE

In addition to tracking the number and rate of uninsured children, the analysis examined the source of coverage among children who were insured. This section describes how we measured the source of coverage. After the Census Bureau's edits and imputations, all insurance coverage reported in the CPS ASEC is assigned to one or more of the following sources: (1) coverage by a current or former employer or union, which may be paying all, part, or none of the cost of premiums; (2) coverage purchased directly by the insured; (3) TRICARE, CHAMPUS, CHAMPVA, or other military coverage; (4) Medicare; or (5) Medicaid or SCHIP, including "other government coverage."<sup>4</sup> Questions about SCHIP coverage were introduced into the survey in March 2001, but they are asked only of people with no reported Medicaid coverage during the reference year. Because of this limitation and a widely shared concern that many

<sup>&</sup>lt;sup>4</sup> Coverage provided by the Indian Health Service is not counted as health insurance in the CPS. Such coverage reported by respondents is identified separately from the sources delineated above so that users who wish to include it as health insurance coverage can do so.

|                  | Estim  | ates with 199 | 0 Census-Bas | ed Weights    | Estir          | Estimates with 2000 Census-Based Weights |        |        |  |  |
|------------------|--|---------------|--------------|---------------|----------------|--|--------|--------|--|--|
| Poverty Level    | 1997   | 1998          | 1999         | 2000          | 1997           | 1998                                     | 1999   | 2000   |  |  |
| (Percent of FPL) | Percent of Children Without Health Insurance |               |              |               |                |  |        |        |  |  |
| Total            | 15.3   | 15.6          | 14.1         | 13.3          | 15.5           | 15.8                                     | 14.4   | 13.5   |  |  |
| Less than 200    | 24.9   | 25.4          | 22.8         | 21.2          | 25.2           | 25.6                                     | 23.0   | 21.4   |  |  |
| 200 or more      | 8.6  | 9.0           | 8.6          | 8.6           | 8.6            | 9.1                                      | 8.7    | 8.7    |  |  |
| Less than 50     | 26.1   | 27.9          | 25.7         | 24.1          | 26.1           | 28.0                                     | 25.9   | 24.2   |  |  |
| 50 to < 100      | 24.8   | 26.3          | 24.3         | 24.5          | 25.0           | 26.5                                     | 24.5   | 24.7   |  |  |
| 100 to < 150     | 27.8   | 26.1          | 22.0         | 21.3          | 28.1           | 26.3                                     | 22.2   | 21.6   |  |  |
| 150 to < 200     | 21.2   | 21.7          | 20.0         | 15.9          | 21.4           | 21.9                                     | 20.2   | 16.1   |  |  |
| 200 to < 250     | 15.0   | 17.2          | 15.0         | 15.9          | 15.2           | 17.3                                     | 15.2   | 16.1   |  |  |
| 250 to < 300     | 10.8   | 9.4           | 11.5         | 11.5          | 10.9           | 9.5                                      | 11.7   | 11.6   |  |  |
| 300 to < 350     | 8.3  | 10.1          | 8.4          | 9.6           | 8.5            | 10.3                                     | 8.5    | 9.7    |  |  |
| 350 to < 400     | 7.4  | 9.1           | 8.0          | 7.1           | 7.4            | 9.2                                      | 8.2    | 7.2    |  |  |
| 400 or more      | 5.5  | 5.6           | 5.7          | 5.4           | 5.6            | 5.6                                      | 5.8    | 5.5    |  |  |
|                  |  | Ν             | umber of Chi | ldren Without | t Health Insur | ance (Thousa                             | nds)   |        |  |  |
| Total            | 11,586                                       | 11,871        | 10,792       | 10,208        | 11,726         | 12,007                                   | 10,957 | 10,318 |  |  |
| Less than 200    | 7,808  | 7,789         | 6,788        | 6,079         | 7,943          | 7,913                                    | 6,925  | 6,174  |  |  |
| 200 or more      | 3,778  | 4,082         | 4,004        | 4,129         | 3,783          | 4,094                                    | 4,032  | 4,145  |  |  |
| Less than 50     | 1,900  | 1,886         | 1,500        | 1,315         | 1,923          | 1,916                                    | 1,531  | 1,332  |  |  |
| 50 to < 100      | 2,006  | 2,111         | 1,834        | 1,786         | 2,054          | 2,150                                    | 1,876  | 1,818  |  |  |
| 100 to < 150     | 2,210  | 2,065         | 1,859        | 1,719         | 2,252          | 2,102                                    | 1,900  | 1,752  |  |  |
| 150 to < 200     | 1,691  | 1,726         | 1,594        | 1,258         | 1,714          | 1,745                                    | 1,619  | 1,272  |  |  |
| 200 to < 250     | 1,116  | 1,274         | 1,112        | 1,190         | 1,125          | 1,283                                    | 1,127  | 1,198  |  |  |
| 250 to < 300     | 743  | 614           | 775          | 769           | 744            | 619                                      | 786    | 773    |  |  |
| 300 to < 350     | 494  | 576           | 455          | 576           | 499            | 579                                      | 457    | 580    |  |  |
| 350 to < 400     | 384  | 479           | 399          | 359           | 382            | 480                                      | 401    | 360    |  |  |
| 400 or more      | 1,041  | 1,139         | 1,263        | 1,235         | 1,033          | 1,133                                    | 1,261  | 1,233  |  |  |

### PERCENTAGE AND NUMBER OF CHILDREN UNDER AGE 19 WITHOUT HEALTH INSURANCE, BY POVERTY LEVEL, 1997 THROUGH 2000, WITH ALTERNATIVE CPS WEIGHTS

Source: Mathematica Policy Research, Inc. analysis of March CPS, 1998 through 2001.

Note: The 2000 census-based weights for March 1998 and 1999 were produced by MPR.

|                  | Estima | ates with 1990  | ) Census-Base  | ed Weights    | Estimates with 2000 Census-Based Weights |              |          |        |  |  |  |
|------------------|--------|---|----------------|---------------|--|--------------|----------|--------|--|--|--|
| Poverty Level    | 1997   | 1998  | 1999           | 2000          | 1997                                     | 1998         | 1999     | 2000   |  |  |  |
| (Percent of FPL) |        | Percent of Nonelderly Adults Without Health Insurance |                |               |  |              |          |        |  |  |  |
| Total            | 19.6   | 19.7  | 19.1           | 19.0          | 19.8                                     | 19.9         | 19.3     | 19.3   |  |  |  |
| Less than 200    | 39.3   | 39.1  | 38.5           | 37.9          | 39.5                                     | 39.5         | 39.0     | 38.3   |  |  |  |
| 200 or more      | 12.5   | 13.1  | 12.6           | 13.1          | 12.5                                     | 13.2         | 12.7     | 13.2   |  |  |  |
| Less than 50     | 48.8   | 50.1  | 50.1           | 49.2          | 48.9                                     | 50.6         | 50.5     | 49.6   |  |  |  |
| 50 to < 100      | 38.9   | 38.9  | 40.5           | 39.5          | 39.2                                     | 39.2         | 41.0     | 39.8   |  |  |  |
| 100 to < 150     | 40.7   | 41.0  | 37.4           | 38.6          | 41.0                                     | 41.4         | 37.8     | 39.0   |  |  |  |
| 150 to < 200     | 32.9   | 31.3  | 31.9           | 30.3          | 33.1                                     | 31.6         | 32.3     | 30.6   |  |  |  |
| 200 to < 250     | 24.9   | 25.7  | 24.7           | 26.7          | 25.1                                     | 25.9         | 25.1     | 27.1   |  |  |  |
| 250 to < 300     | 19.2   | 19.8  | 19.4           | 19.9          | 19.3                                     | 19.9         | 19.7     | 20.2   |  |  |  |
| 300 to < 350     | 13.6   | 16.2  | 15.9           | 16.3          | 13.8                                     | 16.3         | 16.0     | 16.5   |  |  |  |
| 350 to < 400     | 12.4   | 14.2  | 12.7           | 14.0          | 12.4                                     | 14.2         | 12.8     | 14.2   |  |  |  |
| 400 or more      | 8.3    | 8.7   | 8.6            | 8.5           | 8.4                                      | 8.8          | 8.6      | 8.6    |  |  |  |
|                  |        | Numbe   | er of Nonelder | rly Adults Wi | thout Health I                           | nsurance (Th | ousands) |        |  |  |  |
| Total            | 31,528 | 32,050  | 31,340         | 31,645        | 32,231                                   | 32,792       | 32,148   | 32,466 |  |  |  |
| Less than 200    | 16,866 | 16,100  | 15,839         | 15,135        | 17,312                                   | 16,583       | 16,330   | 15,557 |  |  |  |
| 200 or more      | 14,662 | 15,950  | 15,501         | 16,509        | 14,919                                   | 16,209       | 15,818   | 16,909 |  |  |  |
| Less than 50     | 3,523  | 3,549   | 3,379          | 3,207         | 3,601                                    | 3,650        | 3,472    | 3,289  |  |  |  |
| 50 to < 100      | 3,961  | 3,842   | 3,859          | 3,565         | 4,084                                    | 3,954        | 3,969    | 3,664  |  |  |  |
| 100 to < 150     | 5,065  | 4,745   | 4,574          | 4,585         | 5,202                                    | 4,899        | 4,728    | 4,722  |  |  |  |
| 150 to < 200     | 4,318  | 3,964   | 4,027          | 3,778         | 4,426                                    | 4,080        | 4,160    | 3,882  |  |  |  |
| 200 to < 250     | 3,312  | 3,501   | 3,252          | 3,758         | 3,390                                    | 3,585        | 3,355    | 3,899  |  |  |  |
| 250 to < 300     | 2,666  | 2,584   | 2,576          | 2,689         | 2,721                                    | 2,633        | 2,657    | 2,766  |  |  |  |
| 300 to < 350     | 1,676  | 1,979   | 1,932          | 2,099         | 1,710                                    | 2,019        | 1,967    | 2,162  |  |  |  |
| 350 to < 400     | 1,528  | 1,760   | 1,467          | 1,645         | 1,546                                    | 1,777        | 1,496    | 1,684  |  |  |  |
| 400 or more      | 5,479  | 6,126   | 6,274          | 6,318         | 5,552                                    | 6,195        | 6,342    | 6,398  |  |  |  |

### PERCENTAGE AND NUMBER OF NONELDERLY ADULTS WITHOUT HEALTH INSURANCE, BY POVERTY LEVEL, 1997 THROUGH 2000, WITH ALTERNATIVE CPS WEIGHTS

Source: Mathematica Policy Research, Inc. analysis of March CPS, 1998 through 2001.

Note: The 2000 census-based weights for March 1998 and 1999 were produced by MPR.

respondents would not be able to differentiate between the two programs, we do not present separate estimates of SCHIP coverage.

We make a number of other simplifying assumptions as well. Medicare is rare among children, and some of what is reported as Medicare coverage may be Medicaid instead. Even without such errors, the number of Medicare children is too small to support analysis of trends, so we combine reported Medicare with Medicaid and SCHIP into a single category representing public coverage.<sup>5</sup>

More than half of those who report TRICARE, CHAMPUS, and related coverage also report having employer-sponsored insurance (ESI). To a large extent, however, this appears to be duplicate reporting. The CPS question used to elicit employer or union-sponsored coverage asks respondents to exclude military coverage, but that caution may not register adequately with civilian employees covered by the various plans. Because of this and the small fraction of children who are covered by the Department of Defense and Veterans Administration programs, we combine such coverage with ESI.

Private nongroup coverage, which an individual or family purchases directly from an insurance company, is of particular interest to researchers because it may provide the only alternative to either public coverage or no coverage for those who have no access to ESI. Yet about half of what the CPS identifies as private nongroup coverage is almost certainly ESI. According to the 2004 CPS ASEC Supplement, about 3 million children are covered by private plans whose policyholders live in a different household. The CPS collects no information on whether this coverage is ESI or nongroup coverage, but the Census Bureau allocates essentially all of it to nongroup coverage. This imputed nongroup coverage accounts for more than half of the private nongroup coverage that the CPS reports for children. Whatever the rationale for the Census Bureau's allocation strategy, it is sharply contradicted by other data collected in the CPS. All policyholders are asked (directly or by proxy) if they cover anyone outside the household. According to the 2004 survey, an estimated 4.5 million nonelderly adult policyholders cover people in other households. About 93 percent of these plans are group plans—that is, ESI. This does not mean, necessarily, that 93 percent of the children covered by policyholders outside the household are in group rather than nongroup plans, as we do not know which policyholders' plans cover children (or how many). Nevertheless, the 93 percent figure is, arguably, our best estimate.<sup>6</sup> If this fraction of children with nongroup coverage from outside the household were shifted to group coverage, the estimated number of children with nongroup coverage would fall from 5.7 to 3.0 million in the 2004 survey. Given this, and the uncertainty about which children with outside coverage have group versus nongroup coverage, we elected to combine the private nongroup children with group children, giving us a single category for private coverage.

<sup>&</sup>lt;sup>5</sup> For consistency, we also do this with nonelderly adults.

<sup>&</sup>lt;sup>6</sup> In the 2004 survey, policyholders who covered people outside the household were more likely to have group coverage if they were parents of children in the household than if they were nonparents (95 versus 92 percent). This suggests that the 93 percent figure could even be low.

Finally, while we have combined the private sources into a single private category and done the same with the public sources, there remain children and adults who had both public and private coverage during the reference year. How we classify the small fraction of individuals who reported both private and public coverage can affect trends in private or public coverage if the fraction with dual coverage is growing or declining. We addressed this, initially, by reporting the combination of both private and public coverage as a separate source. In subsequent analyses, we examined trends in "any public" coverage and "private-only" coverage.

# **D. DETAILED TABLES**

Tables B.4 to B.13 supplement the data presented in Chapter III. In particular, they contain more detailed estimates by poverty level. These tables also contain the detailed data presented in the figures shown in Chapter III.

|                                | 1997        | 1998        | 1999         | 2000        | 2001         | 2002        | 2003        |
|--------------------------------|-------------|-------------|--------------|-------------|--------------|-------------|-------------|
| Poverty Level (Percent of FPL) |             | Р           | ercent of Ch | ildren With | out Health I | nsurance    |             |
| Total                          | 15.5        | 15.8        | 14.4         | 13.5        | 13.2         | 13.2        | 12.8        |
| Less than 200<br>200 or more   | 25.2<br>8.6 | 25.6<br>9.1 | 23.0<br>8.7  | 21.4<br>8.7 | 21.3<br>8.2  | 20.9<br>8.4 | 20.1<br>8.1 |
| Less than 50                   | 26.1        | 28.0        | 25.9         | 24.2        | 24.9         | 23.2        | 21.7        |
| 50 to < 100                    | 25.0        | 26.5        | 24.5         | 24.7        | 22.1         | 21.0        | 20.2        |
| 100 to < 150                   | 28.1        | 26.3        | 22.2         | 21.6        | 21.7         | 21.8        | 19.7        |
| 150 to < 200                   | 21.4        | 21.9        | 20.2         | 16.1        | 17.4         | 18.1        | 18.9        |
| 200 to < 250                   | 15.2        | 17.3        | 15.2         | 16.1        | 14.1         | 14.1        | 12.2        |
| 250 to < 300                   | 10.9        | 9.5         | 11.7         | 11.6        | 10.0         | 11.5        | 10.8        |
| 300 to < 350                   | 8.5         | 10.3        | 8.5          | 9.7         | 8.5          | 9.2         | 8.9         |
| 350 to < 400                   | 7.4         | 9.2         | 8.2          | 7.2         | 8.2          | 8.3         | 9.0         |
| 400 or more                    | 5.6         | 5.6         | 5.8          | 5.5         | 5.5          | 5.4         | 5.6         |

### PERCENTAGE OF CHILDREN UNDER AGE 19 WITHOUT HEALTH INSURANCE, BY POVERTY LEVEL, 1997 THROUGH 2003

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 to 2001, and ASEC Supplement, 2002 to 2004.

| Poverty Level                | 1997         | 1998         | 1999         | 2000         | 2001         | 2002         | 2003         |
|------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| (Percent of FPL)             |              | Per          | cent of Par  | ents Witho   | ut Health I  | nsurance     |              |
| Total                        | 15.7         | 15.5         | 15.1         | 15.0         | 15.9         | 16.7         | 17.5         |
| Less than 200                | 34.2         | 33.9         | 33.9         | 33.3         | 36.3         | 36.9         | 38.3         |
| 200 or more                  | 7.4          | 7.7          | 7.5          | 8.2          | 8.0          | 8.5          | 8.8          |
| Less than 50                 | 36.8         | 39.4         | 40.4         | 37.7         | 46.1         | 41.7         | 42.0         |
| 50 to < 100                  | 40.9         | 39.2         | 40.4         | 42.1         | 43.0         | 43.8         | 44.9         |
| 100 to < 150                 | 36.8         | 37.5         | 34.3         | 36.3         | 36.7         | 38.2         | 40.3         |
| 150  to < 200                | 25.4         | 24.1         | 25.8         | 22.9         | 27.1         | 28.5         | 29.8         |
| 200 to < 250                 | 16.7         | 18.2         | 16.9         | 19.4         | 17.1         | 18.4         | 19.1         |
| 250 to < 300                 | 11.1         | 10.2         | 11.7         | 12.6         | 11.8         | 13.3         | 13.3         |
| 300 to < 350                 | 8.0          | 9.6          | 7.7          | 10.2         | 8.5          | 10.2         | 10.5         |
| 350 to < 400                 | 6.2          | 6.7          | 6.6          | 6.4          | 7.8          | 7.9          | 8.9          |
| 400 or more                  | 4.0          | 4.0          | 4.3          | 4.3          | 4.8          | 4.6          | 4.7          |
|                              | Perc         | ent of Non   | parents Age  | es 19 to 39  | Without H    | ealth Insura | ance         |
| Total                        | 30.0         | 30.5         | 29.6         | 29.3         | 29.7         | 31.6         | 33.2         |
| Less than 200                | 52.1         | 53.1         | 52.0         | 50.8         | 51.1         | 51.8         | 54.8         |
| 200 or more                  | 21.6         | 22.6         | 21.6         | 22.2         | 22.1         | 24.2         | 24.9         |
| Less than 50                 | 64.1         | 64.3         | 61.3         | 63.9         | 60.1         | 58.7         | 60.2         |
| 50  to < 100                 | 47.0         | 52.0         | 53.6         | 50.3         | 48.5         | 48.7         | 53.1         |
| 100  to  < 150               | 53.8         | 52.9         | 50.1         | 49.6         | 51.8         | 53.7         | 56.8         |
| 150  to < 200                | 46.5         | 46.3         | 46.3         | 43.3         | 46.0         | 46.6         | 49.7         |
| 200  to < 250                | 40.9         | 38.9         | 37.8         | 41.6         | 38.5         | 41.1         | 43.8         |
| 250  to < 300                | 31.0         | 33.6         | 32.0         | 31.7         | 32.4         | 34.9         | 36.2         |
| 300 to < 350                 | 24.0         | 26.7         | 25.2         | 26.2         | 26.4         | 31.7         | 30.2         |
| 350  to < 400                | 20.7         | 25.5         | 23.3         | 25.7         | 23.9         | 25.3         | 25.5         |
| 400 or more                  | 15.0         | 15.7         | 15.4         | 14.8         | 15.9         | 17.0         | 17.6         |
|                              |              |              |              |              | Without H    |              |              |
| Total                        | 16.2         | 16.4         | 15.8         | 16.0         | 16.7         | 17.4         | 17.5         |
|                              |              |              |              |              |              |              |              |
| Less than 200<br>200 or more | 35.0<br>11.0 | 34.6<br>11.8 | 33.4<br>11.4 | 33.5<br>11.5 | 33.9<br>12.1 | 35.8<br>12.4 | 35.4<br>12.6 |
|                              |              |              |              |              |              |              |              |
| Less than 50                 | 49.6         | 50.5         | 50.2         | 46.5         | 46.1         | 49.8         | 50.7         |
| 50 to < 100                  | 28.4         | 27.4         | 30.4         | 27.6         | 30.7         | 31.3         | 30.0         |
| 100  to < 150                | 34.7         | 36.1         | 31.8         | 32.8         | 33.7         | 34.7         | 35.3         |
| 150 to < 200                 | 32.8         | 30.1         | 28.4         | 31.4         | 30.0         | 31.5         | 30.3         |
| 200 to < 250                 | 23.1         | 24.6         | 25.3         | 23.3         | 24.9         | 28.3         | 25.0         |
| 250 to < 300                 | 19.7         | 20.7         | 20.0         | 20.1         | 20.5         | 21.3         | 21.4         |
| 300 to < 350                 | 13.4         | 16.7         | 19.0         | 16.5         | 16.9         | 15.2         | 20.3         |
| 350 to < 400                 | 13.6         | 14.6         | 12.0         | 13.9         | 13.9         | 13.4         | 14.7         |
| 400 or more                  | 7.5          | 8.0          | 7.8          | 8.0          | 8.5          | 8.6          | 8.7          |

# PERCENT OF ADULT PARENTS AND NONPARENTS WITHOUT HEALTH INSURANCE, BY POVERTY LEVEL, 1997 THROUGH 2003

# TABLE B.5 (continued)

- Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 to 2001, and ASEC Supplement, 2002 to 2004.
- Note: All estimates use 2000 census-based weights.

| Subpopulation and        |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|
| Type of Coverage         | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
| Children                 |      |      |      |      |      |      |      |
| Private only             | 64.1 | 64.4 | 65.6 | 66.2 | 64.4 | 63.2 | 61.3 |
| Public only              | 16.4 | 15.4 | 15.9 | 16.2 | 17.9 | 19.0 | 20.9 |
| Both                     | 4.0  | 4.3  | 4.1  | 4.0  | 4.5  | 4.6  | 5.0  |
| Parents                  |      |      |      |      |      |      |      |
| Private only             | 75.5 | 76.4 | 77.2 | 77.8 | 76.5 | 75.0 | 73.8 |
| Public only              | 7.1  | 6.5  | 6.2  | 5.6  | 6.0  | 6.6  | 7.0  |
| Both                     | 1.7  | 1.7  | 1.6  | 1.6  | 1.5  | 1.7  | 1.7  |
| Nonparents Ages 19 to 39 | )    |      |      |      |      |      |      |
| Private only             | 63.6 | 63.6 | 64.9 | 65.4 | 63.9 | 62.1 | 59.9 |
| Public only              | 5.0  | 4.7  | 4.4  | 4.0  | 5.1  | 5.1  | 5.5  |
| Both                     | 1.3  | 1.2  | 1.2  | 1.4  | 1.3  | 1.2  | 1.4  |
| Nonparents Ages 40 to 64 | ļ.   |      |      |      |      |      |      |
| Private only             | 73.9 | 73.8 | 74.3 | 73.6 | 72.6 | 72.3 | 71.8 |
| Public only              | 6.9  | 6.8  | 7.0  | 7.3  | 7.7  | 7.4  | 7.7  |
| Both                     | 3.0  | 3.0  | 2.8  | 3.2  | 3.0  | 2.9  | 3.1  |

### PERCENTAGE OF ALL CHILDREN AND NONELDERLY ADULTS WITH ONLY PRIVATE COVERAGE, ONLY PUBLIC COVERAGE, OR BOTH, 1997 THROUGH 2003

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 to 2001, and ASEC Supplement, 2002 to 2004.

| Low-Income Subpopulation |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|
| and Type of Coverage     | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
| Children                 |      |      |      |      |      |      |      |
| Private only             | 33.2 | 33.8 | 35.4 | 35.7 | 32.6 | 31.0 | 28.6 |
| Public only              | 35.6 | 34.0 | 35.3 | 36.6 | 39.6 | 41.5 | 44.2 |
| Both                     | 6.1  | 6.5  | 6.4  | 6.3  | 6.5  | 6.6  | 7.1  |
| Parents                  |      |      |      |      |      |      |      |
| Private only             | 41.8 | 43.0 | 44.2 | 46.1 | 42.3 | 40.6 | 38.5 |
| Public only              | 20.9 | 19.6 | 18.8 | 17.8 | 18.8 | 19.6 | 20.2 |
| Both                     | 3.1  | 3.4  | 3.1  | 2.8  | 2.6  | 2.9  | 3.0  |
| Nonparents Ages 19 to 39 |      |      |      |      |      |      |      |
| Private only             | 32.2 | 32.4 | 34.5 | 36.3 | 33.8 | 33.7 | 29.8 |
| Public only              | 13.9 | 12.5 | 11.8 | 11.0 | 13.2 | 13.0 | 13.7 |
| Both                     | 1.8  | 2.0  | 1.7  | 1.9  | 1.9  | 1.5  | 1.6  |
| Nonparents Ages 40 to 64 |      |      |      |      |      |      |      |
| Private only             | 35.3 | 35.2 | 35.9 | 34.9 | 34.3 | 34.4 | 33.1 |
| Public only              | 25.1 | 25.3 | 25.9 | 26.1 | 27.2 | 25.6 | 26.6 |
| Both                     | 4.7  | 5.0  | 4.8  | 5.5  | 4.5  | 4.2  | 4.9  |

### PERCENTAGE OF LOW-INCOME CHILDREN AND NONELDERLY ADULTS WITH ONLY PRIVATE COVERAGE, ONLY PUBLIC COVERAGE, OR BOTH, 1997 THROUGH 2003

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 to 2001, and ASEC Supplement, 2002 to 2004.

| Higher-Income Subpopulation |      |      |      |      |      |      |      |
|-----------------------------|------|------|------|------|------|------|------|
| and Type of Coverage        | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
| Children                    |      |      |      |      |      |      |      |
| Private only                | 86.3 | 85.4 | 85.4 | 84.7 | 84.2 | 83.3 | 82.4 |
| Public only                 | 2.6  | 2.7  | 3.3  | 3.9  | 4.4  | 4.9  | 5.8  |
| Both                        | 2.5  | 2.8  | 2.6  | 2.7  | 3.2  | 3.4  | 3.6  |
| Parents                     |      |      |      |      |      |      |      |
| Private only                | 90.5 | 90.5 | 90.5 | 89.6 | 89.7 | 88.9 | 88.6 |
| Public only                 | 1.0  | 0.9  | 1.0  | 1.1  | 1.1  | 1.4  | 1.5  |
| Both                        | 1.0  | 0.9  | 0.9  | 1.1  | 1.1  | 1.2  | 1.2  |
| Nonparents Ages 19 to 39    |      |      |      |      |      |      |      |
| Private only                | 75.7 | 74.5 | 75.6 | 74.8 | 74.6 | 72.6 | 71.5 |
| Public only                 | 1.6  | 1.9  | 1.8  | 1.7  | 2.2  | 2.1  | 2.3  |
| Both                        | 1.1  | 1.0  | 1.0  | 1.2  | 1.1  | 1.1  | 1.3  |
| Nonparents Ages 40 to 64    |      |      |      |      |      |      |      |
| Private only                | 84.5 | 83.6 | 84.0 | 83.3 | 82.8 | 82.5 | 82.2 |
| Public only                 | 1.9  | 2.1  | 2.3  | 2.5  | 2.5  | 2.6  | 2.6  |
| Both                        | 2.5  | 2.5  | 2.3  | 2.6  | 2.6  | 2.6  | 2.6  |

### PERCENTAGE OF HIGHER-INCOME CHILDREN AND NONELDERLY ADULTS WITH ONLY PRIVATE COVERAGE, ONLY PUBLIC COVERAGE, OR BOTH, 1997 THROUGH 2003

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 to 2001, and ASEC Supplement, 2002 to 2004.

|                  |  | Annual Estimate | es     | Estimates of Change |              |              |  |  |  |  |
|------------------|--|-----------------|--------|---------------------|--------------|--------------|--|--|--|--|
| Poverty Level    | 1997   | 2000            | 2003   | 1997 to 2000        | 2000 to 2003 | 1997 to 2003 |  |  |  |  |
| (Percent of FPL) | Number of Children (1,000s)                          |                 |        |                     |              |              |  |  |  |  |
| Total            | 75,461   | 76,386          | 77,598 | 926                 | 1,211        | 2,137*       |  |  |  |  |
| Less than 200    | 31,572   | 28,860          | 30,467 | -2,712*             | 1,607*       | -1,105       |  |  |  |  |
| 200 or more      | 43,889   | 47,526          | 47,130 | 3,637*              | -396         | 3,242*       |  |  |  |  |
| Less than 50     | 7,358  | 5,498           | 6,500  | -1,860*             | 1,002*       | -858*        |  |  |  |  |
| 50 to < 100      | 8,211  | 7,349           | 7,536  | -861*               | 186          | -675*        |  |  |  |  |
| 100 to < 150     | 8,003  | 8,104           | 8,360  | 101                 | 256          | 358          |  |  |  |  |
| 150  to < 200    | 8,001  | 7,910           | 8,071  | -92                 | 162          | 70           |  |  |  |  |
| 200 to < 250     | 7,420  | 7,461           | 7,543  | 40                  | 83           | 123          |  |  |  |  |
| 250 to < 300     | 6,838  | 6,662           | 6,478  | -176                | -185         | -360         |  |  |  |  |
| 300 to < 350     | 5,888  | 5,955           | 5,703  | 67                  | -251         | -184         |  |  |  |  |
| 350 to < 400     | 5,149  | 5,001           | 4,689  | -149                | -312         | -461*        |  |  |  |  |
| 400 or more      | 18,593   | 22,448          | 22,717 | 3,854*              | 270          | 4,124*       |  |  |  |  |
|                  | Number of Children Without Health Insurance (1,000s) |                 |        |                     |              |              |  |  |  |  |
| Total            | 11,726   | 10,318          | 9,947  | -1,408*             | -371         | -1,779*      |  |  |  |  |
| Less than 200    | 7,943  | 6,174           | 6,111  | -1,770*             | -63          | -1,833*      |  |  |  |  |
| 200 or more      | 3,783  | 4,145           | 3,836  | 362                 | -308         | 53           |  |  |  |  |
| Less than 50     | 1,923  | 1,332           | 1,413  | -591*               | 82           | -510*        |  |  |  |  |
| 50 to < 100      | 2,054  | 1,818           | 1,521  | -236                | -297*        | -533*        |  |  |  |  |
| 100 to < 150     | 2,252  | 1,752           | 1,648  | -501*               | -103         | -604*        |  |  |  |  |
| 150 to < 200     | 1,714  | 1,272           | 1,528  | -442*               | 256*         | -186         |  |  |  |  |
| 200 to < 250     | 1,125  | 1,198           | 923    | 74                  | -275*        | -202*        |  |  |  |  |
| 250 to < 300     | 744  | 773             | 700    | 28                  | -73          | -45          |  |  |  |  |
| 300 to < 350     | 499  | 580             | 510    | 82                  | -70          | 12           |  |  |  |  |
| 350 to < 400     | 382  | 360             | 424    | -22                 | 64           | 42           |  |  |  |  |
| 400 or more      | 1,033  | 1,233           | 1,279  | 200                 | 46           | 246*         |  |  |  |  |

### NUMBER OF CHILDREN UNDER AGE 19 AND NUMBER WITHOUT HEALTH INSURANCE, BY POVERTY LEVEL: 1997, 2000, AND 2003

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 and 2001, and 2004 ASEC Supplement.

Note: All estimates use 2000 census-based weights.

|                  |  | Annual Estimate | es     | Estimates of Change |              |              |  |  |  |  |
|------------------|--|-----------------|--------|---------------------|--------------|--------------|--|--|--|--|
| Poverty Level    | 1997   | 2000            | 2003   | 1997 to 2000        | 2000 to 2003 | 1997 to 2003 |  |  |  |  |
| (Percent of FPL) | Number of Children with Any Public Coverage (1,000s)   |                 |        |                     |              |              |  |  |  |  |
| Total            | 15,364   | 15,498          | 20,093 | 134                 | 4,595*       | 4,729*       |  |  |  |  |
| Less than 200    | 13,139   | 12,380          | 15,629 | -759                | 3,249*       | 2,489*       |  |  |  |  |
| 200 or more      | 2,224  | 3,118           | 4,464  | 894*                | 1,346*       | 2,240*       |  |  |  |  |
| Less than 50     | 4,499  | 3,287           | 4,203  | -1,212*             | 916*         | -296         |  |  |  |  |
| 50 to < 100      | 4,675  | 4,002           | 4,829  | -673*               | 828*         | 154          |  |  |  |  |
| 100 to < 150     | 2,597  | 3,186           | 4,054  | 589*                | 868*         | 1,457*       |  |  |  |  |
| 150  to < 200    | 1,369  | 1,905           | 2,543  | 536*                | 638*         | 1,174*       |  |  |  |  |
| 200 to < 250     | 748  | 1,079           | 1,697  | 331*                | 618*         | 949*         |  |  |  |  |
| 250 to < 300     | 421  | 655             | 957    | 235*                | 302*         | 537*         |  |  |  |  |
| 300 to < 350     | 268  | 468             | 542    | 200*                | 75           | 274*         |  |  |  |  |
| 350  to < 400    | 223  | 252             | 301    | 29                  | 50           | 78           |  |  |  |  |
| 400 or more      | 564  | 664             | 966    | 100                 | 302*         | 402*         |  |  |  |  |
|                  | Number of Children with Only Private Coverage (1,000s) |                 |        |                     |              |              |  |  |  |  |
| Total            | 48,371   | 50,570          | 47,558 | 2,199*              | -3,012*      | -813         |  |  |  |  |
| Less than 200    | 10,489   | 10,307          | 8,728  | -182                | -1,579*      | -1,761*      |  |  |  |  |
| 200 or more      | 37,882   | 40,263          | 38,830 | 2,381*              | -1,433*      | 948          |  |  |  |  |
| Less than 50     | 936  | 879             | 884    | -57                 | 5            | -52          |  |  |  |  |
| 50  to < 100     | 1,482  | 1,530           | 1,186  | 48                  | -344*        | -296*        |  |  |  |  |
| 100 to < 150     | 3,154  | 3,166           | 2,658  | 13                  | -508*        | -495*        |  |  |  |  |
| 150  to < 200    | 4,918  | 4,732           | 4,000  | -186                | -732*        | -918*        |  |  |  |  |
| 200 to < 250     | 5,547  | 5,183           | 4,923  | -364                | -260         | -624*        |  |  |  |  |
| 250 to < 300     | 5,673  | 5,234           | 4,821  | -439                | -413         | -852*        |  |  |  |  |
| 300 to < 350     | 5,121  | 4,907           | 4,651  | -214                | -256         | -470*        |  |  |  |  |
| 350 to < 400     | 4,544  | 4,389           | 3,963  | -156                | -425*        | -581*        |  |  |  |  |
| 400 or more      | 16,997   | 20,551          | 20,472 | 3,554*              | -79          | 3,475*       |  |  |  |  |

# NUMBER OF CHILDREN UNDER AGE 19 WITH ANY PUBLIC COVERAGE OR ONLY PRIVATE COVERAGE, BY POVERTY LEVEL: 1997, 2000, AND 2003

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 and 2001, and 2004 ASEC Supplement.

Note: All estimates use 2000 census-based weights.

|                  | A                                  | Annual Estimates | l    | Estimates of Change |              |              |  |  |  |  |
|------------------|------------------------------------|------------------|------|---------------------|--------------|--------------|--|--|--|--|
| Poverty Level    | 1997                               | 2000             | 2003 | 1997 to 2000        | 2000 to 2003 | 1997 to 2003 |  |  |  |  |
| (Percent of FPL) | Percent with Any Public Coverage   |                  |      |                     |              |              |  |  |  |  |
| Total            | 20.4                               | 20.3             | 25.9 | -0.1                | 5.6*         | 5.5*         |  |  |  |  |
| Less than 200    | 41.6                               | 42.9             | 51.3 | 1.3                 | 8.4*         | 9.7*         |  |  |  |  |
| 200 or more      | 5.1                                | 6.6              | 9.5  | 1.5*                | 2.9*         | 4.4*         |  |  |  |  |
| Less than 50     | 61.1                               | 59.8             | 64.7 | -1.4                | 4.9*         | 3.5          |  |  |  |  |
| 50 to < 100      | 56.9                               | 54.4             | 64.1 | -2.5                | 9.6*         | 7.1*         |  |  |  |  |
| 100 to < 150     | 32.4                               | 39.3             | 48.5 | 6.9*                | 9.2*         | 16.0*        |  |  |  |  |
| 150 to < 200     | 17.1                               | 24.1             | 31.5 | 7.0*                | 7.4*         | 14.4*        |  |  |  |  |
| 200 to < 250     | 10.1                               | 14.5             | 22.5 | 4.4*                | 8.0*         | 12.4*        |  |  |  |  |
| 250 to < 300     | 6.2                                | 9.8              | 14.8 | 3.7*                | 4.9*         | 8.6*         |  |  |  |  |
| 300 to < 350     | 4.6                                | 7.9              | 9.5  | 3.3*                | 1.7          | 5.0*         |  |  |  |  |
| 350 to < 400     | 4.3                                | 5.0              | 6.4  | 0.7                 | 1.4          | 2.1*         |  |  |  |  |
| 400 or more      | 3.0                                | 3.0              | 4.3  | -0.1                | 1.3*         | 1.2*         |  |  |  |  |
|                  | Percent with Only Private Coverage |                  |      |                     |              |              |  |  |  |  |
| Total            | 64.1                               | 66.2             | 61.3 | 2.1*                | -4.9*        | -2.8*        |  |  |  |  |
| Less than 200    | 33.2                               | 35.7             | 28.6 | 2.5*                | -7.1*        | -4.6*        |  |  |  |  |
| 200 or more      | 86.3                               | 84.7             | 82.4 | -1.6*               | -2.3*        | -3.9*        |  |  |  |  |
| Less than 50     | 12.7                               | 16.0             | 13.6 | 3.3*                | -2.4         | 0.9          |  |  |  |  |
| 50 to < 100      | 18.0                               | 20.8             | 15.7 | 2.8                 | -5.1*        | -2.3         |  |  |  |  |
| 100 to < 150     | 39.4                               | 39.1             | 31.8 | -0.3                | -7.3*        | -7.6*        |  |  |  |  |
| 150 to < 200     | 61.5                               | 59.8             | 49.6 | -1.6                | -10.3*       | -11.9*       |  |  |  |  |
| 200 to < 250     | 74.8                               | 69.5             | 65.3 | -5.3*               | -4.2*        | -9.5*        |  |  |  |  |
| 250 to < 300     | 83.0                               | 78.6             | 74.4 | -4.4*               | -4.1*        | -8.5*        |  |  |  |  |
| 300 to < 350     | 87.0                               | 82.4             | 81.5 | -4.6*               | -0.9         | -5.4*        |  |  |  |  |
| 350 to < 400     | 88.2                               | 87.8             | 84.5 | -0.5                | -3.2*        | -3.7*        |  |  |  |  |
| 400 or more      | 91.4                               | 91.6             | 90.1 | 0.1                 | -1.4*        | -1.3*        |  |  |  |  |

# PERCENTAGE OF CHILDREN UNDER AGE 19 WITH ANY PUBLIC COVERAGE OR ONLY PRIVATE COVERAGE, BY POVERTY LEVEL: 1997, 2000, AND 2003

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 and 2001, and 2004 ASEC Supplement.

Note: All estimates use 2000 census-based weights.

|                  | A                                  | Annual Estimates | 5    | Es           | stimates of Char | ige          |  |  |  |  |
|------------------|------------------------------------|------------------|------|--------------|------------------|--------------|--|--|--|--|
| Poverty Level    | 1997                               | 2000             | 2003 | 1997 to 2000 | 2000 to 2003     | 1997 to 2003 |  |  |  |  |
| (Percent of FPL) | Percent with Any Public Coverage   |                  |      |              |                  |              |  |  |  |  |
| Total            | 8.8                                | 7.2              | 8.7  | -1.6*        | 1.5*             | -0.1         |  |  |  |  |
| Less than 200    | 24.0                               | 20.6             | 23.2 | -3.5*        | 2.6*             | -0.9         |  |  |  |  |
| 200 or more      | 2.1                                | 2.2              | 2.6  | 0.1          | 0.4*             | 0.6*         |  |  |  |  |
| Less than 50     | 47.5                               | 43.5             | 41.5 | -4.0         | -2.1             | -6.0*        |  |  |  |  |
| 50 to < 100      | 37.2                               | 30.5             | 32.5 | -6.7*        | 2.0              | -4.7*        |  |  |  |  |
| 100 to < 150     | 17.0                               | 15.7             | 19.8 | -1.3         | 4.1*             | 2.9*         |  |  |  |  |
| 150 to < 200     | 8.7                                | 9.1              | 10.6 | 0.4          | 1.5              | 1.9*         |  |  |  |  |
| 200 to < 250     | 5.0                                | 4.8              | 6.8  | -0.3         | 2.1*             | 1.8*         |  |  |  |  |
| 250 to < 300     | 2.6                                | 3.7              | 4.4  | 1.2          | 0.7              | 1.8*         |  |  |  |  |
| 300 to < 350     | 2.2                                | 2.6              | 3.2  | 0.4          | 0.6              | 1.0*         |  |  |  |  |
| 350 to < 400     | 1.6                                | 2.4              | 2.0  | 0.8          | -0.4             | 0.4          |  |  |  |  |
| 400 or more      | 1.1                                | 1.0              | 1.1  | -0.1         | 0.1              | 0.0          |  |  |  |  |
|                  | Percent with Only Private Coverage |                  |      |              |                  |              |  |  |  |  |
| Total            | 75.5                               | 77.8             | 73.8 | 2.3*         | -4.0*            | -1.7*        |  |  |  |  |
| Less than 200    | 41.8                               | 46.1             | 38.5 | 4.3*         | -7.6*            | -3.3*        |  |  |  |  |
| 200 or more      | 90.5                               | 89.6             | 88.6 | -0.9*        | -1.0*            | -1.9*        |  |  |  |  |
| Less than 50     | 15.7                               | 18.8             | 16.5 | 3.1          | -2.2             | 0.8          |  |  |  |  |
| 50  to < 100     | 22.0                               | 27.4             | 22.6 | 5.5*         | -4.8*            | 0.6          |  |  |  |  |
| 100 to < 150     | 46.3                               | 48.0             | 39.9 | 1.8          | -8.2*            | -6.4*        |  |  |  |  |
| 150  to < 200    | 65.9                               | 68.0             | 59.6 | 2.1          | -8.4*            | -6.3*        |  |  |  |  |
| 200 to < 250     | 78.2                               | 75.8             | 74.0 | -2.4         | -1.8             | -4.2*        |  |  |  |  |
| 250 to < 300     | 86.3                               | 83.7             | 82.3 | -2.6*        | -1.3             | -4.0*        |  |  |  |  |
| 300 to < 350     | 89.9                               | 87.2             | 86.3 | -2.6*        | -1.0             | -3.6*        |  |  |  |  |
| 350 to < 400     | 92.2                               | 91.2             | 89.0 | -1.0         | -2.2*            | -3.2*        |  |  |  |  |
| 400 or more      | 94.9                               | 94.7             | 94.1 | -0.2         | -0.5             | -0.8         |  |  |  |  |

### PERCENTAGE OF PARENTS OF CHILDREN UNDER AGE 19 WITH ANY PUBLIC COVERAGE OR ONLY PRIVATE COVERAGE, BY POVERTY LEVEL: 1997, 2000, AND 2003

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 and 2001, and 2004 ASEC Supplement.

Note: All estimates use 2000 census-based weights.

|                  | A                                  | Annual Estimates | 5    | Es           | stimates of Char | nge          |  |  |  |  |
|------------------|------------------------------------|------------------|------|--------------|------------------|--------------|--|--|--|--|
| Poverty Level    | 1997                               | 2000             | 2003 | 1997 to 2000 | 2000 to 2003     | 1997 to 2003 |  |  |  |  |
| (Percent of FPL) | Percent with Any Public Coverage   |                  |      |              |                  |              |  |  |  |  |
| Total            | 6.3                                | 5.4              | 6.9  | -1.0*        | 1.5*             | 0.6          |  |  |  |  |
| Less than 200    | 15.7                               | 12.9             | 15.4 | -2.8*        | 2.5*             | -0.3         |  |  |  |  |
| 200 or more      | 2.7                                | 2.9              | 3.6  | 0.2          | 0.7*             | 0.9*         |  |  |  |  |
| Less than 50     | 17.4                               | 13.5             | 16.8 | -4.0         | 3.3              | -0.7         |  |  |  |  |
| 50 to < 100      | 27.3                               | 21.6             | 22.5 | -5.7*        | 1.0              | -4.8*        |  |  |  |  |
| 100 to < 150     | 12.0                               | 11.9             | 14.7 | -0.2         | 2.8              | 2.6          |  |  |  |  |
| 150 to < 200     | 9.2                                | 7.6              | 9.7  | -1.6         | 2.1              | 0.5          |  |  |  |  |
| 200 to < 250     | 5.2                                | 5.2              | 6.6  | 0.0          | 1.4              | 1.4          |  |  |  |  |
| 250 to < 300     | 3.9                                | 4.7              | 6.2  | 0.9          | 1.4              | 2.3*         |  |  |  |  |
| 300 to < 350     | 3.9                                | 3.7              | 4.1  | -0.2         | 0.4              | 0.2          |  |  |  |  |
| 350 to < 400     | 2.5                                | 3.3              | 4.3  | 0.8          | 1.1              | 1.9*         |  |  |  |  |
| 400 or more      | 1.8                                | 1.9              | 2.3  | 0.0          | 0.5              | 0.5*         |  |  |  |  |
|                  | Percent with Only Private Coverage |                  |      |              |                  |              |  |  |  |  |
| Total            | 63.6                               | 65.4             | 59.9 | 1.7*         | -5.5*            | -3.7*        |  |  |  |  |
| Less than 200    | 32.2                               | 36.3             | 29.8 | 4.1*         | -6.4*            | -2.4         |  |  |  |  |
| 200 or more      | 75.7                               | 74.8             | 71.5 | -0.9         | -3.4*            | -4.2*        |  |  |  |  |
| Less than 50     | 18.5                               | 22.6             | 23.0 | 4.1          | 0.4              | 4.5*         |  |  |  |  |
| 50  to < 100     | 25.7                               | 28.1             | 24.4 | 2.4          | -3.7             | -1.3         |  |  |  |  |
| 100 to < 150     | 34.1                               | 38.5             | 28.5 | 4.4*         | -10.0*           | -5.6*        |  |  |  |  |
| 150 to < 200     | 44.3                               | 49.1             | 40.6 | 4.8*         | -8.4*            | -3.7         |  |  |  |  |
| 200 to < 250     | 53.9                               | 53.2             | 49.7 | -0.7         | -3.6             | -4.3*        |  |  |  |  |
| 250 to < 300     | 65.1                               | 63.6             | 57.6 | -1.6         | -5.9*            | -7.5*        |  |  |  |  |
| 300 to < 350     | 72.1                               | 70.1             | 65.2 | -2.0         | -4.9*            | -6.9*        |  |  |  |  |
| 350 to < 400     | 76.8                               | 71.0             | 70.1 | -5.8*        | -0.9             | -6.7*        |  |  |  |  |
| 400 or more      | 83.2                               | 83.3             | 80.1 | 0.1          | -3.2*            | -3.1*        |  |  |  |  |

# PERCENTAGE OF NONPARENTS AGES 19 TO 39 WITH ANY PUBLIC COVERAGE OR ONLY PRIVATE COVERAGE, BY POVERTY LEVEL: 1997, 2000, AND 2003

Source: Mathematica Policy Research, Inc. analysis of CPS March Supplement, 1998 and 2001, and 2004 ASEC Supplement.

Note: All estimates use 2000 census-based weights.

# **APPENDIX C**

# CASE STUDY METHODS

Our goal in the case study component was to identify programmatic and contextual features that contributed to the successful enrollment of children in the State Children's Health Insurance Program (SCHIP). We selected a sample of states that would reflect the diversity in the SCHIP programs implemented across the nation. Using criteria that included several key enrollment measures, we selected the following eight states for the study:

- Separate child health (S-SCHIP) programs: Georgia, Kansas, Pennsylvania, and Utah
- Medicaid expansion (M-SCHIP) programs: Ohio and South Carolina
- Combination programs: Kentucky and Maryland

The case study component included site visits and focus groups in the eight states. In addition to conducting on-site interviews in the state capital, we visited two communities in each state to learn how SCHIP was implemented at the "front lines." This appendix describes the procedures used to (1) select the eight states, and (2) conduct the site visits and focus groups.

# A. SELECTION OF EIGHT STATES

# 1. Selection Criteria

The state selection methodology included three steps: (1) identifying states eligible to participate in the evaluation, (2) defining the criteria for selecting the final set of study states, and (3) reviewing the final states to ensure that our sample represented a cross-section of all states in terms of geographic region and SCHIP delivery system.

In identifying the states eligible to participate in the evaluation, we began by excluding the 10 states that were part of the ASPE evaluation,<sup>1</sup> one state (Arizona) that declined to participate in the ASPE evaluation because of concerns about burden, and two states (Massachusetts and Wisconsin) that were part of other CMS evaluations. We also excluded states with fewer than 15,000 children enrolled in SCHIP in federal fiscal year (FFY) 2000, because we did not believe that an enrollment of this size would support the analyses.

The second step was to identify criteria for selecting the eight states. Because one goal of the CMS evaluation was to understand "how the most successful programs operate," we chose four variables that reflected states' early success in enrolling children into SCHIP:

1. Number of children ever enrolled in SCHIP in FFY 2000. This variable gave weight to states with larger target populations and larger SCHIP enrollment in FFY

<sup>&</sup>lt;sup>1</sup>Under our contract with CMS, we were required to coordinate the state selection process for this evaluation with that for the ASPE SCHIP evaluation. The 10 states participating in the ASPE evaluation were California, Colorado, Florida, Illinois, Louisiana, Missouri, New Jersey, New York, North Carolina, and Texas.

 $2000.^2$  This criterion gives more weight to states that had implemented their programs in FFY 1998 or in the first half of FFY 1999.

- 2. *Rate of growth in SCHIP enrollment from FFY 1999 to FFY 2000.* This variable measured states' early progress in enrolling children in SCHIP. Substantial growth may reflect recent outreach efforts, program innovations, eligibility expansions, or implementation of new program components.
- **3.** *FFY 2000 SCHIP-ever-enrolled as a percent of traditional Medicaid-ever-enrolled.* This measure reflected the size of SCHIP enrollment relative to traditional Medicaid enrollment.<sup>3</sup> It indicated the extent to which public insurance coverage had grown beyond coverage offered by traditional Medicaid.
- 4. Percent of FFY 1998 allotment spent. This variable was a proxy for state progress in reaching previously uninsured children and enrolling them in SCHIP.

We ranked states according to these four variables. Ranks were assigned separately for each program type (S-SCHIP, M-SCHIP, and combination) to ensure that the "highest-ranking" states in each type of program were selected. Next, we summed the ranks across the four variables to determine the relative rankings among states. Finally, we examined the distribution of states according to two additional characteristics—geographic region and SCHIP delivery system—to ensure that the top-ranked states represented a cross-section of all states on these two variables.

The case study included four states with S-SCHIP programs, two states with M-SCHIP programs, and two states with combination programs. The focus on states with S-SCHIP programs was consistent with the growing trend toward separate child health programs, reflecting (1) the phasing out of M-SCHIP programs that accelerated Medicaid coverage to adolescents, and (2) the implementation or expansion of S-SCHIP programs in some states.

# 2. State Characteristics

As Table C.1 shows, FFY 2000 SCHIP enrollment in the eight states ranged nearly 5-fold, from 25,000 to 121,000, while SCHIP enrollment growth ranged more than 12-fold, from 32 percent to more than 400 percent. Consistent with its substantial enrollment growth, Maryland had the largest expansion beyond Medicaid (33 percent), while the other states were clustered between 11 and 19 percent. By FFY 2000, half the states spent more than 100 percent of their FFY 1998 SCHIP allotment, while the other half were between 45 and 86 percent.

<sup>&</sup>lt;sup>2</sup>The target population was measured as the number of children below 200 percent of poverty the FPL who were uninsured, according to the 1996-1998 Current Population Survey. We found that the size of the target population was highly correlated with the size of the ever-enrolled population (r = .79).

<sup>&</sup>lt;sup>3</sup>To the extent that SCHIP outreach and enrollment efforts cause substantial increases in traditional Medicaid enrollment, the magnitude of the SCHIP expansion will be understated.

### TABLE C.1

| Type of Program | State          | Total FFY 2000<br>SCHIP<br>Enrollment <sup>a</sup> | SCHIP<br>Enrollment<br>Growth <sup>b</sup> | Expansion<br>Beyond<br>Medicaid FFY<br>2000 <sup>c</sup> | Percent of<br>SCHIP<br>Allotment<br>Spent <sup>d</sup> |
|-----------------|----------------|--|--|--|--|
| S-SCHIP         | Pennsylvania   | 119,710  | 44.4                                       | 15.0   | 105  |
|                 | Kansas         | 26,306   | 82.1                                       | 18.3   | 70   |
|                 | Georgia        | 120,626  | 153.5                                      | 11.4   | 45   |
|                 | Utah           | 25,294   | 69.8                                       | 17.2   | 86   |
| M-SCHIP         | Ohio           | 111,436  | 33.2                                       | 16.0   | 84   |
|                 | South Carolina | 60,415   | 32.1                                       | 15.8   | 183  |
| COMBO           | Maryland       | 93,081   | 415.1                                      | 32.9   | 172  |
|                 | Kentucky       | 55,593   | 199.2                                      | 17.3   | 156  |

### RESULTS OF STATE SELECTION FOR SCHIP CASE STUDY COMPONENT

<sup>a</sup>Total number ever enrolled in SCHIP in FFY 2000 (Source: SCHIP Statistical Enrollment Data System [SEDS]). <sup>b</sup>Percentage change in SCHIP enrollment from FFY1999 to FFY 2000 (Source: SCHIP SEDS).

<sup>c</sup>SCHIP ever enrolled as a percentage of traditional Medicaid ever enrolled in FFY 2000 (Source: SCHIP

SEDS). <sup>d</sup>Percentage of FFY 1998 allotment spent (Source: Unpublished data from the Center for Medicaid and State Operations).

Table C.2 summarizes key characteristics of the selected SCHIP programs based on information in their FFY 2000 SCHIP annual reports to CMS. However, because of the dynamic nature of the SCHIP program, many of these characteristics may have changed. The eight states represented a range of SCHIP eligibility limits, from 150 percent of the FPL in South Carolina to 235 percent of the FPL in Georgia, with the other six states extending coverage to 200 percent of the FPL as of December 2000.

All but one of these states (Utah) had a joint application for SCHIP and Medicaid, and all had introduced one or more simplified application policies, such as mail-in applications (eight states), telephone applications (two states), or internet applications (two states were in the planning stages). None of the states required a face-to-face interview during the initial application. Eligibility was determined by state or county Medicaid staff in five states, by a contractor in two states, and by both state Medicaid staff and a contractor in one state (Kansas).

Five states provided continuous coverage for either 6 or 12 months, and three states had a passive redetermination process or used redetermination forms that had been preprinted with previously submitted information to reduce the reporting burden on families. None of the eight states provided presumptive eligibility, while four states provided retroactive eligibility to some SCHIP children. To prevent substitution of SCHIP for private coverage, five states had a waiting period, and two states charged a premium or co-payments. Among the eight states, the dominant delivery system in four states was managed care, three predominantly used a primary care case management (PCCM) system, and one used a fee-for-service (FFS) system. The dominant delivery system was classified based on the system accounting for at least two-thirds of the SCHIP enrollment as of the fourth quarter of FFY 2000 (Rosenbach et al. 2003). In some states, however, the delivery system may have varied between urban and rural areas, with the urban areas relying on a managed care system and the rural areas relying on PCCM or FFS delivery systems.

The eight study states reflected the evolution of SCHIP programs nationwide, including changes in eligibility thresholds, eligibility determination and enrollment procedures, and renewal policies. This state-to-state variation created a natural laboratory to observe the effects of different program strategies, thus allowing us to develop insight into what works in reaching, enrolling, and retaining children who are eligible for SCHIP but uninsured. Through the case study, and subsequent empirical analyses using data from some of these states, we were able to assess how (and why) states modified their policies and procedures and the effects of these changes on enrollment outcomes.

# TABLE C.2

# CHARACTERISTICS OF SCHIP PROGRAMS IN EIGHT STATES, AS OF DECEMBER 2000

| Characteristic  | Georgia    | Kansas   | Kentucky                               | Maryland                               | Ohio                                    | Pennsylvania       | South Carolina                         | Utah                                   |
|---|------------|--|--|--|---|--------------------|--|--|
| Program type  | S-SCHIP    | S-SCHIP  | Combination                            | Combination                            | M-SCHIP                                 | S-SCHIP            | M-SCHIP                                | S-SCHIP                                |
| Date of implementation  | 11/98      | 1/99   | 7/98                                   | 7/98                                   | 1/98                                    | 5/98               | 10/97                                  | 8/98                                   |
| Maximum eligibility<br>threshold (percent of the FPL)               | 235        | 200  | 200                                    | 200 <sup>a</sup>                       | 200                                     | 200                | 150                                    | 200                                    |
| Has joint application for Medicaid and SCHIP                        | Yes        | Yes  | Yes                                    | Yes                                    | Yes                                     | Yes                | Yes                                    | No                                     |
| Has a mail-in application   | Yes        | Yes  | Yes                                    | Yes                                    | Yes                                     | Yes                | Yes                                    | Yes                                    |
| Can apply for program over phone                                    | No         | No   | No                                     | No                                     | No                                      | No                 | No                                     | Yes <sup>b</sup>                       |
| Can apply for program over internet                                 | No         | Planned  | No                                     | No                                     | No                                      | No                 | No                                     | Planned                                |
| Requires face-to-face<br>interview during initial<br>application    | No         | No   | No                                     | No                                     | No                                      | No                 | No                                     | No                                     |
| Entity responsible for eligibility determination                    | Contractor | State Medicaid<br>eligibility staff,<br>Contractor | State<br>Medicaid<br>eligibility staff | State<br>Medicaid<br>eligibility staff | County<br>Medicaid<br>eligibility staff | Contractor         | State<br>Medicaid<br>eligibility staff | State<br>Medicaid<br>eligibility staff |
| Provides presumptive eligibility                                    | No         | No   | No                                     | No                                     | No                                      | No                 | No                                     | No                                     |
| Provides retroactive eligibility                                    | No         | No   | Yes (90 days) <sup>c</sup>             | Yes (90 days)                          | Yes (90 days)                           | No                 | Yes (3 months)                         | No                                     |
| Provides period of continuous coverage regardless of income changes | No         | Yes (12<br>months)                                 | No <sup>d</sup>                        | Yes (6 months)                         | No <sup>e</sup>                         | Yes (12<br>months) | Yes (12<br>months)                     | Yes (12<br>months)                     |
| Has a passive redetermination process or uses preprinted forms      | Yes        | No   | Yes                                    | No                                     | No                                      | No                 | No                                     | Yes                                    |

TABLE C.2 (continued)

| Characteristic   | Georgia   | Kansas  | Kentucky       | Maryland       | Ohio    | Pennsylvania | South Carolina | Utah           |
|--|---|---|----------------|----------------|---------|--------------|----------------|----------------|
| Program type   | S-SCHIP   | S-SCHIP   | Combination    | Combination    | M-SCHIP | S-SCHIP      | M-SCHIP        | S-SCHIP        |
| Requires child to be<br>uninsured for a specified<br>period of time before<br>enrollment | Yes (3 months)  | Yes (6 months)  | Yes (6 months) | Yes (6 months) | No      | No           | No             | Yes (3 months) |
| Imposes premiums or<br>enrollment fees   | Yes: \$7.50 per<br>month per<br>child; \$15 per<br>month for two<br>or more<br>children in<br>same<br>household | Yes: \$10 per<br>family per<br>month (151 -<br>175% FPL);<br>\$15 per family<br>per month (176<br>- 200% FPL) | No             | No             | No      | No           | No             | No             |
| Imposes co-payments or coinsurance   | No  | No  | No             | No             | No      | No           | No             | Yes            |
| Dominant delivery system   | РССМ  | MC  | РССМ           | MC             | РССМ    | MC           | FFS            | МС             |

C.8

Sources: Federal fiscal year 2000 State SCHIP annual reports. Dominant delivery system was defined based on data from the SCHIP Statistical Enrollment Data System (see Rosenbach et al. 2003 for details).

NA = not applicable FPL = federal poverty level PCCM = primary care case management MC = managed care FFS = fee-for-service

<sup>a</sup>In November 2000, Maryland received approval to implement Phase II of its SCHIP program, and raised the upper income eligibility limit to 300 percent of the FPL as of July 2001.

<sup>b</sup>Applicants may apply over the phone but must sign and return the completed form that is mailed to them.

<sup>c</sup>For enrollees who live in the one managed care region in the state, eligibility is retroactive only to the first day of the month in which the application was received.

<sup>d</sup>Enrollees who live in the one managed care region of the state are guaranteed six months' coverage.

<sup>e</sup>Ohio submitted a request for a Section 1115 demonstration to extend 12 months of continuous coverage to children with family incomes from 150 through 200 percent of the FPL.

# **B. CASE STUDY PROCEDURES**

# 1. Site Visits

During 2002 and 2003, we conducted one-week site visits in each state. In addition to conducting interviews in the state capital, we selected two communities in each state to gain perspective on program experiences in both urban and rural areas. We chose communities that (1) had a disproportionate share of children living in poverty (relative to the state as a whole), (2) had a diverse population in terms of racial and ethnic composition, (3) had an identifiable medical community (such as a community hospital), and (4) were within a two-hour drive from each other and from the state capital. The local communities and interview dates were:

| States         | Communities             | Site Visit Dates      | Focus Group Dates        |
|----------------|-------------------------|-----------------------|--------------------------|
| Georgia        | Macon and Gainesville   | October 21-25, 2002   | January 26-29, 2004      |
| Kansas         | Wichita and Hutchinson  | March 24-28, 2003     | November 18-20, 2003     |
| Kentucky       | Louisville and Danville | December 9-16, 2002   | September 8-10, 2003     |
| Maryland       | Towson and Hagerstown   | March 24-28, 2003     | November 3-6, 2003       |
| Ohio           | Cleveland and           | September 16-20, 2002 | April 29-30; May 1, 2003 |
|                | Mansfield               |                       |                          |
| Pennsylvania   | Philadelphia and York   | November 18-22, 2002  | May 10-13, 2004          |
| South Carolina | Greenville and          | December 9-13, 2002   | October 1-2, 2003        |
|                | Greenwood               |                       |                          |
| Utah           | Salt Lake City and      | January 27-31, 2003   | May 19-22, 2003          |
|                | Layton                  |                       |                          |

Each site visit included interviews with state and county Medicaid agency staff, public health officials, child health advocates, frontline eligibility workers, health care providers, and staff of organizations involved in outreach and application assistance. (Table C.3 lists key informants included in the site visits.) We developed discussion guides to structure the conversations and tailored the guides to reflect state-specific program features and circumstances. We developed separate guides for SCHIP program staff, health plans, providers, and other key informants (including community-based organizations and advocates). Two-person teams included a senior researcher, who led most of the interviews, and an analyst, who set up each visit and took notes during the interviews. To ensure that procedures for setting up and conducting the site visits were comparable across the eight states, all team members participated in a site visit notes. The notes were then coded in Atlas.ti, a qualitative data analysis software package, to facilitate the analysis.

# 2. Focus Groups

The focus groups took place in 2003 and 2004. We conducted focus groups in the 16 local communities we visited during our site visits. Across the eight study states, we conducted 51 focus groups with 481 parents.

### TABLE C.3

### KEY INFORMANTS INCLUDED IN THE SCHIP EVALUATION SITE VISITS

### State Level

- SCHIP/Medicaid directors and key staff
- Governor's health policy staff
- State legislators/staff with health policy responsibilities
- State public health and/or maternal and child health directors
- Leaders of advocacy groups
- Vendors involved in outreach, eligibility determination, health plan enrollment, etc.
- Representatives of health plan and/or provider associations (including the state Primary Care Association and the state chapter of the American Academy of Pediatrics)
- Representatives of agencies/organizations that conduct SCHIP outreach at the state level, such as state Covering Kids grantees

### Local Level

- Representatives of agencies/organizations that conduct SCHIP outreach or provide application assistance
- Representatives of agencies/organizations involved in eligibility determination, redetermination, and enrollment of children in SCHIP (including county social services agencies and community-based organizations
- Managed health care plan administrators
- Staff of local health departments involved in SCHIP outreach or service delivery
- Providers, such as staff of school health clinics, community clinics, hospitals, Indian Health Service (where appropriate), and physicians/dentists (or practice managers) with important roles in serving low-income children
- Representatives of other relevant agencies/organizations, such as local advocacy groups, other community-based organizations, Native American tribal leaders, and the business community

**Moderator Guides.** We developed two moderator guides, one for focus groups with parents of recent enrollees and the other for focus groups with parents of established enrollees. The guides were similar, except that parents of new enrollees were asked about their experience enrolling in the program, while parents of established enrollees were asked about the renewal process. The guides addressed the following topics:

- Experience with enrollment and renewal processes, including barriers to obtaining and maintaining coverage
- Experience accessing care, including finding a primary care provider and obtaining specialty care
- Perception of the program's cost-sharing policies and whether the policies pose a financial hardship for the family
- Overall satisfaction with the program, its policies, and the services provided

The guides were tailored to each state to reflect differences in eligibility processes, costsharing policies, and delivery systems. We tested the guides in Ohio and subsequently revised them to improve the flow and content of the discussions.

**Recruitment.** We conducted separate focus groups with parents of recent enrollees and parents of established enrollees. To be included in the sample, children had to have an address in one of the two counties we visited. Recent enrollees had to be enrolled continuously for at least three months, but no more than six months. Established enrollees had to be enrolled continuously for at least 13 months, but no longer than 24 months.

We drew our samples from list frames we developed using enrollment records obtained from each state. These files varied somewhat across the eight states but generally included individual identifying numbers, eligibility dates, parent name and address, and telephone numbers. In most states, the file included family or case identifying numbers that were used to identify siblings to eliminate the possibility of sampling a parent more than once.

Using the telephone numbers available in the administrative data, we called parents to invite them to participate approximately three weeks before the focus groups. Parents agreeing to participate received a confirmation letter, a "Save the Date" postcard, and driving directions. Two days before the focus group, we called to confirm their participation.

Across the eight study states, we recruited 892 parents and were able to confirm that 704 parents planned to attend. A total of 481 parents actually participated in the groups. The average group included 9.4 parents. Table C.4 presents results overall and by state.

# TABLE C.4

|                       | Overall | Georgia | Kansas | Kentucky | Maryland | Ohio | Pennsylvania | South<br>Carolina | Utah |
|-----------------------|---------|---------|--------|----------|----------|------|--------------|-------------------|------|
| Number of Groups      | 51      | 8       | 6      | 5        | 8        | 6    | 8            | 3                 | 7    |
| Recent enrollees      | 26      | 4       | 3      | 3        | 4        | 3    | 4            | 1                 | 4    |
| Established enrollees | 25      | 4       | 3      | 2        | 4        | 3    | 4            | 2                 | 3    |
| Number Recruited      | 892     | 146     | 102    | 83       | 144      | 107  | 144          | 39                | 127  |
| Number Confirmed      | 704     | 115     | 86     | 66       | 113      | 84   | 103          | 32                | 105  |
| Number Attended       | 481     | 75      | 69     | 49       | 64       | 57   | 62           | 24                | 81   |
| Number per Group      | 9.4     | 9.4     | 11.5   | 9.8      | 8.0      | 9.5  | 7.8          | 8.0               | 11.6 |

# FOCUS GROUP RECRUITMENT AND ATTENDANCE RESULTS, BY STATE

# 3. Sessions

Using the zip code information available in the enrollment records, we secured meeting rooms in locations central to where most parents lived. A trained moderator led each focus group session. A facilitator also was present to assist, observe, record notes, and probe for additional information as necessary. Two sessions were held each night (at 5:30 P.M. and 8:00 P.M.) to accommodate work schedules. Parents completed a short information form that collected basic demographic data and, when appropriate, information about premium payments and health plan enrollment. Each group lasted about two hours; after the session, each participant received a \$50 stipend for participating. We were not able to accommodate parents who arrived after the session began. The 30 parents who arrived late were asked to complete the short information form and received the stipend.

The sessions were audiotaped and transcribed. The transcriptions were coded and analyzed in ATLAS.ti. We developed a coding scheme that allowed us to organize the information efficiently and analyze it for common themes among the groups.

# 4. Participant Characteristics

The information forms collected data on demographic information such as the parent's age, gender, race, Hispanic ethnicity, marital status, and employment status. It also asked for information on the parents' insurance status, the types of health care services their children had received since enrolling, and whether they experienced difficulties accessing care. If applicable, the form asked about the name of the child's health plan and the premiums they paid.

Table C.5 presents participant characteristics overall and by state. Most parents attending the focus groups were women (91 percent), and more than two-fifths (43 percent) were in their 30s. Overall, two-thirds of parents were white, a quarter were African American, and seven percent were Hispanic. The racial and ethnic composition of the groups varied across the states, reflecting the diversity of state populations. For example, the majority of parents attending the groups in Ohio were African American (56 percent) and one-third were white, whereas in Utah 88 percent of parents were white. In Kansas, 13 percent of parents attending the focus groups were Hispanic, and nearly 9 percent were of other racial categories such as Asian and multiracial.

Nearly half of the parents were married (49 percent), ranging from one-third in Ohio to nearly two-thirds in Utah (64 percent). More than half worked 20 or more hours a week (54 percent). In South Carolina, only one-third of parents worked at this level, compared to 69 percent in Georgia.

# TABLE C.5

| Participant Characteristics     | Overall | Georgia | Kansas | Kentucky | Maryland | Ohio | Pennsylvania | South<br>Carolina | Utah |
|---------------------------------|---------|---------|--------|----------|----------|------|--------------|-------------------|------|
| Percent Female                  | 91.0    | 88.0    | 89.9   | 95.8     | 90.6     | 89.5 | 91.8         | 95.8              | 91.4 |
| Age                             |         |         |        |          |          |      |              |                   |      |
| Less than 21                    | 2.5     | 0.0     | 4.3    | 2.1      | 4.7      | 0.0  | 3.3          | 4.2               | 2.5  |
| 21 through 30                   | 27.6    | 30.7    | 29.0   | 31.3     | 31.3     | 14.0 | 24.6         | 29.2              | 29.6 |
| 31 through 40                   | 43.4    | 48.0    | 44.9   | 35.4     | 43.8     | 45.6 | 41.0         | 33.3              | 45.7 |
| 41 through 50                   | 19.4    | 16.0    | 15.9   | 20.8     | 10.9     | 33.3 | 21.3         | 29.2              | 17.3 |
| 51 and over                     | 7.1     | 5.3     | 5.8    | 10.4     | 9.4      | 7.0  | 9.8          | 4.2               | 4.9  |
| Marital Status                  |         |         |        |          |          |      |              |                   |      |
| Never married                   | 18.4    | 21.3    | 11.6   | 25.0     | 32.8     | 21.1 | 18.0         | 20.8              | 3.7  |
| Married                         | 49.1    | 52.0    | 58.0   | 45.8     | 45.3     | 33.3 | 41.0         | 37.5              | 64.2 |
| Divorced                        | 19.4    | 18.7    | 23.2   | 16.7     | 14.1     | 29.8 | 14.8         | 20.8              | 18.5 |
| Other                           | 12.9    | 8.0     | 7.2    | 12.5     | 7.8      | 15.8 | 24.6         | 20.8              | 13.6 |
| Not reported                    | 0.2     | 0.0     | 0.0    | 0.0      | 0.0      | 0.0  | 1.6          | 0.0               | 0.0  |
| Race                            |         |         |        |          |          |      |              |                   |      |
| White                           | 65.6    | 65.3    | 73.9   | 64.6     | 71.9     | 36.8 | 54.1         | 50.0              | 87.7 |
| Black                           | 25.5    | 30.7    | 7.2    | 33.3     | 18.8     | 56.1 | 37.7         | 45.8              | 0.0  |
| Other                           | 4.0     | 0.0     | 8.7    | 2.1      | 3.1      | 3.5  | 3.3          | 0.0               | 5.9  |
| Not reported                    | 5.2     | 4.0     | 10.1   | 0.0      | 6.3      | 3.5  | 4.9          | 4.2               | 6.2  |
| Percent Hispanic                | 7.3     | 8.0     | 13.0   | 0.0      | 7.8      | 3.5  | 8.2          | 4.2               | 8.6  |
| Employment                      |         |         |        |          |          |      |              |                   |      |
| Works 20 or more hours a week   | 53.7    | 69.3    | 52.2   | 52.1     | 54.7     | 61.4 | 57.4         | 33.3              | 38.3 |
| Works less than 20 hours a week | 11.3    | 6.7     | 5.8    | 10.4     | 15.6     | 7.0  | 14.8         | 25.0              | 13.6 |
| Not employed                    | 34.7    | 22.7    | 42.0   | 37.5     | 29.7     | 31.6 | 26.2         | 41.7              | 48.1 |
| Not reported                    | 0.4     | 1.3     | 0.0    | 0.0      | 0.0      | 0.0  | 1.6          | 0.0               | 0.0  |

# CHARACTERISTICS OF FOCUS GROUP PARTICIPANTS, OVERALL AND BY STATE

Source: MPR focus group personal information forms.