Enrollment in the State Child Health Insurance Program: A Conceptual Framework for Evaluation and Continuous Quality Improvement

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THE ENACTMENT OF THE STATE CHILD HEALTH Insurance Program (SCHIP) as Title XXI of the Social Security Act provides an opportunity to extend health insurance to a population of children that has not been well covered through Medicaid or through private, employer-based insurance (Rosenbaum, Johnson, Sonosky, et al. 1998). A major component of the SCHIP implementation strategy and a large measure of its impact will depend on the success of SCHIP programs in enrolling eligible children. Past studies show that many children eligible for Medicaid are not enrolled, and studies of private, employer-based insurance reveal that not all employees take advantage of coverage when it is offered (Halfon, Wood, Valdez, et al. 1997; Carrasquillo, Himmelstein, Woolhandler, et al. 1998; Cooper and Schone 1997). The legacy of Medicaid's low participation rate by eligible families raises concerns about the potential of SCHIP to improve children's access to care. Federal and state policy makers must find the answers to several critical questions: Which factors facilitate enrollment and program participation? Which measures are most useful for program monitoring and evaluation? Which strategies can be developed to overcome enrollment barriers?

The Milbank Quarterly, Vol. 77, No. 2, 1999
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Measuring and monitoring children's enrollment in SCHIP serves two fundamental purposes: First, these activities are essential for evaluating the impact of SCHIP on children's insurance status nationally and across the participating states. Enrollment measures can be applied across states to examine how specific program features, like eligibility levels and cost-sharing requirements, affect children's enrollment.

The second purpose is to enable states to improve enrollment policies and procedures. Measures of enrollment can be framed within states as a continuous quality improvement (CQI) process. Measuring enrollment for program evaluation and CQI purposes presents certain notable challenges:

- Because continuity of enrollment and transitions among public insurance programs have not been a major focus of research and evaluation initiatives, the necessary measures and measurement tools are not well developed.
- The administrative and organizational infrastructure, including management information systems (MIS), for the continuous improvement of enrollment outcomes has not been well defined.
- The data sources and analytic capacity needed for evaluating SCHIP enrollment are unevenly distributed across states, and no national data collection strategy is in place to provide state-level information.
- It is not clear that sufficient funds will be available at the national and state levels to design and implement appropriate evaluation activities.
- Methods for retaining enrolled children and facilitating their transition among insurance programs have not been well developed and tested.

We outline here a conceptual approach to measuring and monitoring several critical dimensions of the enrollment process. We describe how access measures for enrollment can be used to characterize states' relative successes in recruiting, enrolling, and retaining eligible children in their SCHIP programs. We describe how access measures and "enrollment critical management procedures" can be utilized to establish mechanisms at the state and federal levels that will support continuous improvement of enrollment policies and procedures. Finally, we outline a strategy to maximize the collaborative learning of several states through formal sharing of monitoring and quality improvement strategies.

Overview of SCHIP Implementation

SCHIP provides \$20.3 billion in federal matching funds in the form of block grants to states over the five-year period from 1997 to 2002. States can elect to use SCHIP funds to expand Medicaid eligibility for children, to create or expand separate state programs for children's health insurance, or for a combination of these methods. The program's target population is children living in families with incomes between the existing Medicaid eligibility threshold and 200 percent of the federal poverty level (FPL). Estimates indicate that the federal SCHIP funds, coupled with matching state funds, could extend health insurance coverage to one-third of the 11 million currently uninsured U.S. children (Weinick, Weigers, and Cohen 1998). SCHIP enrollment outreach efforts may also contribute indirectly to more coverage among the one-third of currently uninsured children who are eligible for Medicaid but are not enrolled.

SCHIP enabling legislation contains numerous provisions for enhancing children's access to insurance, such as requirements that states institute outreach mechanisms and procedures to coordinate SCHIP and Medicaid enrollment. Specifically, to gain federal approval, states must outline their strategies for informing families and enrolling eligible children in SCHIP and other health insurance programs that are directed toward low-income populations. States must specify how they will coordinate SCHIP with state-funded programs (like those in Florida, New York, or New Jersey) or privately sponsored coverage programs, like the Blue Cross-supported Caring Foundation for Children in 20 states (Shenkman, Pendergast, Wegener, et al. 1997).

Other legislative provisions of the Balanced Budget Act of 1997 for enhancing access are the establishment of presumptive and continuous eligibility provisions to promote and maintain Medicaid enrollment. Presumptive eligibility allows providers to conduct a simple eligibility assessment for Medicaid and to initiate medical treatment immediately while awaiting the formal eligibility determination. Continuous eligibility provisions permit states to guarantee Medicaid enrollment for up to a year (even if family income fluctuates above eligibility levels), thus eliminating the need for monthly or quarterly eligibility determinations. These are important provisions because a major shortcoming of the Medicaid program has been the large numbers of eligible children who either never enroll or are covered only episodically because of fluctuating eligibility (U.S. General Accounting Office 1995).

Rationale for Measuring and Monitoring Enrollment

Inclusion in the federal enabling legislation of specific provisions to enhance SCHIP enrollment draws from the national experience with the Medicaid program. Medicaid eligibility expansions for children were legislated through the late 1980s, yet a significant proportion of children made eligible through these expansions did not enroll and remained uninsured (U.S. General Accounting Office 1995; Arruch, Machlin, Bonin, et al. 1998; Newacheck, Hughes, Pearl, et al. 1998; Weinick, Weigers, and Cohen 1998). Arruch and colleagues conclude from Current Population Survey data that 2.3 million Medicaid-eligible children were uninsured in 1993. An analysis of the 1996 Medical Expenditure Panel Survey indicates that more than 4.3 million children (from birth to age 17) were eligible for Medicaid but uninsured in 1996 (Weinick, Weigers, and Cohen 1998).

Duration of enrollment is another critical program participation issue in Medicaid. Analysis of longitudinal data from 1991 to 1993 revealed these facts: of those under 16 years of age enrolled in Medicaid at the beginning of the period, 45 percent lost coverage within 28 months; 80 percent of the members of this age group who were newly enrolled in Medicaid lost coverage within 28 months; and 39 percent of children under 16 who lost Medicaid coverage did not have health insurance four months later (Carrasquillo et al. 1998). Among the reasons cited for these eligibility losses were changes in family income, administrative barriers, and lack of parental awareness of their children's eligibility (Carrasquillo et al. 1998; Arruch et al. 1998). Because discontinuities in insurance coverage can disrupt relationships with providers, affect appropriate utilization, and pose administrative burdens, maintaining coverage among enrolled children becomes an important program priority (Marquis and Long 1996; Newacheck et al. 1998; Halfon et al. 1997).

There is likely to be significant variability across SCHIP programs, owing to the flexibility granted states in the federal legislation. States have discretion in setting income eligibility levels, establishing cost-sharing requirements, and defining benefit packages. States also have options in how they implement SCHIP, ranging from the length and content of application forms to the design of outreach efforts and the degree of coordination between Medicaid and SCHIP. Decisions about

program design and implementation are likely to affect enrollment levels and other program outcomes.

Table 1 presents a list of evaluation and quality improvement questions for measuring the impact of SCHIP on insurance status. The overarching question is, To what degree does SCHIP reduce the number of children without health insurance coverage? We distinguish between program evaluation and CQI approaches because they serve different purposes. Evaluation is needed to determine the effectiveness of SCHIP in expanding insurance coverage, whereas the ongoing assessment and feedback of CQI can enable states to improve their enrollment procedures.

TABLE 1
Main Question: What Impact Does SCHIP Have on
Health Insurance Coverage?

Program evaluation questions

1. What proportion of uninsured children is eligible for SCHIP?
2. What proportion of eligible children enrolls in SCHIP?
3. How do the type, intensity, and creativity of outreach efforts affect knowledge of potential eligibility for SCHIP?
4. How do the type and intensity of enrollment procedures, including sites and methods, affect initial enrollment rates?
5. What effect do lock-out provisions and other eligibility sanctions have on retention rates?
6. What are effective mechanisms for maximizing retention and facilitating transition to other coverage for those leaving SCHIP?
7. Does the implementation of CQI for enrollment critical management processes improve enrollment trends?

CQI questions

1. How do changes to enrollment critical management procedures improve education, enrollment, and retention?
 2. How does the deployment of education and outreach resources affect knowledge of the SCHIP program and potential eligibility among eligibles?
 3. How does modification of education and outreach procedures improve knowledge about SCHIP eligibility?
 4. What modifications to management procedures increase enrollment rates?
 5. What modifications to management procedures improve retention of eligible children?
 6. What modifications to management procedures improve the transition of children between insurance programs?
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Monitoring Enrollment for Program Evaluation

The overall impact of SCHIP on children's health insurance status is a matter of significant policy interest, both nationally and at the state level. Program evaluation is primarily focused on how SCHIP affects several critical areas, such as the number of eligible children who are enrolled and the impact of enrollment rates on total insurance coverage rates for low-income children. From the perspective of the federal government, it is important to understand the effects of variation in state CHIP designs on the enrollment of eligible children and, once enrolled, on their retention rates. However, it is necessary to tailor some aspects of the general evaluation to a particular state's program in order to provide state-level policy makers with the information they need for program administration and state legislative requirements. Program information will enable states to report to their own legislatures and their federal funding partners about the degree to which they are achieving SCHIP goals: increasing enrollment of eligible children each year; retaining enrolled children in the program; promoting appropriate transitions to Medicaid or other private insurance programs when eligibility for SCHIP changes; and increasing Medicaid enrollment among eligible children.

Monitoring Enrollment for CQI

Another way to monitor enrollment is through the use of enrollment indicators for ongoing improvement. By deconstructing complex enrollment processes into component procedures and linking these procedures with enrollment outcomes, it is possible to support CQI in management activities that affect enrollment. CQI that targets short-term improvements can be achieved through linking specific management procedures with measured outcomes, instituting changes to these procedures, and monitoring the effects of those changes. An important precondition of this CQI strategy is the presence of a management information system that provides the state with indicators for measuring the impact of the management changes on enrollment and retention rates.

Although differing in purpose, timing, and application, both program evaluation and quality improvement require a framework that links enrollment to outcomes. In the next section, we discuss the *Access Pathway* as a conceptual framework for both program evaluation and CQI.

Access Pathway

Access is a multidimensional construct that has been used to measure the degree to which individuals or populations obtain needed health care (Andersen, McCutcheon, Aday, et al. 1983). Historically, most research and evaluation studies of access to care have explored the ability of individuals to obtain physician services and to establish a continuous relationship with a single provider (Berk and Schur 1998; Gold 1998). Over time, the construct of access has gained greater sophistication, incorporating concepts of effectiveness and appropriateness as well as considering both individual and system-level determinants (Halfon, Inkelas, and Wood 1995). For the purposes of monitoring and evaluating SCHIP enrollment, it will be important to broaden the concept of access by moving further “up stream” from the point of service delivery to measure how effectively children obtain health insurance through SCHIP and to ascertain whether eligible children’s enrollment can be sustained over time.

We have developed an Access Pathway Model (fig. 1) to provide a dynamic representation of the steps to becoming enrolled, obtaining services, and, ultimately, achieving the desired health outcome (Halfon, Inkelas, DuPlessis, et al. 1998; 1999). The Access Pathway Model is divided into two phases: *enrollment* and *utilization*. The pathway illustrates that access outcomes are the product of multiple factors and processes that facilitate or hinder enrollment and utilization. Illustration of a time course, with a set of explicit “intervention points” and associated procedures and interactions, helps to identify critical factors and processes that affect access.

Even though enrollment is identified as a critical component of access, there have been relatively few studies of the effectiveness and impact of campaigns to increase enrollment in public programs. Several studies report on efforts to expand enrollment and participation in the Medicaid program (Sardell and Johnson 1998; Gavin, Adams, Herz, et al. 1998; Rosenbaum, Maloy, Stuber, et al. 1998). Qualitative evaluations of outreach provisions of Medicaid’s Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program have identified state administrative procedures that affect participation of the eligible population (Gavin et al. 1998). Few have empirically examined the specific factors that may either facilitate enrollment or create barriers to it.

FIG. 1. Access Pathway Model. $\diamond$ = Administrative procedures and program features that inform, recruit, and enroll children and manage transitions; $\circ$ = administrative procedures and program features that facilitate appropriate utilization, including entering care, access barriers, provision of care, quality, outcomes; — = pathway of children through insurance enrollment procedures and utilization; ... = pathway of children who remain or become uninsured.

Enrollment Domains

The Access Pathway shown in figure 1 illustrates the four components critical to measuring enrollment in the SCHIP program: *education and outreach*; *initial enrollment*; *retention*; and *transition*. Each of these potential intervention points, or “stations,” along the pathway is associated with a set of complex procedures, in which families interact with state and local government agencies, advocacy groups, and other organizations involved in outreach and enrollment. Examples of key administrative procedures and structural features are provided for each component. Drawing from the structure/process/outcome approach to evaluation, each station can be further elaborated and represented by a “subpathway,” which, in turn, has its own associated structural and process elements and outcome indicators.

Figure 2 depicts the structure, process, and outcome subpathway of the *initial enrollment* domain. States interested in improving initial enrollment could develop quality improvement procedures for both structural and process elements relevant to initial enrollment. For example, one outcome from the initial enrollment station is the number of children enrolled in SCHIP as a proportion of potentially eligible children. The structural and process elements contributing to that specific outcome can be identified, assessed, and adjusted to alter the enrollment outcome. Although space limitations allow us to illustrate only the structure, process, and outcome dimensions for the initial enrollment domain, we have also developed similar structure, process, and outcome subpathways for education and outreach, retention, and transition stations.

Measures of Enrollment Outcomes

Table 2 presents a list of potential enrollment measures for the stations along the Access Pathway, each with its related structural and process elements. It is also important to note that different sampling frames (denominators) are required to collect the data underlying these different measures. For example, education and outreach targeting current and future potential eligibles, and thus the sampling frame, must include both the families of currently eligible children and the families above the income eligibility ceiling whose children are “at risk” for becoming eligible for SCHIP. In contrast, the transition procedures

FIG. 2. Structure, process, and outcomes elements of the initial enrollment subpathway.

between SCHIP and Medicaid programs target children already enrolled in either program. Thus, to evaluate enrollment adequately, denominators must be derived from appropriate population-based or administrative data systems. Table 3 provides a list of core enrollment outcomes with their corresponding sampling frames and likely data sources.

Enrollment Critical Management Procedures

Lessons from Medicaid eligibility expansions, and from the rapidly accumulating experience with CQI processes implemented by prepaid health plans, illustrate the importance of instituting procedures to assure that key processes and outcomes are monitored and that corrective steps are systematically programmed as part of ongoing quality improvement. Monitoring the implementation of SCHIP should include assessing the effectiveness of administrative procedures that were instituted to improve program performance, termed “quality critical management procedures” by Milstein and Kamani (1998).

Following Milstein and Kamani, we have defined as “enrollment critical management procedures” those administrative procedures that affect enrollment and can be adjusted to improve enrollment outcomes. The relevant management procedures of the state agencies responsible for administering the SCHIP program can form the basis for a CQI approach. Table 4 presents the potential measurement dimensions within the four categories of enrollment critical management procedures represented in the stations of the Access Pathway. These procedures are designed to improve education and outreach, maximize enrollment, improve retention, and facilitate transitions. The management procedures in each category include mechanisms for ongoing assessment of procedural effectiveness and responsiveness to stated goals. We emphasize these potential management procedures because of their particular merit from the perspective of monitoring the enrollment process: they are feasible for states and other administering organizations to institute; they build assessment capacities and responsiveness into the central program responsibilities; and they are likely to permit states and other relevant organizations to compare their own progress against established benchmarks and thereby to improve their own enrollment processes.

TABLE 2
Structure, Process, and Outcome Measures of Access for Enrollment Phase

Enrollment domain and measure type	Access measures	Potential data source(s)
<i>Education and outreach</i>		
Outcome measures	Proportion of families who know about the SCHIP program	Population survey
	Proportion of eligible families who know where to go to become enrolled	Population survey
	Proportion of eligible families who know their child is eligible	Population survey
Process measures	Parents informed about no cost-sharing provision for preventive care	Population survey
	Ability of parents to understand enrollment process and materials	Administrative data, population survey
Structural measures	Number of outreach workers per eligible	Administrative data
	Total expenditures on outreach per eligible	Administrative data
	Number of language-competent outreach workers/sites per eligible	Administrative data
	Type and linguistic content of key outreach messages	Administrative data
<i>Initial enrollment</i>		
Outcome measures	Proportion of eligible children who become enrolled	Administrative data, population survey
	Total enrolled months per person-eligible months	Administrative data, population survey
Process measures	Parent discouraged from enrolling child because of immigration status, employment status, language, any reason other than eligibility	Population survey
	Time elapsed between initial request for coverage and becoming enrolled	Population survey
	Ability of parents to understand enrollment process and materials	Administrative data, population survey
	Ascertained at enrollment whether child has special needs and requires special provider, services, equipment	Population survey

	Parents informed about no cost-sharing provision for preventive care Child's regular provider(s) ascertained	Population survey Administrative data, population survey
Structural measures	Distance from home to nearest known eligibility determination site	Administrative data, population survey
	Option to mail enrollment forms versus on-site enrollment only	Administrative data
	Accessibility of enrollment sites to eligible populations (transportation, hours)	Administrative data, population survey
<i>Retention</i>		
Outcome measures	Proportion of children continuously eligible for SCHIP who remain enrolled	Administrative data, population survey
	Duration of enrollment of children who are continuously eligible for SCHIP	Administrative data, population survey
Process measures	Reason(s) why child is not continuously enrolled for eligible time period	Population survey
	Parents informed about payment responsibilities	Population survey
	Parents informed about requirements to maintain eligibility and consequences of failing to meet them (coverage loss, lock-out)	Population survey
Structural measures	Length of lock-out period	Administrative data
<i>Transition</i>		
Outcome measures	Proportion of children losing Medicaid eligibility who enroll in SCHIP among those eligible Proportion of children losing SCHIP eligibility who enroll in Medicaid among those eligible	Administrative data Administrative data, population survey
Process measures	Parents notified of alternative coverage when they lose SCHIP or Medicaid coverage	Administrative data, population survey
Structural measures	Existence of and length of transition period following eligibility loss Proportion of providers who are both Medicaid and SCHIP providers among those who serve Medicaid beneficiaries Proportion of providers who are both Medicaid and SCHIP providers among those who serve SCHIP beneficiaries	Administrative data Administrative data Administrative data

TABLE 3
Potential Outcome Measures in Enrollment Phase

Measure	Numerator	Denominator	Potential data source
Outreach/penetration rate	Number of families who know about SCHIP	Potentially eligible families	Population survey
Application success rate	Number of applications completed	Number of applications initiated	Administrative data
SCHIP participation rate	Number of SCHIP enrollees	Number of SCHIP eligibles	Administrative data, population survey
Insurance rate of children in low-income families	Number insured	Number of low-income children (<200% FPL)	Administrative data, population survey
Insurance rate of children in low-income families (state-specific measure)	Number insured	Number of children eligible for SCHIP	Administrative data, population survey
Low-income uninsured children	Number uninsured	Number of low-income children (ages 0–18)	Population survey
Retention rate	Number continuously insured for year	Number continuously eligible for SCHIP	Administrative data, population survey
	Number continuously insured for year	Number ever enrolled during the year	Administrative data
Transition rate	Number enrolling in SCHIP	Number losing Medicaid and eligible for SCHIP	Administrative data
	Number enrolling in Medicaid	Number losing SCHIP and eligible for Medicaid	Administrative data
	Number of transitions per year	Number continuously enrolled in year	Administrative data

Strategies to Achieve Program Evaluation and CQI Objectives for SCHIP

Although there have been substantial efforts to document “realized” access to health care services by measuring utilization, there have been far fewer empirical studies that measure access as it pertains to education, outreach, and enrollment. Evaluating access in the enrollment phase is challenging for several reasons. There are few standardized and/or routinely used measures of program enrollment in the research and evaluation literature. Enrollment evaluation requires population-based information about multiple groups of persons (“denominators”) who are eligible, who may become eligible, and who have enrolled. Because the eligibility and enrollment status of individuals in these groups changes over time, it is important also to understand the factors that determine these transitions.

In addition to the conceptual challenges, there are methodological challenges to measuring the impact of SCHIP on child health insurance rates and of specific administrative procedures on enrollment for eligible children. Each station in the enrollment phase of the Access Pathway contains many structure and process variables; understanding their direct and interactive effects and measuring their relative impact on enrollment constitute no small task. Even with complex multivariate analysis, the factors that contribute to relative success or failure might not be readily apparent.

Understanding these direct and interactive effects of management procedures will require both descriptive and analytic techniques. Quantitative studies will be important to understand the strength and magnitude of relations among key variables. However, qualitative research focused on elucidating the various components of an enrollment process will also be essential for grasping the underlying mechanics and interpreting results from quantitative analyses. A combination of methodological approaches is especially important, given that the potentially eligible population is heterogeneous and includes distinct population subgroups (e.g., children of immigrant parents, chronically ill and disabled children) that will experience the enrollment process quite differently. Although such research may be difficult to aggregate nationally, efforts to describe and measure the impact of program characteristics would be largely concentrated on state enrollment procedures and improvement initiatives.

TABLE 4
Core Set of Enrollment Critical Management Procedures

<i>Education and outreach</i>	
<i>Purpose:</i> To identify and target potentially eligible children for enrollment in the SCHIP program; to inform these families about eligibility options and processes of enrollment	
Education improvement	<ul style="list-style-type: none">• Sufficient and dedicated resources to conduct education of potentially eligible families at the state and local community level• Systematic monitoring and evaluation of education program effectiveness• Mechanisms to inform eligibles about enrollment processes, maintenance of coverage, co-payments, lockout provisions, continuation procedures, and transitions between SCHIP and Medicaid• Culturally and linguistically designed services to meet population needs• Involvement of local communities, plans, providers, and eligibles in the development of management procedures and in improvement processes
<i>Enrollment</i>	
<i>Purpose:</i> To maximize the enrollment of eligible children into the SCHIP program	
Enrollment management improvement	<ul style="list-style-type: none">• Dedicated resources to conduct enrollment activities at state and local community levels• Procedures for estimating eligibility of the population (e.g., person-months of eligibility)• Data systems to facilitate continuous enrollment and to minimize coverage loss and discontinuities due to fluctuation in eligibility• Procedures to monitor enrollment and to evaluate the effectiveness of different enrollment strategies

- Mechanisms to involve advocates and consumers in improving the enrollment processes
- Procedures to record and respond to eligibles' complaints about the enrollment procedure in a timely manner
- Provision of rights and responsibilities to enrollees
- Mechanisms to inform enrollees about their benefits, their eligibility for medically necessary services, how to access services, and grievance procedures

Retention

Purpose: To ensure that mechanisms are in place to maintain enrollment

- Retention management
- Continuous monitoring of children losing eligibility based on income, assets, failed premium payment, and/or change in categorical eligibility
 - Systematic reassessment of eligibility when eligibility under current category lapses
 - Reporting on frequency of, and reasons for, eligibility loss
 - Process in place to analyze and improve retention mechanisms

Transitions

Purpose: To assure that transitions between the Medicaid Program and SCHIP Program are as seamless as possible when eligibility status changes

- Transition management improvement
- Outreach and education of eligibles about alternative insurance options (Medicaid, SCHIP)
 - Timely procedures for notifying enrollees of pending eligibility change
 - Administrative and data system links between state Medicaid and SCHIP programs for purposes of enrollee transition when eligibility changes
 - Process to track performance of transition procedures
-

*Data Necessary to Construct
Population-Based Measures*

Gathering information about enrollment, as outlined in the Access Pathway, requires population-based data on potentially eligible children and administrative information on enrollment procedures. In addition, there must be the capacity to track eligible cohorts longitudinally and to repeat enrollment measures on a regular basis. Although most states have administrative data systems in place, it is unlikely that many have installed the necessary systems for collecting and analyzing population-based data on enrollment. Until recently, little attention has been paid to monitoring state administrative procedures as part of CQI systems in public insurance programs. Thus, states need to consider how to develop data collection and management information systems that are useful for evaluation and quality improvement.

Obtaining the population-based information needed to construct measures is a challenge for all states. At present, no state is routinely monitoring population health status, insurance status, and access to care, except through limited efforts, such as the Behavioral Risk Factor Survey. Although a number of national surveys, including the National Health Interview Survey and Current Population Survey, are fielded on an annual basis, they do not provide reliable, state-level estimates for small populations (Halfon, Inkelas, DuPlessis, et al. 1998; Newacheck and Starfield 1995).

One strategy that states and the federal government might consider is the development of a telephone-based population survey of the SCHIP-eligible population in their state. A sample size of approximately 2,000 to 3,000 eligible children in each state should be adequate to evaluate with suitable precision many of the questions that we have posed.

The National Center for Health Statistics (NCHS) is experimenting with a State and Local Area Integrated Telephone Survey (SLAITS) for purposes like this. In fact, NCHS has developed a survey instrument that specifically focuses on issues of enrollment, access to care, and utilization for the SCHIP-eligible population. NCHS is presently piloting this survey and, pending budgetary considerations, may soon be ready to implement it in several states. The federal government could assist states with instituting their evaluation efforts by entering into partnerships in conducting SLAITS and by assisting states with other

evaluation strategies. One way to accomplish this would be to develop a questionnaire with a core set of items for informing a national evaluation. Supplemental questions specific to each state's SCHIP initiative could then be added to the core. Such a strategy would help meet both federal and state program evaluation and CQI needs.

Whatever decisions are made concerning SLAITS, states will need a comprehensive strategy of data collection that covers enrollment, retention, and transitions, as well as encounter data, HEDIS, and other administrative data. By encouraging the development of data collection and constructing a common set of data elements across states, the federal government would allow state comparisons to be made. Because the state Title V agencies are now required to report on their maternal and child health goals, using specified indicators, they might also be persuaded to become involved in this process by including SCHIP and Medicaid enrollment indicators in their own required data set. This would be an additional stimulus to states and would institutionalize SCHIP and Medicaid indicators within state Title V assessment and assurance roles.

Validation of Enrollment Critical Management Procedures

There are several options for further refining the management procedures that affect enrollment and generating a "benchmarking" process to stimulate their improvement. One option would be for the Health Care Financing Administration, while conducting its oversight of SCHIP implementation, to encourage states to demonstrate their capacity in each of these areas as part of an accreditation process. These management procedures could be reviewed and refined through a consensus process and then provided to states as model standards for improving the quality of their education and enrollment activities. Although the institutions and the context differ somewhat, this approach is similar to that of the National Committee for Quality Assurance (NCQA) for identifying, refining, testing, and fielding the HEDIS indicator sets. However, this approach might be difficult to initiate at the federal level based on the absence of a clear mandate in authorizing legislation and in view of the reticence of many states to increase their administration and reporting burdens.

MIS Infrastructure to Support Policies, Evaluation, and Quality Improvement

States will also need to invest resources for improving their data collection, analysis, and reporting capacity related to children's health insurance coverage. MIS capabilities will be critical to supporting management procedures that affect enrollment and to identifying areas where improvements can be made. For example, timely availability of administrative eligibility data will be important for managing transitions between SCHIP and Medicaid programs to minimize unnecessary gaps in coverage. Administrative data and mechanisms for notifying SCHIP-contracted managed care plans on a timely basis about enrollees' missed premiums and impending lock-out periods may be needed if the managed care plans are to play any role in contacting those families and assisting them in maintaining their coverage. Such timely applications of administrative data are essential to maximize retention of eligible children. Enhanced federal matching rates for state development of MIS capabilities, as provided for state Medicaid programs, might be a useful strategy for SCHIP.

Collaborative Approach to Implementing Evaluation and CQI Strategies

Different strategies can be used by states, by the federal government, and by local and national philanthropies that are interested in supporting innovative and effective evaluation. Because the measures of the enrollment process are so underdeveloped at present, it is important to provide mechanisms that will allow states to share in the learning that takes place across the nation. This way, states can benefit from successes as well as failures. Organizations like the National Academy for State Health Policy, the National Governors Association, and the National Conference of State Legislatures could all play an essential role in dissemination of lessons learned. The creation of a clearinghouse on measures and the dissemination of innovative strategies are important elements of an overall strategy to maximize innovation over the shortest time frame. The dissemination of measurement, evaluation, and quality improvement tools and applications could also be served by the creation of a national technical assistance center for states to use.

State CHIP programs can also build upon some of the lessons that have been learned in other measurement and quality improvement ac-

tivities. Donald Berwick and his colleagues at the Institute for Health Care Improvement in Boston have pioneered a set of techniques that uses collaborative approaches in short cycles of data collection and procedural change to facilitate improved quality and outcomes (Nolan and Knapp 1996). State efforts to improve management procedures related to enrollment could be supported by the development of a learning collaborative composed of a small number of states. Such a state-level learning collaborative could actively facilitate improvements in state enrollment outcomes by refining their enrollment procedures. This learning collaborative could focus on different stations of the Access Pathway: developing and testing different outreach and education procedures; assessing the impact of modifying enrollment processes; ranking applications of different administrative data collection; and instituting other critical management procedures. Using short-cycle techniques, they could work together to determine the effectiveness of these strategies for improving enrollment outcomes. In states with large county-level systems, like California and New York, similar learning collaboratives could be developed among five to ten counties within the state.

The potential collaborative benefit of jointly developing tools and techniques could be augmented by the public relations value of creating a “buzz” about what is possible in the world of SCHIP enrollment. This could stimulate improvements in outreach, enrollment, retention, and transition procedures, with a focus on changing procedures for which states are accountable. Products of such a process would include well-tested procedures, data requirements and protocols for analyzing administrative data, and a set of new tools to improve enrollment that would potentially have widespread applicability. These well-developed and tested best practices could be useful for other purposes as well. For example, such a process would also serve an important function of setting higher standards of enrollment performance. We believe that using this technique would also shift the perceptual frame within and between states to a focus on continuous improvement rather than being restricted to the maintenance of monitoring functions.

Conclusion

Although there are many challenges in mounting a SCHIP program that meets the intended legislative goals, we believe that the federal and

state governments can accomplish these goals by working together. The conceptual outline, which includes evaluation and quality improvement strategies, should help provide states with a framework to design their own specific approach. The framework we have presented is purposely broad, as we recognize that each state is starting at a different place and has different needs, concerns, and expertise regarding evaluation and quality improvement. The framework should also help the federal government consider how to develop a common approach and a core set of data elements that could ensure comparability of information across states.

Given the timing of the passage of Title XXI and the rapid response by states in both formulating plans for their programs and implementing them, there has not been adequate time to plan a well-designed evaluation at either the national or the state level. Consequently, in most states it is no longer possible to conduct evaluations that include pre-implementation baseline data. Nonetheless, states should be able to develop workable, quasi-experimental evaluation designs tailored to their particular circumstances. Doing so will provide the information needed to improve enrollment processes and to ensure maximum participation of eligible children.

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