

The Children's Health Insurance Program: Expanding the Framework to Evaluate State Goals and Performance

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IN 1997, CONGRESS AND THE CLINTON ADMINISTRATION signed into law Title XXI of the Social Security Act, which created the State Children's Health Insurance Program (SCHIP). Within the context of the Balanced Budget Act of 1997, SCHIP represented a notable expansion of governmental responsibility amid a host of measures to reduce federal spending and regulatory authority (U.S. Congress 1997). The purpose of SCHIP is to "provide funds to states to enable them to initiate and expand the provision of child health assistance to uninsured, low-income children in an effective and efficient manner that is coordinated with other sources of health benefits coverage for children . . ." ¹ SCHIP offers the states and U.S. territories block grants—totaling approximately \$40 billion over the ten-year period from 1997 to 2007—to provide health assistance to children not already covered by Medicaid or private insurance.

States have the option of implementing SCHIP coverage by expanding their Medicaid program, creating or expanding a separate program, or combining the two options. Funds are allocated to each state based on its share of the nation's uninsured children with family incomes below either 200 percent of the federal poverty level (FPL) or 150 percent of

¹HR 2015, §2101a.

the state's Medicaid eligibility, with adjustments for differences in health care costs across states (Bruen and Ullman 1999). Although states must contribute funds of their own, the federal government covers 65 percent or more of the costs of SCHIP.

States that expand their Medicaid program must follow the Medicaid eligibility process, whereas states with separate state child health programs can be more flexible with their eligibility standards. Because SCHIP is considered a means-tested federal benefit under the immigration reform provision in the Personal Responsibility and Work Opportunity Reconciliation Act of 1996,¹ states with separate programs may not use their funds to assist children who are not citizens. SCHIP Medicaid programs must also follow Medicaid benefit and cost-sharing rules, which is in contrast to the greater flexibility, in both coverage and cost-sharing rules, permitted separate state child health programs. States can act as an insurer and provide direct coverage, contract with managed-care organizations, contract with a community-based delivery system, or offer coverage through employer plans. States must involve the public in the design and implementation of their plans.

As of March 22, 2000, all states and the U.S. territories of American Samoa, Guam, Puerto Rico, and the Virgin Islands have submitted their SCHIP plans. Of these, 15 have a separate SCHIP program, 23 expand the Medicaid program, and 17 combine both approaches. Forty-three plan amendments have been approved, and 13 are still under review (see table 1 for state-by-state breakdowns).

The primary purpose of SCHIP is to reduce the number of uninsured children. At the time of enactment, federal policy makers suggested that SCHIP would cover up to 5 million children, nearly half of the 11 million who were uninsured at that time. In fact, Ullman, Bruen, and Holohan (1998) calculate that the federal funds authorized for SCHIP, combined with state matching funds, would be sufficient to cover 5.8 million children. They estimate, however, that only half that number of children, 2.9 million, meet the current eligibility requirements for SCHIP. The enrollment targets in the initial state plans received by the Health Care Financing Administration (HCFA) confirm this gap, indicating that the SCHIP initiative may provide insurance for only 2 to 3 million individuals. New evidence suggests that, even with increases in public health insurance coverage from SCHIP, recent erosion of private insurance

¹P.L. 104-193. H.R. 3734.

TABLE 1
Tracking States' Responses to SCHIP

State	Approved separate child health plan (N = 15)	Approved Medicaid expansions (N = 23)	Approved combination plans (N = 17)	Plan amendments approved (N = 43)	Plan amendments under review (N = 13)
Alabama			X		
Alaska		X		Two	
Arizona	X			Three	Three
American Samoa		X			
Arkansas		X			
California			X	Four	
Colorado	X			One	
Connecticut			X		Three
Delaware	X			One	
District of Columbia		X			
Florida			X	One	Three
Georgia	X				Two
Guam		X			
Hawaii		X			Two
Idaho		X		One	
Illinois		X			Three
Indiana			X	One	

(continued)

TABLE 1 *continued*

State	Approved separate child health plan (N = 15)	Approved Medicaid expansions (N = 23)	Approved combination plans (N = 17)	Plan amendments approved (N = 43)	Plan amendments under review (N = 13)
Iowa			X	One	Two
Kansas	X				Three
Kentucky			X	One	
Louisiana		X		One	
Maine			X		Three
Mariana Islands		X			
Maryland		X			
Massachusetts			X		
Michigan			X	One	
Minnesota		X			
Mississippi			X	Two	
Missouri		X		One	
Montana	X				Three
Nebraska		X		One	
Nevada	X			Two	
New Hampshire			X	One	
New Jersey			X	Three	Three
New Mexico		X			

New York			X	One	
North Carolina	X			Three	
North Dakota			X	One	
Ohio		X			
Oklahoma		X		One	
Oregon	X				Two
Pennsylvania	X			Three	
Puerto Rico		X			
Rhode Island		X		One	Two
South Carolina		X			
South Dakota		X		One	
Tennessee		X			
Texas			X	One	
Utah	X				
Vermont	X			Two	
Virginia	X			One	
Washington	X				
West Virginia			X	One	
Wisconsin		X		One	
Wyoming	X				

Source: From the HCFA web site (<http://www.hcfa.gov/init/chip-map.htm>) as of March 21, 2000.

coverage means that by 1998–99 there was no net gain in coverage for low-income children (Cunningham and Park 2000).

A secondary purpose of SCHIP is to improve the quality of health care for this population. Section 2108 of the SCHIP legislation requires states to report on their progress in reducing the number of uncovered low-income children and improving the quality of their health coverage for these children. However, the federal government has not prescribed or suggested either a specific insurance target or any quality guidelines. States are left to devise their own strategic objectives and quality measures as part of their applications for federal approval.

Many observers and analysts have proposed criteria and methods for evaluating SCHIP implementation and performance based on policy analysis, health services research, or professional judgment (American Academy of Pediatrics 1998; Halfon, Inkelas, DuPlessis, et al. 1999; Riley 1998; 1999). A recent article by Halfon and his colleagues, published in this journal, for example, proposed detailed evaluations of SCHIP outreach and enrollment (Halfon, Inkelas, and Newacheck 1999).

Here we take the evaluation approach proposed by Halfon and his coauthors and expand it, both conceptually and empirically. We describe a more comprehensive framework to evaluate SCHIP and discuss potential measures and data sources to capture the various components of the framework. We then review the program information in states' SCHIP applications, focusing specifically on their strategic objectives and proposed performance measures.

Our basic premise is that an expansion of insurance coverage, although important, is not a sufficient goal for SCHIP. Policy makers, program administrators, and children's health advocates must consider whether the program meets not only basic legal and administrative requirements but also higher standards of health improvement for the children enrolled in SCHIP. Although state leaders might readily agree with this premise, the actual state plans submitted to HCFA tend to stress program enrollment and basic access to services but fail to emphasize the type and quality of services children receive once they are enrolled in the program. In particular, we believe that SCHIP should place greater emphasis on access to high-quality primary care in order to advance health outcomes for beneficiaries and their families. With this in mind, we broaden and strengthen the criteria proposed by the states into a more comprehensive conceptual framework for evaluating SCHIP design and performance.

This article contributes to the ongoing assessment of SCHIP design and evaluation in a number of ways. First, it offers a broad conceptual framework that emphasizes both health outcomes and administrative processes, and it incorporates a broader set of indicators to assess SCHIP program performance. Second, it documents the actual range of strategies and evaluation objectives that states proposed for SCHIP in their initial applications for federal funding. Third, it presents and critiques the pattern of measures proposed by states for SCHIP evaluation, highlighting priorities and indicating interstate variation.

Methods

We developed a conceptual framework to guide the evaluation of SCHIP by researchers, policy makers, and children's advocates, which was based on a review of states' SCHIP strategic and evaluation objectives as well as the literature on children's health and quality of care. Section 2107 of the SCHIP legislation contains the following provisions for "strategic objectives and performance goals" and "plan administration": A state Child Health Plan must describe its strategic objectives and performance goals and outline its performance measures for providing child health assistance to targeted low-income children, maximizing health benefits coverage for other low-income children, and raising the level of care for the general population of children in the state. The plan must describe how performance measures will be assessed through objective, independently verifiable means and compared against performance goals. A state Child Health Plan also must describe the state's plan for annual assessments, reports, and evaluations and assure the secretary of health and human services access to records for audit purposes.

We obtained data on each state's program from a number of Web sites that follow the development of SCHIP. These include the Health Care Financing Administration, the Urban Institute, the National Governors' Association, the American Academy of Pediatrics, and the Association of State and Territorial Health Officials.

We obtained states' program objectives and performance measures from the initial SCHIP applications they submitted to HCFA. The applications were either downloaded from the states' Web sites or ordered directly from the states. States must describe their SCHIP plan structure, eligibility standards and methodology, outreach and coordination,

coverage requirements, quality and appropriateness of care, cost sharing and payment, strategic objectives and performance goals, and evaluations. In section 7, the application describes the methods that are to be used to assure the quality and appropriateness of care and the qualifications of entities that will provide coverage. In section 9, the application presents the strategic objectives, the performance goals, and the performance measures that a state has established for providing child health assistance to selected groups of low-income children and to the general population of children in the state. To reduce the number of categories that states employ to describe their strategic and evaluation objectives, we grouped similar content areas under the same category. Any differences in coding were resolved through discussions among the investigators. For performance measurement categories, we examined how states responded to HCFA's SCHIP template categories 9.3.1–9.3.8 (see table 5 for a complete list).

Our summary of state performance measures is based on the original SCHIP applications submitted by states to HCFA. Although we recognize that most states have amended their original plans, we did not track down the subsequent changes. The purpose of this project, developing a SCHIP evaluation framework, does not depend on an exhaustive or completely up-to-date record of state evaluation plans.

Although our evaluation framework is based on actual state plans, we have expanded both the scope and specificity of performance measures to reflect our own vision of how SCHIP can contribute to the health and well-being of underserved children and their families. The measures we have added are intended to bring the states' own objectives and operations into alignment with the literature on children's health and the quality of their health services. The framework also reflects the comments by the reviewers of an earlier draft of this paper.

Ultimately, the success of SCHIP should be measured by its long-term impact on children's health status. Health status is one of the motivating forces for interest in children's health care (American Academy of Pediatrics 1998). Infant and child mortality rates in the United States have been falling throughout the second half of the twentieth century but remain high in comparison with those of other developed countries. The proportion of children reported to be in excellent or very good health decreased slightly between 1990 and 1993, and prevalence rates for most children's chronic health conditions have not improved over the past two decades (Office of the Assistant Secretary for Planning and

Evaluation 1996). SCHIP is expected to strengthen children's health status by facilitating their access to health services. Improvements in children's health status will depend, however, on the quality of those services.

The Institute of Medicine defines quality as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge." Starfield (1999) presented a conceptual basis for evaluating SCHIP that was based on a comprehensive review of the literature. She indicated that although insurance improves access to, and use of, health services, better health depends on the kinds of services received. Access to a *regular source of care* is a critical characteristic. If this source of care provides good *primary care*, a variety of benefits would be expected to accrue. The literature provides strong evidence that the quality of primary care is associated with health and cost outcomes (Blumenthal, Mort, and Edwards 1995; Starfield 1998). Thus, we argue that an evaluation of the benefits of SCHIP should consider not only expanded insurance coverage for eligible children but also the extent to which children receive high-quality primary care.

To evaluate SCHIP, we adopt the classic approach to quality assessment established by Donabedian, based on the structure, process, and outcomes of health care. These components are complementary and should be used collectively to monitor quality of care (Al-Assaf 1998). The three components are also hierarchical. Structure is the foundation of the quality of health care. Good processes require a good structure, and deficiencies in structure generally have a negative effect on the processes of health care. Structure and processes together influence the quality of outcomes, but structure has only a secondary influence on outcomes.

It should be noted that the structure–process–outcome framework typically places quality strictly within the perspective of the delivery system. It does not account for socioeconomic and behavioral factors that also significantly affect health status. In combination with the health care system, certain sociodemographic factors are also associated with the health of children. Children are at greater risk of encountering difficulties with the health care system, depending on their race or ethnicity, parents' education, and parents' employment status. Evaluating the impact of SCHIP, therefore, requires some control for environmental and sociodemographic characteristics (Shi and Singh 1998).

An Evaluation Framework for SCHIP

Figure 2 presents an evaluation framework of SCHIP that has three major components:

1. program precursors
2. SCHIP design and delivery system characteristics (structure and process)
3. individual and system performance indicators (short- and long-term outcomes that are affected by the overall program environment)

Program Precursors

An important precursor is the number of uninsured children in the state, which represents a direct demand for SCHIP. This number will dictate the scale of the new program and affect the willingness of state policy makers to develop a separate administrative infrastructure apart from Medicaid.

Preexisting policies will clearly affect the basic design of SCHIP. A state is almost certain to build upon a separate children's health insurance programs created prior to SCHIP, or to use SCHIP to expand Medicaid if it recently reformed its program through a section 1115 waiver. Departing from these prior commitments would require an unusual degree of political capital and a variety of financial and technical resources. In this regard, we note that even in states like Oregon and Georgia that have created a nominally separate version of SCHIP, the program is administered by the Medicaid agency and has the same benefits and providers.

Political ideology and the concentration of power in the state, although less important than prior initiatives, are likely to affect the design of SCHIP as well. A unified government with a Democratic governor and Democratic majorities in the legislature is more likely to support a Medicaid expansion, given Democrats' traditional defense of government-run programs and their allied interest groups who recognize that Medicaid typically offers more comprehensive benefits than private insurance programs. In contrast, a unified government with a Republican governor and Republican majorities in the legislature is more likely to adopt a separate SCHIP program, given Republicans' traditional interest in private insurance alternatives and their reluctance to build upon

a means-tested “welfare” program. Republicans are more likely to accept a Medicaid expansion, of course, if the state already contracts out services to capitated managed-care plans. If party control of government is divided—especially with a Republican governor—a state is more likely to develop a combination approach.

All these precursors establish a series of considerations for policy makers, one in which we believe prior initiatives take precedence and ideology plays a secondary role. A study by Brandon, Chaudry, and Sardell (2000) illustrates how these precursors and other idiosyncratic factors affected SCHIP design in New York, Ohio, and North Carolina. Even among Democrats, there is interest in creating separate, privately administered SCHIP arrangements that are likely to avoid stigma and increase enrollment of the working poor. Maryland, for example, is now adding a small “private option” for a few thousand families whose incomes reach up to 300 percent of the FPL on top of more than 60,000 SCHIP beneficiaries now enrolled in the Medicaid expansion adopted in 1998 (Oliver 2000).

These policy precursors matter: First, because they signal policy makers’ perceptions about the target population and their degree of commitment across different demographic groups and jurisdictions. Second, because they affect the immediate capacity of a given state’s program for outreach and enrollment, depending on the finer points of SCHIP design and service delivery, which are discussed below. Administrative integration of SCHIP and Medicaid can work both ways. On the one hand, a strong outreach effort based within a Medicaid program can create a positive spillover, identifying thousands of individuals and families who are eligible for Medicaid at the same time that it attracts SCHIP enrollment (e.g., Oliver 2000). On the other hand, a separate, simpler, and less stigmatizing enrollment process for SCHIP can avoid the problems that have plagued Medicaid since eligibility was technically—but often not functionally—delinked from welfare assistance by the federal reforms of 1996 (Ellwood and Ku 1998; Families USA 1999; Hudman 2000; Garrett and Holohan 2000). The New York SCHIP application can be mailed in, for example, whereas Medicaid still requires face-to-face interviews (Brandon, Chaudry, and Sardell 2000).

SCHIP Design and Delivery System Characteristics

The structure-process-outcome continuum is used to characterize SCHIP design and its role in the health care system. The structure of SCHIP

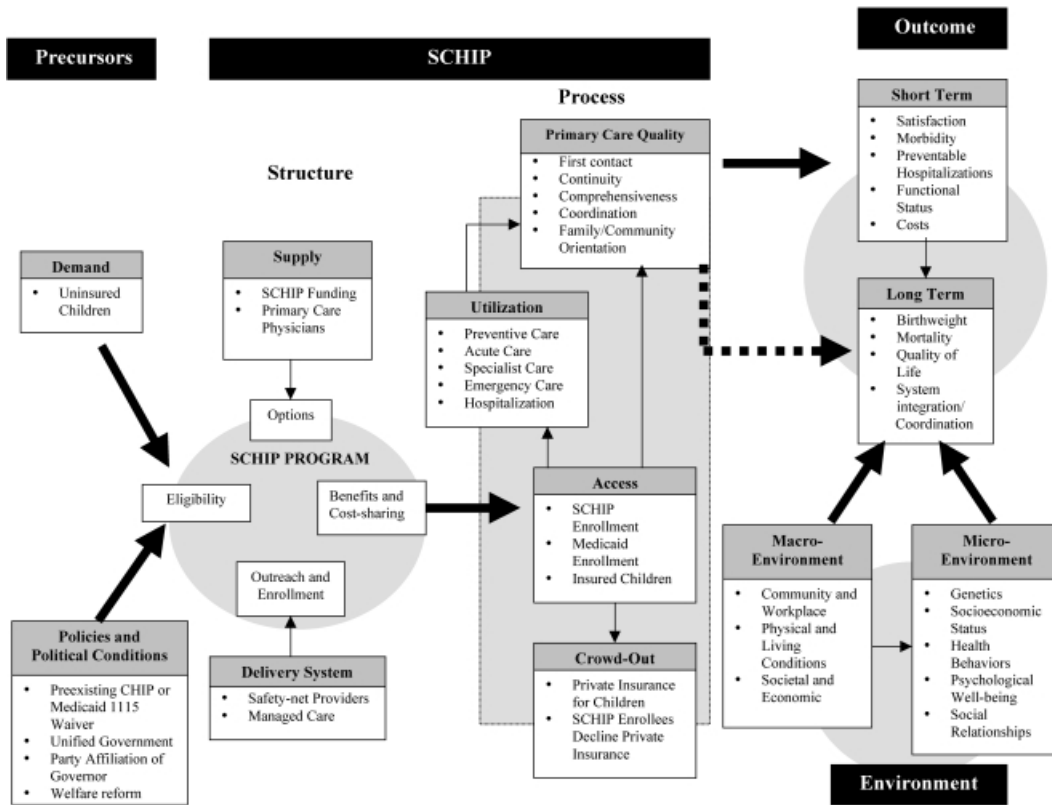


FIG. 1. An evaluation framework for SCHIP.

includes supply factors, predominant delivery systems for this population, and the specific features of the SCHIP program itself. Funding for SCHIP (both the federal allotment and state matching funds) is a supply factor, as are the availability and willingness of primary care providers, in particular primary care physicians, to serve the newly recruited children. The health care delivery system includes safety-net providers, such as community health centers (Federally Qualified Health Centers and their look-alikes), public hospitals, and local health departments, as well as managed-care organizations. The supply- and delivery-system characteristics will influence the implementation and sustainability of SCHIP.

As we suggested above, the features of SCHIP itself are, of course, critical: the type of program (Medicaid expansion, separate state child health program, or a combination of both); the eligibility requirements (additional children to recruit after enrolling those with family income below 200 percent of FPL); outreach efforts (funding, staffing, and channels of outreach); enrollment issues (mail-in or in-person application, simplified forms, and minimum length of continued enrollment despite family income change); benefits structure and cost sharing (the choice of benefit package and level of cost sharing in terms of premiums, copayments, and deductibles). Although all states recognize the importance of making SCHIP accessible, some states have clearly demonstrated greater commitment and capacity in the early stages of the program (Thompson 2000).

Taking into consideration all factors, states without a preexisting children's health program have, early on, been more likely to implement SCHIP through a Medicaid expansion. This is because the administrative structures and benefit packages for Medicaid are already in place, an advantage for states that want to act quickly and put their federal allocation to work. States may want to establish consistent Medicaid eligibility criteria for children of all ages in order to simplify administration and outreach efforts, keep the children in one family in the same program, and make it easier to determine eligibility. States with small numbers of uninsured children may also prefer Medicaid expansions because they can thus avoid setting up a separate child health program for relatively few individuals (Alpha Center 1999).

SCHIP guidelines released by HCFA assert that states choosing Medicaid expansions will receive federal funds at Medicaid matching rates if the state exceeds its SCHIP allotment, whereas states choosing non-Medicaid plans cannot receive federal funding beyond the allotted

amount. Medicaid expansion also facilitates movement as family income changes. If a state has created a state-only SCHIP program that is separate from Medicaid, and if families' incomes fluctuate over time, the children may have to move back and forth between Medicaid and the state-only programs to maintain coverage. Such shifts between public programs can also result in shifts for the children between health plans and providers (pediatricians and hospitals) if the states do not structure plans to avoid this contingency.

As states have more time to develop plans, the number of non-Medicaid programs will grow for several reasons. New plans have greater flexibility and it is easier to impose cost-sharing requirements at higher income levels (Dubay and Kenney 1996). They are less expensive for the states and tend to carry less of the stigma that is typically associated with the Medicaid program. States may also choose a separate program because of the potential for certainty in spending and the desire to avoid a new entitlement (Rosenbaum, Johnson, Sonosky, et al. 1998). Finally, policy makers may want to involve the private sector in SCHIP—employers, insurers, agents, and brokers—in the hope of preventing “crowd-out” of private coverage (discussed below) or even of expanding coverage by attracting businesses that have not previously offered coverage to employees, low-income or otherwise (Oliver 2000).

In sum, the basic choice of SCHIP design, and its underlying rationale, is likely to generate important differences in the specific features of state programs. Evaluation of SCHIP programs, therefore, must take into account the political context and basic program design and consider how they affect certain features, such as program organization, the stability of funding, eligibility and enrollment, types of covered services and conditions for their use, and quality-assurance mechanisms.

The structural indicators are expected to influence the process measures, which are delineated in the center of figure 1. Process components of SCHIP include measures of access, health care utilization, and the quality of primary care experience. The implementation of SCHIP is expected to improve access to care through expanded insurance coverage for children by SCHIP and Medicaid after adjusting for the “crowd-out” effect. “Crowd-out” refers to the likelihood that expansion of Medicaid eligibility through SCHIP will replace private-sector coverage—in particular, employer-sponsored insurance (ESI). This can occur if parents decide to reject ESI coverage for dependents in favor of Medicaid, or if employers drop ESI or increase copayments owing to the availability of

Medicaid or SCHIP for the dependents of some of their workers (Dubay and Kenney 1996; Cutler and Gruber 1997). Concern over such public-for-private substitution led to the inclusion of several "anti-crowd out" provisions in SCHIP plans, including some that force eligible children to endure a waiting period during which they are uninsured. In some states, families have to be uninsured for six months before they can get SCHIP coverage. These provisions could unintentionally create barriers to access. States that have waiting periods for coverage (to avoid crowd-out) can cause gaps in coverage. If a family leaves welfare because the head of family gets a job, has coverage briefly at that job, but then loses the job, the family might have to wait six months to one year before the children are eligible for SCHIP.

On a cautionary note, it should be mentioned that the mere change in private coverage for children does not in itself indicate either crowd-out or that people are dropping out of private coverage to enroll in Medicaid. The parents of the newly enrolled children could have lost their own coverage through job loss. A study by Thorpe and Florence, based on the National Longitudinal Survey of Youth, found little substitution of public for private insurance among families living at or near the FPL (Thorpe and Florence 1998). Most of the children enrolling in Medicaid were previously uninsured. Only 16 percent of newly enrolled Medicaid children were likely to have had access to private insurance through a parent. Moreover, the loss of insurance by parents who lost their jobs may explain why these children were enrolled in the program and other eligible children were not.

SCHIP may be expected to increase preventive visits, physician office visits, and specialist care, and reduce improper utilization, such as emergency-room visits and hospitalization. The quality of primary care experience, as measured by its principal components—first contact, continuity, comprehensiveness, and coordination—is a critical process component of SCHIP.

Individual and System Outcomes

The process measures are expected to influence both short-term and long-term outcomes, which are depicted on the right side of figure 1. The short-term, direct impact of SCHIP could be that both recipients and providers experience greater satisfaction with their care; morbidity and preventable hospitalization are reduced; functional status,

particularly for children with special needs, is improved; and costs related to the health spending of both the government and individual families are stabilized. Over time, these impacts could lead to improved health outcomes, such as a reduction in low birthweight, lower mortality, and improved quality of life. The health care delivery system could also become more integrated and better coordinated if SCHIP serves as an impetus to consolidate and coordinate the health and social services designed for vulnerable populations.

Because health outcomes are influenced by individual and social factors, in addition to health care access (reflected in figure 1 by the dotted arrow), a properly designed evaluation should also take these environmental factors into account. The environment consists of micro- and macro-components (bottom right of figure 1). The micro-components focus on individual determinants of health, including individuals' genetic or biological factors, socioeconomic status, health behaviors, psychological factors, and social relationships. The macro-components (bottom far right of figure 1) focus on ecological determinants of health: community and workplace characteristics, physical and living conditions, and societal and economic systems. The dynamic interactions of individual and ecological determinants are expected to modify significantly the effect of SCHIP on health outcomes. Because modifications of these environmental factors are likely to have a far greater impact on health outcomes, it will be difficult to attribute changes in long-term health outcomes to SCHIP. Given the complexity of the issues and the designs that will be required, states will likely need to work with outside researchers and data sources in developing this type of evaluation.

Evaluation Measures and Sources

Table 2 presents a list of potential measures for the components of the SCHIP evaluation framework displayed in figure 1. These measures may be collected by combining secondary and primary sources. Because monitoring SCHIP is a long-term process, evaluators should plan to track similar measures over time. Measures should also reflect changes in political conditions and variations in state plans so that changes in outcomes may be properly explained.

Secondary sources include regular surveys (e.g., the Current Population Survey on insurance coverage; the Health Resources and Services

TABLE 2
Measures of SCHIP

Precursors

Demand

- Uninsured children: number and percent of uninsured children under age 18; under age 12; and under 200% of FPL (*Source: Census Bureau, Current Population Survey*)

Political conditions

- Unified government: either Republicans or Democrats represent the majority of both the state senate and the house. (*Source: National Conference of State Legislatures Web site*)
- Party affiliation of governor: The governor's party affiliation is the same as the majority of both the state senate and the house (*Source: National Conference of State Legislatures Web site*)

SCHIP structure

Supply

- SCHIP funding: federal allotment and state matching funds (*Source: HCFA*)
- Primary care physicians: primary care physicians (family and general practice, pediatricians, and internists) per 10,000 population; number and percent of primary care physicians participating in Medicaid and SCHIP (*Sources: AMA Physician Master File; HRSA's Area Resource File*)

Delivery system

- Safety-net providers: community health centers (Federally Qualified Health Centers and look-alikes), public hospitals, and local health departments (*Sources: HRSA's Uniform Data System; State Hospital Association Database; State Public Health Department Database*)
- Managed care: managed care enrollees as a percentage of the insured; and Medicaid managed care enrollees as a percentage of Medicaid recipients (*Sources: American Association of Health Plans managed care survey; HCFA*)
- Existing programs for kids: current state insurance program for low-income children; and 1115 waiver status (*Source: State Medicaid Office*)

SCHIP program (*Source: State SCHIP plan and amendments submitted to HCFA*)

- Options: Medicaid expansion, separate state child health program, or combination.
 - Eligibility: uninsured children not eligible for Medicaid with family income below 200% of FPL (or exceeding 200% poverty for states with high income eligibility standards in Medicaid); children with special health needs
 - Outreach and enrollment: outreach strategies and funding; simplified enrollment application and eligibility determination process; and minimum length of SCHIP status
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TABLE 2 *continued*

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- Benefits and cost-sharing: for Medicaid expansion: Medicaid benefits; for private insurance: the state's employee health plan, the Federal Employees Health Benefits Program, the HMO with the largest commercial enrollment in the state, or another benefit package that is approved by the secretary of the Department of Health and Human Services. For children below 150% of poverty, cost sharing (copayments, premiums, and deductibles) required to be consistent with that in the Medicaid program; for children above 150% of poverty, cost sharing not to exceed 5% of family's income

SCHIP process

Access

- SCHIP enrollment: number and percent of eligible children enrolled in SCHIP. (*Source:* SCHIP administrative data)
- Medicaid enrollment: number and percent of Medicaid eligible children enrolled in Medicaid. (*Sources:* State Medicaid office; HCFA)
- Insured children: number and percent of children insured (*Source:* Census Bureau, Current Population Survey)

Crowd-Out

- Private insurance for children: number and percent of employers offering health insurance coverage for dependent children (*Source:* survey of employers)
- SCHIP enrollees decline private insurance: number and percent of SCHIP enrollees declining employer-sponsored dependent health insurance coverage (*Source:* survey of SCHIP enrollees)

Utilization (*Source:* SCHIP enrollee utilization data)

- Preventive care: number and percent of SCHIP children who have up-to-date immunizations; number and percent of SCHIP children with at least one well-child visit/year; and number and percent of SCHIP children with at least one dental exam/year
- Acute care: number and percent of SCHIP enrollees with primary care physician as regular source of care; and number of primary care visits by SCHIP enrollees
- Specialist care: SCHIP children with special health needs receiving at least one subspecialty care/year; and number of specialist visits by SCHIP enrollees
- Emergency care: number of emergency-room visits per SCHIP child
- Hospitalization: number of hospitalizations per SCHIP child

Primary care quality (*Source:* survey of SCHIP enrollees)

- First-contact: Survey questions selected from PCAT: 1. When the office is *open* and your child gets sick, would someone from there see your child that same day? 2. When the office is *closed* on *Saturday* or *Sunday* and your child gets sick, would someone from there see your child the same day? 3. When the office is *closed* and your child gets sick *during the night*, would someone from there see or talk with you about your child that night? 4. When the office is closed, is there a phone number you can call when your child gets sick?
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TABLE 2 *continued*

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- Continuity:- Survey questions selected from PCAT: 1. When you take your child to the regular source of care, do you see the *same* doctor or nurse each time? 2. If you have a question, can you call and talk to *the doctor who knows your child best*? 3. Do you think your doctor *understands what you say or ask*? 4. Does your doctor know what problems are most important to your child? 5. Does your doctor know your child's complete medical history? 6. Does your doctor know about all the medications your child is taking? 7. Does your doctor know your child very well as a person? 8. Would you change your child's doctor if it was easy to do? 9. Would your doctor let you look at your child's medical record if you wanted to? 10. When you go to your child's doctor is your record always available? 11. Does your doctor call or send you the results of your child's lab tests? 12. If the doctor who knows your child best is not available and you have to see someone else, would your doctor get the information about that visit? 13. Would you recommend your child's doctor to a friend or relative? 14. Would you recommend your child's doctor to someone who does not speak English well?
 - Coordination: Survey questions selected from PCAT: 1. Does your child's doctor have to get approval from someone else to refer to a specialist? 2. Did your child's doctor know about these visits to the specialist or special service? 3. Did your child's doctor discuss with you different places you could have gone to get help with that problem? 4. Did someone at the doctor's office help you make the appointment for that visit? 5. After going to a specialist or special service, did your child's doctor talk with you and your child about what happened at the visit? 6. Does your child's doctor know what the results of that visit were? 7. Does your child's doctor seem interested in the quality of care your child gets from that specialist or special care?
 - Comprehensiveness: Survey questions selected from PCAT: 1. Can your child get the following services from his/her regular source of care: a) meeting with someone to talk about nutrition, b) immunizations or "shots," c) checking to see if your family is eligible for any social service programs or benefits, such as WIC Services (supplemental milk and food program), d) family planning or birth control, e) substance or drug abuse counseling or treatment, f) counseling for behavior or mental health problems, g) tests for lead poisoning, h) sewing up a cut that needs stitches, and i) counseling and testing for HIV/AIDS? 2. Has your child received the following services from his/her regular source of care: a) ways to keep your children healthy, such as nutritional foods, or getting enough sleep? b) ways to keep your children safe, like (i) teaching children under 6 to cross the street safely and using child safety seats in cars? OR (ii) teaching children 6–12 years age to stay away from guns and to use seatbelts and bicycle helmets? OR (iii) teaching children over 12 years old safe sex, saying no to drugs, and not drinking and driving? c) home safety, like using smoke detectors and storing medicines safely? d) ways to handle problems with your child's behavior? and e) changes in growth and behavior that you can expect at certain ages.
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TABLE 2 *continued*

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- Family/community orientation: Survey questions selected from PCAT: 1. Would anyone at the doctor's office ever make home visits? 2. Does your child's doctor know about all of the important health problems of your neighborhood? 3. How does your child's regular source of care get opinions and ideas from people that will help them provide better health care? Do they. . . a) do surveys of their patients to find out their experiences with the doctor and the doctor's office? b) do surveys in the community to find out about health problems, c) ask family members to be on the board of directors or advisory committee?

SCHIP outcome

Short-term

- Satisfaction: percent of SCHIP children and families satisfied with health care and cost; and percent of primary care physicians satisfied with providing care for SCHIP children and with administrative responsibilities related to SCHIP (*Source*: survey of SCHIP enrollees and providers)
- Morbidity: decline in prevalence of common childhood morbidity such as asthma, otitis media, and allergies. (*Source*: SCHIP enrollee administrative and utilization data)
- Preventable hospitalizations: ambulatory-care-sensitive hospitalizations per 10,000 SCHIP children: asthma, diabetes, epilepsy, dehydration, gastroenteritis, and pneumonia. (*Source*: SCHIP enrollee administrative and utilization data)
- Functional status: reduction in lost school days (*Source*: survey of SCHIP enrollees)
- Costs: SCHIP related costs to the government (federal and state) and to the families of enrollees (*Source*: SCHIP administrative data)

Long-term

- Birthweight: percent of infants of low birth weight; and percent of infants of very low birth weight. (*Source*: State Vital Statistics Survey; Centers for Disease Control and Prevention)
 - Mortality: infant mortality per 1,000 live births; neonatal mortality per 1,000 live births; post-neonatal mortality per 1,000 live births (*Sources*: State Vital Statistics Survey; CDC)
 - Quality of life: improvement in general health status and physical functioning measured by self-perceived physical and mental health status and functioning (*Source*: survey of SCHIP enrollees)
 - System integration/coordination: improvement in integration and coordination within and between health and social services delivery systems (*Source*: case study and focus groups)
-

(*continued*)

TABLE 2 *continued*

 Environment
Micro (*Source*: survey of SCHIP enrollees)

- Genetics: genetic predisposition, individual constitution, race/ethnicity, and gender
- Socioeconomic status: Individual socioeconomic status measures include income, education, and occupation
- Health behaviors: smoking, alcohol consumption, drug abuse, physical activity, seatbelt use, and diet
- Psychological: stress, locus of control, and social integration/isolation
- Social relationships: 1. social networks: number of contacts; 2. social support: type of support (emotional, and instrumental or practical)

Macro (*Source*: compiled based on state-published indicators)

- Community and workplace: community events, public parks, violent crime rates, risky workplace
 - Physical and living conditions: inadequate housing, undernutrition, inadequate clothing
 - Societal and economic: 1. political and economic system; 2. economic structure (% of families below poverty, median household income, and median net worth in lowest income quintile); 3. educational structure (% of college graduates, % of high school graduates, % with less than primary education, and average reading and math scores); and 4. occupational structure: (% of white collar employment, and % of unemployed)
-

Abbreviations: FPL, federal poverty level; PCAT, Primary Care Assessment Tool.

Administration's [HRSA] Uniform Data System on Federally Qualified Community Health Centers; the American Medical Association's Physician Master File on primary care physicians; HRSA's Area Resource File on state county-level indicators; the American Association of Health Plans' managed care survey; and the state's vital statistics survey on birthweight and mortality); organizational Web sites (e.g., HCFA's Web site on SCHIP funding; the National Conference of State Legislatures' Web site on political conditions); program offices' databases (e.g., that of the state Medicaid office on existing state programs for uninsured children and Medicaid enrollment); and other published sources (for macro-environmental indicators).

The federal government is the primary supplier of secondary data sources through the vehicles of the decennial census, the vital statistics system, and various disease surveillance systems. For example, the Centers for Disease Control and Prevention (CDC) has developed several

programs to monitor the health of children at the state level through regular surveys (Brown 1999). Topics covered include youth risk behaviors (Youth Risk Behavior Surveillance System), birth outcomes (Pregnancy Risk Assessment Monitoring System), and child immunization (National Immunization Survey). The National Health Interview Survey, which has been conducted annually since 1957, is the nation's largest survey of the general health of the U.S. population and includes a substantial amount of data on child health. Because of sample size limitations, however, annual estimates using a single year's worth of data can be produced for only the largest states. Estimates for many additional states can be produced by combining several years' worth of data. The Agency for Healthcare Research and Quality (formerly AHCPR) has created a measurement tool for consumers, the Consumer Assessment of Health Plans (CAHPS), that includes patient/family satisfaction queries in pediatric health access, communication by pediatric providers, preventive care, and a global evaluation of services. State hospital discharge data can be used to track hospitalizations for ambulatory-care-sensitive conditions, a marker for inadequate primary care (Friedman, Jee, Steiner, et al. 1999). The National Center for Health Statistics is developing the capacity to field telephone surveys tailored to the needs and interests of individual states at a reasonable price. When and if the State and Local Area Integrated Telephone Survey becomes fully operational, it may target particular population subgroups, such as families with children, and will allow states to contract for surveys of their populations.

Caution must be exercised in the choice and interpretation of existing data sources. As an example, an accurate count of the uninsured children is critical for measuring and monitoring the achievement of SCHIP. A number of sources are available that provide such information, including the Current Population Survey (CPS), the Survey of Income and Program Participation (SIPP), the National Health Interview Survey (NHIS), the National Medical Expenditure Panel Survey (NMEPS), and the Community Tracking Study (CTS) (Lewis, Ellwood, and Czajka 1998). These published estimates of the number of uninsured differ, depending on the design of the study and whether the data are adjusted (e.g., Ku and Bruen 1999). The NHIS has higher uninsured rates than the CPS because the NHIS measures the uninsured at a specific time, whereas the CPS provides an annual estimate. Adjusting for underreporting of Medicaid in the CPS would also result in different estimates. Thus, before any source is used, its validity and reliability need to be assessed and justified.

Primary data sources include program information of SCHIP (e.g., SCHIP Application and Amendments on SCHIP program options, eligibility, outreach, enrollment, benefits, and cost-sharing), the SCHIP Administrative and Patient Utilization Database (for information related to SCHIP enrollment, health care utilization, morbidity, preventable hospitalization, and costs), surveys (e.g., survey of employers and SCHIP enrollees to measure crowd-out effect; survey of SCHIP families to measure the quality of primary care experience, functional status, quality of life, as well as individual determinants of health outcomes such as biological factors, socioeconomic status, health behaviors, psychological factors, and social relationships; and survey of SCHIP families and providers (to measure satisfaction), case studies, and focus groups (to measure system integration/coordination).

States interested in conducting their own surveys on primary care quality as experienced by SCHIP enrollees can choose from a number of validated instruments. The Johns Hopkins Primary Care Assessment Tool—Child Edition (PCAT—CE) has 28 items and 5 primary care scales, including: first contact (accessibility), longitudinality, comprehensiveness (services available), services provided, and coordination (Cassady, Starfield, Hurtado, et al. 2000). The Components of Primary Care Index (CPCI) has 19 items and 4 primary care scales, including preference to see regular physicians, interpersonal communication, knowledge of patient, and coordination of care (Flocke 1997). The Primary Care Assessment Survey (PCAS) has 49 items and 12 primary care scales, including longitudinal continuity, visit-based continuity, financial access, organizational access, communication, knowledge of patient, interpersonal treatment, physical examinations, preventive counseling, integration, and trust (Safran, Kosinski, Tarlov, et al. 1998). The Foundation for Accountability has also developed instruments that assess the quality of primary care for children with chronic and disabling conditions and the developmental and behavioral services that young children and adolescents might receive.

State SCHIP Design and Evaluation Plans

Tables 3a and 3b display the basic features of SCHIP, based on the original plans submitted by states and territories to the Health Care Financing Administration. States that started SCHIP in 1997, the earliest

TABLE 3A
States' SCHIP involvement

State	Name of Plan ^a	Start date ^b	Potential federal allotment (year 1) ^c
<i>Medicaid expansion (N = 24)</i>			
Alaska	Children's Health Insurance Program	03/01/99	\$5,638,146
Arkansas	Child Health Insurance Program	09/01/98	\$45,878,527
DC	Healthy DC Kids	10/01/98	\$12,079,106
Hawaii	CHIP	01/03/001	\$8,990,060
Idaho	State Child Health Plan	10/01/98	\$15,883,789
Illinois	Medicaid expansion	01/05/98	\$122,560,067
Indiana	Hoosier Healthwise	10/01/97	\$70,560,557
Iowa	Medicaid expansion	07/01/98	\$32,486,807
Louisiana	LaCHIP	11/01/98	\$101,762,991
Maryland	HealthChoice Program	07/01/98	\$61,643,199
Minnesota	MinnesotaCare	09/30/98	\$28,403,279
Missouri	MC+ Program	07/01/98	\$51,686,405
Nebraska	Kids Connection	05/01/98	\$14,886,746
New Mexico	New Mexico Title XXI Plan	08/01/98	\$57,605,226
North Dakota	Healthy Steps Program	09/01/98	\$5,042,037
Ohio	CHIP and Healthy Start	01/01/98	\$115,764,112
Oklahoma	SoonerCare	12/01/98	\$81,182,913
Rhode Island	Medicaid RItE Care Program Expansion	05/01/97	\$10,689,168
South Carolina	Partners for Healthy Children	10/01/97	\$63,574,155
South Dakota	Children's Health Insurance Program (CHIP)	07/01/98	\$7,532,311
Tennessee	TennCare	10/01/97	\$66,170,086
Texas	Texas CHIP	07/01/98	\$561,475,805
West Virginia	Children's Health Insurance Program (CHIP)	07/01/98	\$23,612,812
Wisconsin	BadgerCare	07/01/98	\$38,475,831
<i>Separate state plan (N = 14)</i>			
Arizona	KidsCare	10/01/97	\$113,138,521
Colorado	Child Health Plan Plus (CHP+)	04/22/98	\$41,801,288

(continued)

TABLE 3A *continued*

State	Name of Plan ^a	Start date ^b	Potential federal allotment (year) ^c
Delaware	Delaware Healthy Children Program	10/01/98	\$8,055,533
Georgia	Georgia CHIP	09/01/98	\$124,692,179
Kansas	State Children's Health Insurance Program (SCHIP)	01/01/99	\$30,664,400
Montana	Children's Health Insurance Program (CHIP)	Fall, 98	\$9,786,177
Nevada	Nevada Check Up	06/01/98	\$30,414,882
New York	CHPlus	10/01/98	\$255,692,115
North carolina	Title XXI Program	10/01/98	\$79,528,899
Oregon	Medical look-alike CHIP & FHIAP	07/01/98	\$39,131,718
Pennsylvania	PaCHIP Free Program and Subsidized Program	10/01/97	\$117,486,712
Utah	Child Health Insurance Program (CHIP)	07/01/98	\$24,247,390
Vermont	Dr. Dinosaur Vermont Health Access Plan (VHAP)	07/01/98	\$3,536,354
Virginia	Children's Medical Security Insurance Plan	10/26/991	\$68,332,474
Washington	Washington Children's Health Insurance Program	01/01/00	\$46,673,207
Wyoming	CHIP One	04/01/99	\$7,713,620
<i>Combination (N = 11)</i>			
Alabama	AL-Kids	02/01/98	\$85,997,312
California	Medi-Cal & Healthy Families	02/01/98	\$854,864,484
Connecticut	Husky Plan	07/01/97	\$34,968,061
Florida	Florida Healthy Kids Program	01/01/98	\$270,284,180
Kentucky	Kentucky Children's Health Insurance Program (KCHIP)	07/01/98	\$49,945,361
Maine	Cub Care	08/01/98	\$12,490,186

(continued)

TABLE 3A *continued*

State	Name of Plan ^a	Start date ^b	Potential federal allotment (year) ^c
Massachusetts	MassHealth	03/01/98	\$42,847,242
Mississippi	Children's Health Insurance Program (CHIP)	01/01/99	\$56,031,502
Michigan	Michild Program	05/01/98	\$91,609,050
New Hampshire	Healthy Kids-GOLD	05/01/99	\$11,461,349
New Jersey	NJ KidCare Plan A,B,C	02/01/98	\$88,440,626
TOTAL			\$4,203,398,957

Sources: ^aStates' SCHIP proposals;

^bImplementation of the State Children's Health Insurance Program Title XXI, National Governors' Association Center for Best Practices (www.nga.org/MCH/Implementation.htm);

^c"Reserved Allotments to States for Fiscal Year 1998," National Governors' Association Center for Best Practices (www.nga.org/MCH/Implementation.htm).

eligible year, include Rhode Island, Connecticut, Pennsylvania, Arizona, Tennessee, South Carolina, and Indiana. Most states took at least one year to plan their SCHIP, which meant they launched their programs in late 1998 or early 1999. As expected, many states initially implemented SCHIP through an expanded Medicaid program, perhaps as a "placeholder," which is relatively simple to design and implement. It is likely that they will go back and enhance their programs or create new ones over time. Although more than \$4 billion in federal money was allotted for SCHIP during the first year, states proposed to spend less than an average of 15 percent of the total allotment, presumably because they had difficulty in identifying state matching funds and encountered administrative challenges in outreach and enrollment. Among the currently uninsured children that states have designated for coverage, most are below 200 percent of the federal FPL. A few states (Missouri, Vermont, New Hampshire, Connecticut, and Florida) proposed to cover children whose family income is up to 300 percent above the FPL.

As we noted above, almost all states have since submitted amendments, so the features presented may not exactly represent the states' current SCHIP. For example, California may revisit a previously failed proposal to raise its CHIP in order to cover children in families between 200 and 250 percent of the FPL. Mississippi has expanded its CHIP to

TABLE 3B
States' SCHIP Involvement

State	Federal budget (year 1) ^d	State budget (year 1) ^d	Targeted population ^e
<i>Medicaid expansion (N = 24)</i>			
Alaska	n/a	\$1,900,000	0–18, 200% FPL
Arkansas	\$3,897,224	\$910,045	born btw 9/30/82–10/1/83, below 100%
DC	\$6,579,183	\$1,748,897	0–18, 200%
Hawaii	\$538,005	\$289,695	0–18, 133%–200%
Idaho	\$5,516,600	\$1,466,400	0–18, 160%
Illinois	\$18,455,269	\$9,937,452	0–18, 133% (200% preg woman and inf)
Indiana	\$10,904,092	\$4,054,992	14–18, 100%, Part 2: 0–18, 150%
Iowa	\$9,777,700 ^f	\$3,323,868 ^f	6–14, 100%–133%, 15–18, 37%–133%
Louisiana	\$8,139,338	n/a	6–18, 133%
Maryland	\$15,600,00 ^f	\$8,400,000 ^f	0–18, 200%
Minnesota	\$17,679 ^f	\$8,906 ^f	0–1, 275%–280%; Phase 2: children below 275%
Missouri	\$63,118,394	\$24,339,544	0–18, 300%
Nebraska	\$12,865,000 ^f	n/a	Phase 1: 15–18, 100%, Phase 2: 0–18, 185%
New Mexico	\$272,963	\$64,737	0–18, 186%–235%
North Dakota	\$256,982	\$68,641	0–18, 100%
Ohio	\$8,142,690	\$4,615,614	0–6, 133%–150%; 7–14, 100%–150%; 15–18, 33%–150%
Oklahoma	\$11,151,933 ^f	\$3,766,456 ^f	0–17, 185% (init. 0–14)
Rhode Island	\$2,767,500	\$907,186	0–18, 250%
South Carolina	\$24,656,275	\$3,476,958	0–18, 150%
South Dakota	\$1,246,710	\$363,402	6–18, 100%–133%

(continued)

TABLE 3B *continued*

State	Federal budget (year 1) ^d	State budget (year 1) ^d	Targeted population ^e
Tennessee	\$52,881,252	\$18,243,499	Phase 1: 0–17, Phase 2: 0–18, 200%
Texas	\$77,451,170 ^f	\$27,642,186 ^f	14–18, 100%, Phase 2: n/a
West Virginia	\$616,654	\$139,327	1–5, 150%
Wisconsin	\$1,084,672	\$438,958	15–18, 100%; 0–18, 185%, family 200%
<i>Separate state plan (N = 14)</i>			
Arizona	\$29,149,000 ^f	\$9,251,100 ^f	0–18, 150%; 175% (FY99); 200%(FY00)
Colorado	\$4,028,645	\$2,036,678	0–17, 185%; others can buy in
Delaware	\$8,300,000	\$4,500,000	0–18, 200%
Georgia	\$47,100,658 ^f	\$17,785,219 ^f	0–18, 100%
Kansas	\$30,809,906	\$12,100,827	0–18, 200%
Montana	\$901,630 ^f	\$278,148 ^f	0–18, 150%
Nevada	\$7,875,000	\$3,057,000	0–18, 200%
New York	n/a	\$109,000,000 ^f	0–18, 222%
North Carolina	\$44,822,664 ^f	\$15,617,822 ^f	0–18, 200%
Oregon	\$1,476,891	\$563,295	0–5, 133%–170%; 6–18, 100%–170% assets also
Pennsylvania	\$50,161,200	\$24,295,086	1–16, 185%; 0–5, 185%–235%
Utah	\$3,784,635 ^f	\$1,857,716 ^f	0–18, 200%
Vermont	\$348,794	\$125,588	0–17, 300%; 18+, 150%–185%
Virginia	\$437,355	\$224,902	0–18, 150%
Washington ^g	\$2,234,609	\$1,236,860	0–18, 200%–250%
Wyoming ^g	\$434,762	\$343,138	6–16, 101%–133%; 17–18, 133%
<i>Combination (N = 11)</i>			
Alabama	\$4,822,534	\$1,319,257	Phase 1 (Medicaid): 0–18, 100%; phase 2 (state plan): 0–18 100%–200%

California	\$50,311,082	\$17,176,203	Medicaid expanded to 14–18, 85%–100%; state plan: 0–1, 200%–250%; 1–18, 100%–200%
Connecticut	n/a	\$10,316,859	Pt A (Medicaid): 0–18, 185%; Pt B (state plan): 0–18, 185%–300%
Florida	\$26,620,000 ^f	\$11,990,000 ^f	Medicaid: 0–1, 185%; 1–6, 133%; 6–18, 100%; state plan: no limit
Kentucky	\$50,182,500	\$13,940,000	Medicaid: 0–18, 100%; state plan: 0–18, 100%–200%
Maine	\$633,375	\$197,499	Medicaid: 0–1, 185%, 1–18, 150%; state plan: 1–18, 150%–185%
Massachusetts	\$20,300,000	\$10,900,000	Medicaid: 0–18, 150%; state plan: 0–18, 150%–200%
Mississippi ^h	\$20,414,214 ^f	\$3,900,000 ^f	Phase 1: 0–18, 100%; Phase 2: 0–18, 133%
Michigan ^h	\$40,921,400	\$13,295,400	0–18, 200%
New Hampshire	\$1,326,483	\$714,260	Phase 1 & 2- Medicaid 0–1, 300%; 1–18, 18%; state plan 1–18, 185%–300%
New Jersey	\$25,813,721	\$9,034,802	Pt A (Medicaid): 0–18, 133%; state plan: B: 0–18, 133%–150%; C: 0–18, 150%–200%
TOTAL	\$509,492,069	\$198,343,001	

Sources. ^dNational Governors' Association Implementation matrix and states' SCHIP plans;

^eNational Governors' Association (www.nga.org/MCH/annual/);

^fAlaska, Iowa, Utah: funding is for State Fiscal Year (SFY) 99; Texas, North Carolina: figures are for FY 98–99; Arizona, Mississippi: figures are for FY 99;

Arkansas: estimates include last quarter of Federal Fiscal Year (FFY) 98 plus FFY 99; Louisiana, Nebraska—figure is total program costs, no breakdown given; Georgia—figures are for FFY 99; Montana—figures are for SFY 98–99; New York—figures are for 1997 calendar year; Florida—figures are for FY 97–98.

^gFrom www.nga.org/MCH/annual/;

^hSCHIP proposals for these states did not distinguish between Medicaid and state plan in discussion of eligibility levels.

cover children up to age 20 in families up to 230 percent of the FPL. New Mexico will extend coverage to children from families earning up to 235 percent of the FPL. Wisconsin, Vermont, Massachusetts, Rhode Island, and Missouri have prepared to extend coverage to parents of qualifying children (Alpha Center 1999).

States' Strategic Objectives for SCHIP

Table 4 organizes states' strategic objectives for their SCHIP plans along the structure-process-outcome continuum presented in the evaluation framework (see figure 1). The table was constructed on information from the applications, specifically section 9 (Strategic Objectives and Performance Goals for the Plan Administration). To reduce the number of categories, we have grouped similar content areas under these headings as well (a list of the related content areas is available upon request).

The most common strategic objective of states is to reduce the number and proportion of children who are uninsured (46 states including Washington, D.C.). Other frequently cited objectives include improving the quality of care and health status (29 states), improving access to care (first-contact accessibility) (27 states), performing outreach (19 states), ensuring preventive care (13 states), increasing the number of children with a regular source of care (13 states), enhancing SCHIP program administration (11 states), improving coordination (10 states), and preventing "crowd-out" (9 states).

Less frequently cited objectives are improving health care delivery system (8 states), improving enrollment (7 states), reducing financial barriers and cost sharing (6 states), providing comprehensive services (5 states), improving access for children with special needs (5 states), improving the eligibility process (4 states), reducing preventable hospitalization and emergency-room use (4 states), improving continuity of care (3 states), and improving patient/provider satisfaction (3 states). States that have devised a combination plan have, on average, adopted more strategic objectives than states relying solely on either the Medicaid expansion or the private child plan option.

The concentration of state objectives in a few key areas and the scarcity of other objectives may be due to a state plan template developed by

TABLE 4
Strategic Objective of SCHIP Plans

States ^a	Structure						Process									Outcome			Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
<i>Medicaid expansion (N = 23)</i>																			
Alaska			X		X		X					X			X				5
Arkansas							X					X						X	3
DC		X					X									X			3
Hawaii				X	X		X	X				X	X	X				X	8
Idaho		X										X	X	X	X			X	6
Illinois				X			X					X						X	4
Indiana		X					X			X						X		X	5
Iowa									X		X	X					X	X	4
Louisiana				X			X	X	X	X		X					X		7
Maryland				X			X					X							3
Minnesota							X												1
Missouri							X												1
Nebraska		X					X		X		X								4
New Mexico		X					X				X							X	4
North Dakota							X	X			X				X			X	5
Oklahoma							X												1
Rhode Island	X			X			X				X	X	X					X	7
South Carolina							X	X	X	X	X								5
South Dakota		X					X	X			X							X	5

(continued)

TABLE 4 *continued*

States ^a	Structure						Process									Outcome			Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Tennessee				X	X														2
Texas		X					X		X			X						X	5
West Virginia	X			X			X					X						X	5
Wisconsin		X					X					X						X	4
<i>Separate state plan (N = 16)</i>																			
Arizona							X	X		X			X					X	5
Colorado	X					X	X	X					X					X	6
Delaware							X					X							2
Georgia							X		X	X		X					X		5
Kansas							X	X	X			X						X	5
Montana						X	X	X	X				X					X	6
Nevada	X						X												2
New York				X		X	X		X	X		X							6
North Carolina			X	X	X		X		X										5
Oregon		X		X			X		X									X	5
Pennsylvania				X			X		X		X								4
Utah							X		X			X			X			X	5
Vermont	X						X					X	X					X	5
Virginia				X			X											X	3
Washington							X												1
Wyoming				X	X		X						X						4

<i>Combination (N = 11)</i>																		
Alabama		X		X			X			X							X	5
California	X			X	X	X		X			X							6
Connecticut							X				X	X		X				4
Florida	X					X	X					X					X	6
Kentucky						X	X	X		X								5
Massachusetts			X				X	X				X	X					6
Mississippi		X		X			X			X								5
Maine				X			X			X								4
Michigan							X	X										2
New Hampshire			X	X	X		X		X									6
New Jersey	X			X			X		X			X				X		7
TOTAL	8	11	4	19	7	6	46	9	13	13	5	27	10	3	5	3	4	29

1. Improve delivery system; 2. Enhance SCHIP program administration; 3. Improve eligibility; 4. Perform outreach; 5. Improve enrollment; 6. Reduce financial barriers (cost-sharing) to health care; 7. Reduce %/number of uninsured children; 8. Prevent "crowd out"/increase private coverage; 9. Ensure preventive care; 10. Increase % or number of children with regular source of care; 11. Improve access for those with special needs; 12. Improve first-contact (accessibility); 13. Improve coordination; 14. Improve continuity; 15. Provide comprehensiveness; 16. Improve patient/provider satisfaction; 17. Reduce preventable hospitalization/ER; 18. Improve quality care and health status.

^aOhio—n/a.

^bFor infants only.

Source: States' SCHIP applications, Section 9.1.

HCFA, which identified a few key performance objectives for states. It is especially understandable that states attempting to develop a brand-new program and launching it quickly would not do more for the purposes of securing federal approval and funding than the minimum specified by Congress and HCFA; nor would they want to commit themselves to greater oversight in the future based on more detailed evaluation plans. To carry out some potentially important objectives, state officials may not currently have the data and analytical support they need to evaluate program performance confidently. Nonetheless, the scope and variation in state objectives and evaluation plans are important to the degree that these baseline commitments to the federal government fail to incorporate key factors affecting children's health outcomes.

Overall, states' SCHIP plans tend to stress program enrollment and access to services but fail to stress the type and quality of services children receive once they are enrolled in the program. A largely neglected area is the quality of primary care. Only three states cited assuring continuity of care; five states listed improving comprehensive services; and ten states included improving coordination of care in their strategic objectives. Although a large majority of states emphasized program outreach and enrollment, insuring children alone, either through managed-care contracting or other arrangements, does not guarantee that quality care is provided. The extent to which access is associated with better health depends on the kinds and quality of services received (Sox, Swartz, Burstin, et al. 1998; Starfield 1998).

Thus, we believe an important objective of SCHIP for policy makers who are concerned about ultimate health outcomes for this low-income population should be to assure high-quality primary care. This requires access to a regular, first-contact provider that is person focused, not disease oriented; establishes continuity in provider-patient relations; and coordinates care provided elsewhere or by another provider (Starfield 1998; Starfield and Oliver 2000).

Another neglected area is the supply of dedicated health professionals who provide services to vulnerable populations. Among these professionals, often termed safety-net providers, are private pediatricians or family practitioners, school-based clinics, public health clinics, community and migrant health clinics, and hospital emergency departments. Including them in the design and financing of services is critical to building a seamless system of primary care for low-income children.

A critical weakness in states' SCHIP plans is data specification. Most states had not studied thoroughly how they would measure program achievements against their SCHIP objectives, an oversight that is reflected by their use of general proclamations rather than specific plans.

States' Performance Measures for SCHIP

Table 5 summarizes states' performance measures of their SCHIP plans based on information provided from section 9.3 of the SCHIP application template. It should be noted that not all states provided measures of their strategic objectives and that states may measure the performance of an activity that they did not list as a strategic objective. The majority of the states have focused their performance measures on reducing the percent of children who are uninsured (48 states), increasing the percent of Medicaid-eligible children enrolled in Medicaid (47 states), increasing the percent of children with a usual source of care (35 states), and tracking progress made on health problems (32 states).

That most states were concerned about their Medicaid enrollment is due to the 1997 SCHIP legislation, which requires states to enroll Medicaid eligibles in current Medicaid programs rather than in SCHIP. Logically, the same outreach activities and enrollment procedures that states develop for SCHIP should also identify some of the many families that are eligible for, but not enrolled in, Medicaid. Although much more powerful obstacles to Medicaid enrollment have emerged because of its historical political and administrative ties to welfare assistance, state officials believed that the implementation of SCHIP would, in fact, increase the Medicaid population. As a result, many states used Medicaid enrollment as a measure of SCHIP achievement. Indeed, the formal and informal connections between Medicaid and SCHIP reveal the need to plan and analyze these programs together so that they become complementary pieces of a more integrated, continuous system of coverage for the low-income population.

An evaluation of the effect of SCHIP on Medicaid enrollment must take into account the interactions of welfare and other policies. Although the welfare-to-work reform, known as the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, has reduced the numbers of people receiving cash assistance, it has been accompanied by unintended reductions in Medicaid enrollment across the states. The

Wisconsin						X	X	X	X	X	X	X	X	
<i>Separate state plan (N = 16)</i>														
Arizona	X	X	X	X			X	X	X		X		X	X
Colorado	X	X		X	X								X	
Delaware		X	X	X			X	X	X			X		X
Georgia	X	X	X	X			X	X	X	X	X	X	X	
Kansas	X	X	X	X			X	X	X	X	X	X		X
Montana	X	X					X	X	X	X				X
Nevada	X	X			X									
New York	X	X	X	X	X									
North Carolina	X	X	X	X	X									
Oregon	X	X		X	X									
Pennsylvania	X	X		X		X	X	X	X	X	X		X	
Utah	X	X	X		X									
Vermont	X	X	X	X										X
Virginia	X	X	X			X	X	X	X					
Washington	X	X					X	X	X	X	X			
Wyoming	X	X		X										
<i>Combination (N = 11)</i>														
Alabama	X	X	X		X ²		X ¹	X ¹	X ¹	X ¹	X ¹			
California	X	X			X									X
Connecticut	X	X	X		X	X								
Florida	X	X	X	X		X	X	X	X	X	X	X	X	X
Kentucky	X	X	X	X	X									
Massachusetts	X	X	X	X	X									
Mississippi	X	X	X	X	X									

(continued)

TABLE 5 *continued*

States ^a	1	2	3	4	5	6	7	7.1	7.2	7.3	7.4	7.5	7.6	7.7	8
Maine	X	X	X	X	X										
Michigan	X	X		X	X										
New Hampshire	X	X	X	X	X										X
New Jersey	X	X	X	X				X	X	X	X	X	X		X
TOTAL	47	48	35	32	19	13	25	25	23	20	18	12	14	15	7

1. Increase % Medicaid-eligible children enrolled in Medicaid; 2. Reduce % of children uninsured; 3. Increase % of children with usual source of care; 4. Identify progress on health problems; 5. Use HEDIS set; 6. Use other measurement set; 7. Use selected HEDIS measures; 7.1 Immunization; 7.2 Well-child care; 7.3 Adolescent well visits; 7.4 Satisfaction with care; 7.5 Mental health; 7.6 Dental care; 7.7 Other; 8. Performance measures for special targeted populations.

^aSouth Carolina—n/a;

^bOnly for Phase 1;

^cOnly for Phase 2.

Source: States' SCHIP applications, section 9.3 (9.3.1–9.3.8).

drop in Medicaid enrollment can be partly attributed to increased administrative complexity, confusion about their eligibility in the minds of individuals who may still be eligible for Medicaid despite termination of their cash assistance, and mixed messages received by both caseworkers and potential beneficiaries (Ellwood and Ku 1998; Hudman 2000; Garrett and Holohan 2000). Immigration policies also constituted a significant policy dilemma that affected enrollment of Medicaid in southern and western states, which have a large, eligible Hispanic population. Because more than one-third of Hispanic Americans were born outside the United States—compared with 3 percent of non-Hispanic Whites (Bureau of the Census 1995)—many Hispanic families may not qualify for Medicaid (Rosenbaum and Darnell 1997). This represents a greater problem for immigrants from Central America (79 percent foreign born) and South America (75 percent foreign born) than for those from Spain (17 percent foreign born) or Mexico (33 percent foreign born). Without taking into account this policy interaction, states may be surprised to encounter a less-than-expected increase in their Medicaid population.

Nineteen states plan to use the Health Plan Employer Data and Information Set (HEDIS) measurement set that pertains to children and adolescents. Three of these states will also use other child-appropriate measurement sets. Twenty-five states prefer using a subset of HEDIS measures: immunization (25 states), well-child care (23 states), adolescent well visits (20 states), satisfaction with care (18 states), mental health (12 states), dental care (14 states), and other (15 states). Eight of these states will also use other child-appropriate measurement set.

The National Committee for Quality Assurance (NCQA) has created HEDIS 3.0/1988 to measure quality performance in a multitude of areas, including preventive, maternal, acute, chronic, and mental health care. It covers the Medicaid population and includes outcome-based measures such as otitis media and asthma treatment for children, adolescent health-risk counseling, and smoking cessation. A potential concern in applying HEDIS to SCHIP is that, of the 104 reporting and testing set measures indicating effectiveness of care, access, satisfaction, health plan structure, use of services, cost of care, information for health care choices, and health plan descriptive information, only 13 are child-specific measures of quality (Association of State and Territorial Health Officials 1999). Small sample size is another major limitation.

Of the five states not using HEDIS measures, Nebraska and Tennessee will rely on other child-appropriate measurement sets. Only Alaska, Indiana, and Wyoming have not indicated which child-measurement set they plan to use. Seven states will use performance measures for special targeted populations.

Conclusion

Although efforts to establish universal health insurance coverage faltered in the last decade, federal and state policy makers have significantly expanded health insurance for low-income children. Provisions in the Omnibus Budget Reconciliation Acts of 1989 and 1990 require states to extend Medicaid coverage to all children aged six to eighteen living in poverty by the year 2002. The State Children's Health Insurance Program further extends eligibility for insurance coverage. States may cover uninsured children, not eligible for Medicaid, with family incomes up to 200 percent of poverty or 50 percentage points higher than their current eligibility standards.

The overall design of SCHIP, with its great flexibility for the states, provides both the benefits of innovation and the risks of inconsistency and inequity. Whereas American ideology hails states as "laboratories of democracy," in reality few of the best programs are readily adopted across the states or by the federal government (Oliver and Paul-Shaheen 1997). Ultimately, advocates of children's health can best guarantee positive results from SCHIP by ensuring that state program evaluation and federal oversight proceed with some basic standards and assumptions.

This article builds on the initial designs, objectives, and evaluation plans proposed by states for the SCHIP. It expands both the context for program evaluation and the type of outcomes that policy makers, program administrators, health care providers, and children's advocates should consider in assessing state-by-state performance. The proposed framework for evaluation is conceptual rather than fully operational; and it is focused on understanding differences in state programs as a starting point for evaluation because variations across states may prove important in the overall impact of SCHIP. It aims to understand the program's performance in light of its social and political context—in particular, the scale of children's economic and health needs, the size and visibility of the program, its political support, and

its connection to other state and federal policies—as well as its technical design.

We hope such a framework can assist federal and state leaders in discussions of SCHIP performance and in developing a consistent approach for SCHIP evaluation. Once agreed upon, the framework could serve as the conceptual basis to collect and report standardized measures so that comparisons can be made both within and across states. The SCHIP initiative is widely hailed as a breakthrough in covering the nation's underserved populations after the failed attempt of the Clinton health reform. It provides an excellent opportunity, at least over time, to design a health care delivery system for improving the quality of care and children's health outcomes. A broader perspective and stronger goals are essential to achieving that vision for SCHIP.

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