

Integrating Measures of Early Childhood Health and Development into State Title V Maternal and Child Health Services Block Grant Plans

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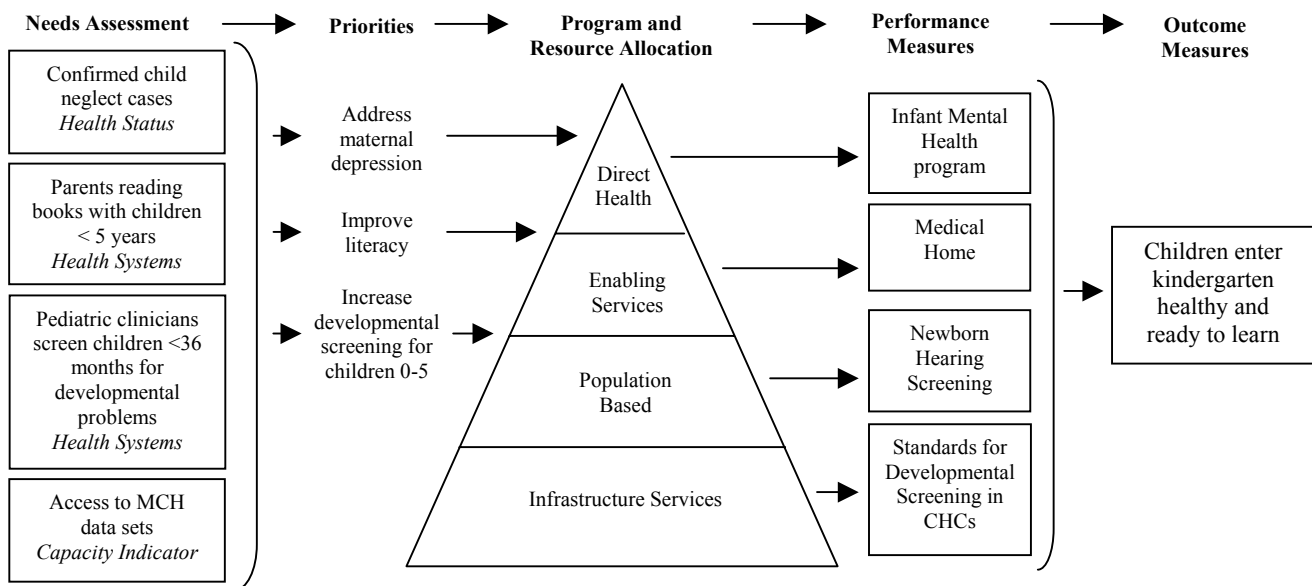
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Under the federal Title V Maternal and Child Health (MCH) Block Grant, state MCH programs are charged with improving the health of all children in the United States. With a renewed emphasis at the national level on the importance of early childhood development, state Title V programs have a unique opportunity to contribute to our understanding of the issues and needs facing young children and their families. Indeed, state MCH programs have several immediate opportunities to provide leadership in assessing early childhood health and development needs and services.

First, state MCH programs have been awarded special federal discretionary grants to collaborate with partners in developing Statewide Early Childhood Comprehensive Systems (SECCS). Second, the federal Title V MCH statute requires all states to conduct comprehensive needs assessments every five years—the next assessment and plan are due July, 2005. These assessments must address target populations including pregnant women and mothers, children and youth, and children and youth with special health care needs. The comprehensive assessments in turn drive development of state MCH plans and performance measures. Both the SECCS grants and the Title V MCH assessment process (see Figure 1) provide state MCH programs with the charge and the vehicles to develop strategies that set important baselines for measuring performance and quality of state service systems over time. In Figure 1 examples of measures specific to early childhood development are used to illustrate these planning steps.

Figure 1. Title V Measurement System: Using Examples of Early Childhood Health and Development Measures



This brief provides information about measures of preventive health and developmental services for children from birth to age five, and how they can be integrated into MCH plans.ⁱ The brief also is intended to assist policy makers, program managers, and providers concerned with early childhood health and development learn about these opportunities (e.g., Title V planning, five-year needs assessment, performance measurement) with state MCH programs. Federal, state, and local partnerships are essential to monitor and improve the quality of the developmental services system. MCH has much to contribute, given its mandates for assessment and performance measurement, as well as its resources for systems improvements. This brief supports state MCH programs and their partners in enhancing quality measurement and improvement for early childhood health and developmental services.

Early Childhood—A Critical Period of Development

Early childhood is a critical time period for establishing the solid foundations essential for children’s long-term health, well-being, and academic success. Early environments, nurturing relationships (particularly with families and primary caregivers), human interaction, and early experiences are among the key factors that play a critical role in a child’s development.ⁱⁱ Poverty, family stress and dysfunction, substance use exposure and, poor nutrition can place young children at risk of adverse developmental outcomes. Research demonstrates that children who begin their schooling academically disadvantaged do not subsequently catch up to their peers.ⁱⁱⁱ Fortunately, early investments in young children and their families can significantly impact child health and well-being—limiting exposure to risk and promoting protective factors—and reduce the need for more costly interventions later in life.^{iv}

Widespread recognition of the importance of early childhood is evident in the scope and diversity of initiatives underway across the country. These initiatives involve multiple sectors including health, education, child care, mental health, and social services. Appendix A highlights the core components of selected national early childhood initiatives and provides links to web sites for additional information about each.

Components of Early Childhood Development Services

- Developmental surveillance, screening and assessment;
- Developmentally-based health promotion and education;
- Developmentally based interventions; and
- Care coordination.^v

MCH public health programs and private sector health systems and providers have a unique opportunity to promote early childhood development. During a child's first five years, nearly all families come into contact with the health system—perhaps more consistently than any other system—through activities such as well-child visits and participation in public health programs targeted to new parents.

However, the opportunities presented by frequent contact of children and their parents with health systems often are not realized as child development services are not implemented consistently or comprehensively in child health care practices. Time limitations, lack of provider training to screen for and recognize developmental problems, and poor reimbursement rates for services contribute to inadequate integration of child development services in health care settings.^{vi} State MCH programs can address such issues by strategies that include:

- Promoting high quality developmental screening using available, evidence-based screening tools,
- Supporting programs in areas including well child services, home visiting, parent education and family support, and
- Collaborating to develop coordinated systems of early childhood care that blend services from health, early intervention, education, social services and other community supports for children and families.

These MCH roles are recognized and bolstered by the federal SECCS collaboration grants. The SECCS system-building initiative focuses specifically on components of access to a medical home, identification and early intervention with children at risk for mental health problems, early care and education, parenting education, and family support.

Strategies for Measuring Early Childhood Health and Development

Early childhood measurement can encompass assessment of young children's health and developmental status and service needs, as well as availability, utilization and quality of services, programs, providers and systems. A range of measurement approaches are available that can be used with Title V needs assessments in order to identify areas for action and investment to improve child health and development. Two such approaches—indicators, and performance and quality measurement—are discussed below. Each discussion 1) defines terms and clarifies uses, 2) provides examples and notes methodological considerations, and 3) identifies resources for additional information.

Use of Indicators

Indicators are statistical markers used to track trends over time. Indicators usually are presented as rates, proportions, or sentinel events (e.g., number of children entering kindergarten with previously unrecognized developmental delays) to allow comparisons to be made. Title V outcome measures (Figure 1), for example, are indicators. Community, state, and national health indicators are especially useful for informing the public about key outcomes of interest, and for monitoring systems performance and influencing policy development. Incorporating indicators with broad public policy interest such as the number and percent of children age 5 and under with no health insurance into Title V needs assessments can be a valuable tool for engaging in partnerships. Because indicators are only markers and do not address the complexity of factors influencing outcomes, they are best not employed as tools for evaluation. While indicators communicate *what* generally is happening, they do not reveal specifically *how* or *why* it is happening (<http://12.109.133.224/Files/SocialIndicatorsRB.pdf>).

The use of indicators is dependent on availability of sound data, or resources for new data collection efforts. Because indicator data must be consistent over time and across sources, states' choices for indicators are sometimes limited. Existing *early childhood health* indicators primarily reflect measures of health status that have been derived from vital statistics, newborn screening registries, and annually fielded national surveys. While these measures are universally available, they often are too general to be instructive for program planning or monitoring.

Where data specific to *developmental services* exist currently, they are collected largely at the national level. Sample sizes in these national level data sets are often insufficient for state estimates. This picture will improve substantially when state level data from the MCHB sponsored National Child Health Survey (NCHS) become available in early 2005. These data will include parent reports of their child's health and developmental risk status, mental health visits, having a medical home, and their pediatrician's assessment and counseling practices in regard to behavior and development (see Table 1 in Appendix B). These data will be valuable to states for establishing baselines for the Title V 2005 and/or subsequent needs assessment processes.

A number of other data sets can be used as sources of indicators for state Title V program needs assessments (see text box below). Data from these surveys include broad measures of health status, growth, development, socioeconomic data, and health services utilization. They are particularly useful for providing contextual material for states' needs assessments. Many of these national indicators as well as data drawn from other sources are being published in chartbook form by The Commonwealth Fund. "Quality of Health Care for Children and Adolescents: A Chartbook" was published in April 2004. The "Chartbook of Early Child Development in Social Context" will be published by Child Trends and the Center for Child Health Research later this year.

Selected Data Resources on Early Child Development and Health

National Surveys

- National Household Education Survey (NHES)
- Early Childhood Longitudinal Studies (ECLS-K and ECLS-B)
- Panel Study of Income Dynamics – Child Development Supplement
- National Health Interview Survey (NHIS)
- National Survey of Early Child Health (NSECH)
- National Health and Nutrition Examination Survey (NHANES)

Surveys with State-Level Data

- National Survey of Children with Special Health Care Needs (CSHCN)
- National Survey of Children's Health (NCHS, available early 2005)
- Pregnancy Risk Assessment Monitoring System (PRAMS)
- National Survey of American Families (NSAF, 1997, 1999) (private)

Community-Level Data

- American Community Survey (Limited)
- Vital Statistics Birth and Death Data

Source: Brett Brown, Child Trends, February 28, 2004.

Use of Performance and Quality Measurement

In general, performance measurement involves assessment of specific programs or organizations that are accountable for delivering specified services.

Contrasted with indicators, performance measures have more utility for evaluation purposes. Performance measures often focus on capacity or process data specific to an agency program or service (e.g., number of services provided). An example of a performance measure might be “proportion of children enrolled in a program, a clinic, or a practice with completed referrals for developmental assessment.”

Consistent with the Government Performance and Results Act (GPRA), state Title V programs are required to report on performance measures. These include 18 national measures as well as state-determined measures. Title V performance measures are viewed as shorter term, intermediate precursors for outcome measures of maternal and child health status.^{vii} While these performance measures are intended to reflect the impact of Title V activities, as with indicators, significant factors outside the control of Title V programs influence system performance.

Although none of the national Title V performance measures address early childhood development, some states have chosen to report on measures of screening. For example, *Iowa has a measure for the percent of counties that report screening and referrals for behavioral problems in young children.* Several other states report on screening ratios, a measure used in Medicaid to assess periodicity but not content of routine preventive visits.

Measures of service process (what is provided and how it is provided) are particularly useful in examining performance in terms of quality of care. Until recently, most available validated measures of quality in the early childhood arena focused on physical health and excluded the broader spectrum of social-emotional health, family supports, and parenting concerns. While approaches and tools for measuring quality of early childhood developmental services are still emerging, significant forward steps have been made in recent years.^{viii,ix,x} For example, noteworthy efforts are being advanced by the Child and Adolescent Health Measurement Initiative (CAHMI, <http://www.facct.org>). The Promoting Healthy Development Survey (PHDS), which includes seven areas for quality measurement for health plans and states, has been incorporated in recent national surveys.^{xi} At the state level such measures could be used to assess the need for and focus of statewide quality improvement initiatives, as well as to target assistance to specific health plans or public programs (see Appendix B).

PHDS Measures of Health Plan Quality

- Anticipatory guidance from providers
- Anticipatory guidance information from health plan
- Follow-up for at-risk children
- Assessment of psychosocial well-being and safety
- Assessment of smoking, drug and alcohol use in the family
- Family-centered care
- Helpfulness and effect of provider information

Source: Bethell C, Peck C, Schor E. Assessing health system provision of well-child care: The Promoting Healthy Development Survey. *Pediatrics* 107(5), May 2001: pp. 1084-94.

Using measures of health and development in needs assessment and planning — whether to be used as indicators, program or system performance, or health care quality measures—involves the following important considerations:

- Keep in mind the intended use(s) and audience(s).
- Identify costs and available resources.
- Consult the research literature, with experts who are familiar with the data sources and their manipulation, and with stakeholders, i.e., key advocates, pediatric providers, administrators of related state agencies.
- Identify or develop a conceptual framework to guide measurement efforts.

Capitalizing on Available Data and Data Collection Tools

State Title V programs may elect to implement strategies for early childhood measurement ranging from those activities that used existing sources of data or may undertake new data collection. An example of new data collection might be to field a state-level comprehensive household survey—for example, a state survey patterned after the National Survey of Early Childhood Health. Strategies that are less costly and less intensive but which fill knowledge gaps specific to developmental services also exist. These include:

- Joining with other state agencies and partners to exchange data, share resources for data collection or analysis, or monitor a broad set of early childhood indicators,

- Constructing an abbreviated survey and/or survey sampling methodology,
- Adding selected items or question sets to other surveys, such as annual household health surveys that are conducted in a number of states,
- Identifying information items where there is available national comparison information against which to benchmark state-specific data,
- Drawing on information provided in program/administrative data sets.

A state Title V program also can draw on available frameworks related to early childhood health and development for organizing their needs assessment data collection. For example, the table below illustrates how four constructs of developmental services^{xii} can be used to guide decisions about what specific information to include in new data collection or analysis efforts.

Table 1. Examples of Uses of a Developmental Services Typology to Guide Data Efforts

	Developmental surveillance, screening, & assessment	Developmentally-based health promotion & education	Developmentally-based interventions	Care Coordination
Individual Child/Family	[Child’s doctor/provider] tells you that they are carrying out a “developmental assessment”? <i>PHDS, NSECH, NSCH</i>	[Child’s doctor/provider] talks w/you [parent] about car seat use, feeding and sleeping routines, reading to your child, [etc.]? <i>PHDS, NSECH, NSCH</i>	[Child’s doctor/provider] offers parents education/support groups? <i>NSECH</i>	[Child’s doctor] makes referral to subspecialist & programs? <i>NSECH & NSCH</i>
Community System	<ul style="list-style-type: none"> •Number & percentage of Medicaid-enrolled children under age 60 months who receive developmental screening. •Number & percentage of newborns screened for hearing. 	<ul style="list-style-type: none"> •Number of calls received annually by hot lines [or warm lines] per population. 	<ul style="list-style-type: none"> •Number & percentage of new families served by home visitation programs. •Number & percentage of parents participating in parenting education classes &/or other educational opportunities focused on child discipline. •Number of parent support groups available to families w/children enrolled in early intervention programs (IDEA). 	<ul style="list-style-type: none"> •Number & percentage of NICU graduates receiving follow-up contacts. •Common forms used for referrals to public programs.

Several surveys and data collection instruments related to early childhood health and developmental services are particularly relevant to implementing these strategies. Appendix B presents the Promoting Healthy Development Survey (PHDS), the National Survey of Early Childhood Health (NSECH), and the National Child Health Survey (NCHS). Both common and unique question items are identified for these three specific data sets or survey instruments (Table 1). Contact information is provided along with web addresses to view the individual surveys and specific findings via the Internet (Table 2).

Selected Measurement Guidance Resources

1. AHRQ's "Child Health Tool Box" accessible at <http://www.ahrq.gov/chtoolbox/>: concepts, tips and tools for evaluating Medicaid, SCHIP, Title V, and other health care service programs for children.
2. MCHB's workshop materials on needs assessment and performance measurement accessible at <http://128.248.232.90/archives/mchb/needs2004/>: Includes streaming video of and PowerPoint materials from presentations conducted by Drs. Donna Petersen and Donna Strobino on needs assessment and state performance measures for state Title V programs.
3. *Early Childhood System-Building Tool: A Framework for the Role of Title V MCH Programs in Early Childhood Systems* accessible at <http://www.healthychild.ucla.edu/NationalCenter/Early%20Childhood%20Tool%20February%202004v2.pdf> includes a section on measures that are specific to the five areas of early childhood identified by MCHB in the SECCS program and can be considered for use in various state planning and measurement efforts. These measures are drawn from Child Trend's *Child, Family, and Community Indicators Book* (<http://12.109.133.224/Files/Prop10IndicatorBook.pdf>), the Finance Project's *Indicators of Child Well Being* (<http://www.financeprojectinfo.org/Publications/indicatorsofchildwellbeingresource.htm>), and from draft sets of indicators developed as part of the 17-state School Readiness Indicators Initiative (www.gettingready.org), as well as contributions from state programs.

Partnership Opportunities Related to Title V Early Childhood Measurement

Title V's mission and requirements cannot be accomplished without working collaboratively with other agencies, systems and programs committed to improving children's health, development and well-being. Indeed, the Title V statute mandates interagency collaboration with partners such as Medicaid. Partnerships are key in conducting needs assessments concerned with the broad spectrum of family health and well-being issues, including early childhood development. Data-related partnerships with key partners such as other public agencies, providers and universities can serve as a foundation for improved coordination in state policy and program development. Partnerships also provide opportunities for maximizing and leveraging resources in ways that are not possible when agencies work in isolation.

Partnership Opportunities with Medicaid and the State Children's Health Insurance Program

The importance of partnerships between Medicaid and state Title V programs is underscored by legislative and regulatory requirements for coordination in both programs. (Requirements for SCHIP are less explicit, but coordination with MCH is a

required component for evaluations). One of Title V MCH's national performance measures and six (out of eleven) national MCH health system capacity indicators are related to Medicaid.

Federal and state agencies responsible for administering Medicaid and SCHIP have undertaken a number of efforts to address quality and performance measurement. While some of these efforts are in formative stages, shared interest in and requirements for measurement present opportunities for partnerships with MCH. Programs can collaborate to refine measures and improve collection and use of data for quality improvement. Two key federal-state Medicaid/SCHIP efforts that present opportunities for measurement improvement partnerships are highlighted below.

- ***EPSDT data*** are required of all states via Form 416, as revised in 1997 with MCH input. Each state reports screening ratios in age-specific groupings—the actual number of EPSDT screens conducted as a proportion of the number recommended in the state's periodicity schedule. Various issues have been raised over the years about the validity and comparability of these data. However, these data are a starting point, with a system in place in every state to collect data from all Medicaid providers on early childhood screening. Both states featured later in this brief are using or seeking to use EPSDT as a source of data for monitoring and measuring quality of early childhood developmental screening. (States' annual reports are available at <http://www.cms.hhs.gov>). State Medicaid agencies also can work with their External Quality Review Organizations to conduct more focused reviews of the quality of EPSDT services in managed care.^{xiii}
- The ***Performance Measurement Partnership Project*** is sponsored by the Centers for Medicare and Medicaid Services (CMS). In collaboration with state Medicaid and SCHIP officials, the PMPP has identified early childhood relevant measures that include well child visits for children in the first 15 months and in the 3rd, 4th, 5th, and 6th years of life, prenatal and postpartum care, children's access to primary care and use of appropriate medications for children with asthma. CMS has revised the SCHIP annual report template for states to report these measures if available. Particularly given fiscal constraints in SCHIP and Medicaid administrative functions, this is an opportunity for state Title V programs to share expertise. Although these measures do not address development, they are a starting place for collaboration on early childhood measurement.

Utah's Medicaid and MCH Early Childhood Measurement Partnership

Utah's Medicaid and MCH programs have had a longstanding partnership for quality measurement. Located in the same state agency, MCH and Medicaid have a history of collaboration, including work together on quality measures for Medicaid managed care plans. There is a strong focus on CSHCN and on EPSDT. Plans are required to report EPSDT screening ratios, and incentives for improving performance on this measure have been added to quality improvement efforts. MCH and Medicaid staffs jointly conduct quality audits of plans. The Utah MCH -Medicaid partnership also includes access for trained members of both programs' staff to a data warehouse containing Medicaid claims and eligibility data as well as vital records. This warehouse is not only a source of data for quality monitoring, but also for the Title V needs assessment.

This Utah MCH-Medicaid partnership has been critical to the state's success in obtaining and implementing the Commonwealth Fund supported ABCD initiative. Utah is the only state to have been funded under both ABCD I and II. ABCD I supported development of case management services for Medicaid infants, similar to the Prenatal to Five program developed by MCH. MCH is responsible for monitoring both the Medicaid and the MCH funded programs, using the same measures. In addition to measuring EPSDT visits and immunizations, a telephone survey of parents assessed other aspects of quality. For example, in 2003 survey results, 79% of parents reported that the doctor talked with them about things they can do to help their child grow and learn. Under ABCD II, the partnership has been broadened to engage pediatricians. With a focus on improving developmental and mental health screening for infants and toddlers and their moms, UT has established the Utah Pediatric Partnership to Improve Healthcare Quality (UPIQ). Chart audits with standard measures have been introduced, and have already resulted in pediatric office changes. Julie Olson in UT Medicaid credits the MCH program with making the pediatric partnership possible, and notes the trust Medicaid places in MCH. Medicaid is contracting with MCH to carry out quality monitoring and MCH has represented those efforts to federal CMS officials. More information about the Utah effort is available by contacting: julieolson@utah.gov.

Partnership Opportunities with State Multi-Agency School Readiness Initiatives

In the 1990s, several national policy discussions prompted greater attention to the use of indicators of child well-being, especially in early childhood. The federal government promulgated a set of eight national education goals, the first of which declared that children entering school should be "healthy and ready to learn." By mid-decade, another national policy dialogue emerged, focusing on concerns about the potential impact of welfare reform on young children and families. As a result, the HHS' Assistant Secretary of Planning and Evaluation (ASPE) *Advancing State Child Indicators Initiative* was launched in 1998 (available at <http://www.aspe.hhs.gov/>). Lessons learned about what was effective in indicator monitoring led to a focus on school readiness. These lessons included the critical importance of cross-agency collaboration, and of having outcomes that many different audiences could understand and rally around.

In 2001, the *School Readiness Indicators Initiative (SRII)* was launched (<http://www.gettingready.org>). Based at Rhode Islands Kid Count, this initiative has brought together senior policy and data staff from multiple public agencies within 17

states. SRII aims to assist states in developing measurable child outcome and systems indicators from birth through fourth grade that can be adopted by government, tracked over time and reported to citizens in order to stimulate policy and program change. SRII focuses on indicators of Ready Children, Ready Schools, and Family and Community Supports. This multi-dimensional concept of school readiness, which has strong health-status and health-systems components, has generated a high level of political interest in many states. Given that Title V can bring data sources and measurement expertise to the table, such multi-agency initiatives present important opportunities for Title V programs to play central roles in policy, program and budget initiatives linked to school readiness. As in Massachusetts, early intervention programs also are key resources in such multi-agency early childhood measurement initiatives.

Massachusetts School Readiness Indicator Project

Massachusetts is one of the states participating in SRII. Massachusetts' Title V agency, which is also the lead agency for its early intervention program, has been actively involved in the state's *Massachusetts School Readiness Indicators Project (SRIP)*. Sally Fogerty, Massachusetts' MCH Director and President of the national Association of Maternal and Child Health Programs, notes "*we have framed our work on early childhood within the context of school readiness. In our state, that has been an essential strategy for building the partnerships and obtaining the support we need for early child health and development services*". With the impetus coming from the Governor's Commission on School Readiness and with support from SRII, the multi-agency MA SRIP developed a definition of school readiness, and winnowed an initial list of about 90 indicators down to 30. About a third of these indicators can be measured now, and some data is available for another third, such as measures for developmental and mental health screens in EPSDT. Measures and data are not yet available for the remaining third. Massachusetts is seeking input on the list through a series of six public forums throughout the state. Ron Benham, who directs early childhood programs for the health department, notes that of the data that is currently available, most of it comes from public health. This has made the agency's role a very important one, providing a platform to educate about the role of health in improving children's outcomes. He also notes that the SRIP work is a natural fit with the MCH needs assessment and planning process. For more information about the health department's participation in the Massachusetts SRIP, contact Ron.Benham@state.ma.us.

Conclusion

Clearly, state Title V MCH programs have an obligation to promote early childhood health and development. In addition to investments in early childhood programs and services, an important area for much-needed Title V leadership and involvement is in the measurement of early childhood health and development. States are embarking on their five-year Title V needs assessment, which provides a particularly unique opportunity to focus on and integrate early childhood-related measures into related state efforts.

A range of measurement strategies and approaches, and early childhood measures are available to states. With thoughtful planning, identification of a conceptual framework, and a clear sense of the goals of measurement, early childhood health and development can become a core component of state Title V program measurement activities. Through these efforts, state Title V programs can best determine where investments and initiatives targeted to young children and their families are most needed.

Appendix A: Common Elements of Selected National Early Childhood Initiatives

INITIATIVE	Early Care and Education	Family/ Caregiver Education	Family/ Caregiver Support	Health Care/ Medical Home	Provider Training and Education	Quality Standards and Measurement	School Readiness	Social and Emotional Development/ Mental Health
Assuring Better Child Health and Development (ABCD)	X	X	X	X	X	X		X
BUILD Initiative	X	X	X	X			X	X
Healthy Child Care America	X	X	X	X	X	X		X
Healthy Steps for Young Children		X	X	X	X	X		X
Home Instruction Program for Preschool Youngsters (HIPPY)		X					X	
National Initiative on Children’s Health Care Quality (NICHQ)				X	X	X		
No Child Left Behind	X					X	X	
Promoting Healthy Development (PHD/CAHMI)		X	X	X		X		
Ready to Read, Ready to Learn		X			X		X	
School Readiness Indicators Initiative	X					X	X	
Starting Early Starting Smart (SESS)	X			X				X
State Early Childhood Comprehensive Systems (SECCS)	X	X	X	X				X
Universal Pre-School Initiative	X						X	X

Summary of Selected National Early Childhood Initiatives

1. Assuring Better Child Health and Development (ABCD) is an initiative of The Commonwealth Fund dedicated to strengthening the capacity of the health care system to provide low-income parents with the knowledge and skills necessary to support their young children's healthy development. Additional information is at www.cmwf.org
2. The Build Initiative is a multi-state partnership funded by 13 national and local foundations designed to help ensure that children ages birth to five are safe, healthy, eager to learn, and ready to succeed in school. Additional information is at www.buildinitiative.org
3. Healthy Child Care America (HCCA) is supported by the U.S. Department of Health and Human Services, the Child Care Bureau, and the Maternal and Child Health Bureau, Health Resources and Services Administration. It is a collaborative effort of health professionals, child care providers, and families seeking to improve the health and well-being of children in child care. Additional information is at www.healthychildcare.org
4. Healthy Steps for Young Children is a multi-state initiative designed to improve the quality of care by incorporating early child development specialists and enhanced developmental services into routine pediatric care for young children. Additional information is at www.healthysteps.org
5. Home Instruction Program for Preschool Youngsters (HIPPY) offers home-based early childhood education for children 3-5 years old by working with their parent(s) as their first teacher. The parent is provided with a set of materials, curriculum and books designed to strengthen their child's cognitive skills, early literacy skills, social/emotional and physical development. Additional information is at www.hippyusa.org
6. The National Initiative on Children's Health Care Quality (NICHQ) mission is to improve the quality of health care for all children, with a focus on primary care and the most vulnerable children. Additional information is at www.nichq.org
7. No Child Left Behind is the federal education reform initiative that places emphasis on school accountability and school choice. Additional information is at <http://www.ed.gov/nclb/landing.jhtml>
8. Promoting Healthy Development (PHD/CAHMI) was developed by FACCT under the rubric of the Child and Adolescent Health Measurement Initiative (CAHMI). PHD measures are designed to capture quality information about preventive health care provided to children 0-48 months old. Additional information is at <http://www.facct.org/cahmiweb/phd/phdhome.htm>
9. Ready to Read, Ready to Learn, an initiative of First Lady Laura Bush, is designed to ensure that all young children are ready to read and learn when they enter school, and that they have well-trained, qualified teachers. Efforts are focused on highlighting successful early childhood programs and teacher recruitment and preparation. Additional information is at <http://www.whitehouse.gov/firstlady/initiatives/education/summary.html>
10. The School Readiness Indicators Initiative (SRII), sponsored by the David and Lucile Packard Foundation, the Ewing Marion Kauffman Foundation, and the Ford Foundation, works with 17 states to develop a comprehensive set of school readiness indicators to inform public policy for young children and their families. Additional information is at www.gettingready.org
11. Starting Early Starting Smart (SESS), a national public-private partnership between Casey Family Programs and the Substance Abuse and Mental Health Services Administration, is designed to integrate behavioral health services into primary health care and early childhood settings that serve children ages 0 to 5 and their families and caregivers. Additional information is at www.health.org/promos/sess
12. State Early Childhood Comprehensive Systems (SECCS) grants, supported by the Health Resources and Services Administration's Maternal and Child Health Bureau, are designed to support states to plan, develop, and implement collaborations and partnerships that support families and communities in their development of children that are healthy and ready to learn at school entry. Additional information is at: www.mchb.hrsa.gov
13. The Universal Pre-School Initiative, supported by the Pew Charitable Trusts, is designed to create the research base and informed debate that foster the adoption and implementation of state and federal policies providing access to high-quality early education for all children, beginning at age three. Additional information is at: www.pewtrusts.com/ideas/index.cfm?issue=26

Appendix B – Table 1. Early Childhood Health/Development Questions Used in Selected Health Surveys.

In “Model Indicators for Maternal and Child Health: An Overview of Process, Product, and Applications” (Peoples-Sheps et al. 1998), the authors presented a conceptual model (or framework) for development of maternal and child health indicators. In the table below, we adapt this model to issues specific to early childhood development. We used the framework domains as a means to categorize questions from three children’s health surveys. The survey questions may prove useful to State Title V programs as they implement data specific activities such as assessing population and system needs, and/or development performance measurement for their program. These domains are used as they are consistent with the Title V Performance Measurement System; this approach is intended to facilitate incorporation of early childhood development information into the comprehensive needs assessment.

Domain Definitions

- **Health and Developmental Status:** Level of health as expressed by indicators of a wide array of health conditions of infants and young children.
- **Child and Home Risk/Protective Status:** Level of risk for or protection from health, developmental problems.
- **Health and Related Services:** Utilization of prevention, treatment, and rehabilitative health and health-related and developmental services.
- **Health System Capacity and Adequacy (Quality):** Availability of services for children and families, and services coordination to meet common needs.
- **Contextual Characteristics:** Characteristics of the community or total population of mothers and children that reflect needs for services.

Items in italics are found in the PHDS as well as the NSECH and/or the NSCH.

Each of the surveys below use a parent as the respondent (see Table 2). Some questions ask about the child/family, others ask about provider behavior, as reported by the parent.

Survey	Health and Developmental Status	Child and Home Risk/Protective Status	Health and Related Services	Health System Capacity & Adequacy (Quality)	Contextual Characteristics
<p>Promoting Healthy Development Survey (PHDS)</p> <p>Part of the</p> <p>Child and Adolescent Health Measurement Initiative (CAHMI)</p>	<ul style="list-style-type: none"> • <i>Child health status</i> • <i>CSHCN screener</i> 	<ul style="list-style-type: none"> • <i>Parents reported concerns about child’s development</i> • <i>Breastfeeding</i> • <i>Frequency of reading with child</i> • <i>Sleep position</i> • <i>Home safety practices</i> • <i>Smoking in household</i> 	<ul style="list-style-type: none"> • <i>Physician visit in last 12 months</i> 	<ul style="list-style-type: none"> • <i>Provider assessment of:</i> <ul style="list-style-type: none"> ○ <i>Parental Concerns (e.g., about child’s behavior)</i> ○ <i>Child development</i> ○ <i>Child psychosocial risk</i> ○ <i>Parent-child relationship</i> ○ <i>Parent(s)’ physical and emotional health status and health habits</i> • <i>Provision of age-appropriate anticipatory guidance</i> 	<ul style="list-style-type: none"> • <i>Family sociodemographics</i> <ul style="list-style-type: none"> ○ <i>Education</i> ○ <i>Income</i> ○ <i>Race/ethnicity</i> • <i>Family composition</i> • <i>Health insurance status/type</i>

Survey	Health and Developmental Status	Child and Home Risk/Protective Status	Health and Related Services	Health System Capacity & Adequacy (Quality)	Contextual Characteristics
National Survey of Early Childhood Health (NSECH)	<ul style="list-style-type: none"> • <i>Child health status</i> • <i>CSHCN screener</i> • Specific recurrent health problems • Increased service use 	<ul style="list-style-type: none"> • <i>Parents reported concerns about child's development</i> • Child/family routines • Premature birth of child • Birth weight of child • Parent(s)' emotional status • Parental discipline of child • Parent takes actions to childproof home 	<ul style="list-style-type: none"> • Delayed or missed care • Use of Emergency department • Hospitalizations • Well-child care • Number of calls to doctor's office for information 	<ul style="list-style-type: none"> • <i>Provider assessment of:</i> <ul style="list-style-type: none"> ○ <i>Parental Concerns (e.g., about child's behavior)</i> ○ <i>Child development</i> ○ <i>Child psychosocial risk</i> ○ <i>Parent-child relationship</i> ○ <i>Parent(s)' physical and emotional health status and health habits</i> • <i>Provision of age-appropriate anticipatory guidance</i> • Provision of parent education/ support groups • Care coordination: <ul style="list-style-type: none"> ○ Sub-specialist and program referrals 	<ul style="list-style-type: none"> • <i>Family sociodemographics</i> <ul style="list-style-type: none"> ○ <i>Education</i> ○ <i>Income</i> ○ <i>Race/ethnicity</i> • <i>Family composition</i> • <i>Health insurance status/type</i> • Public Benefits • Problems attending day care • Problems meeting work responsibilities

Survey	Health and Developmental Status	Child and Home Risk/Protective Status	Health and Related Services	Health System Capacity & Adequacy (Quality)	Contextual Characteristics
<p>National Survey of Children's Health</p>	<ul style="list-style-type: none"> • <i>Child health status</i> • <i>CSHCN screener</i> • Specific medical conditions/recurrent health issues • Dental health • Emotional and behavioral health status • Height and weight 	<ul style="list-style-type: none"> • <i>Parent concerns about child development, age specific questions</i> • <i>Breastfeeding</i> • <i>Frequency of reading with child</i> • Child/family routines • Child injury or poisoning • Family activities (e.g., going on outings, eating together, attending religious services) • Family stress • Maternal and paternal health status (physical and emotional) and habits (exercise, smoking) 	<ul style="list-style-type: none"> • Any health visits, receipt of medical care (preventive, acute, specialty) • Use of emergency department • Receipt of mental health care services • Dental visits 	<ul style="list-style-type: none"> • <i>Provider assessment of parental concerns about child's behavior and development</i> • <i>Provision of anticipatory guidance related to child behavior and development</i> • Intervention (telephone advice line) • Care coordination (sub-specialist and program referrals) • Medical Home • Availability of appropriate interpreter • Sufficiency of health care services received (for each category in previous column) 	<ul style="list-style-type: none"> • <i>Family sociodemographics</i> <ul style="list-style-type: none"> ○ <i>Education</i> ○ <i>Income</i> ○ <i>Race/ethnicity</i> • <i>Health insurance status/type</i> • Primary language • Employment • Receipt of WIC benefits, food stamps, free or reduced-cost school meals • Neighborhood and community characteristics (e.g., support network, safety) • Maternal, paternal, and child country of origin

“Model Indicators for Maternal and Child Health: An Overview of Process, Product, and Applications,” by Mary Peoples-Sheps et al., *Maternal and Child Health Journal*, 1998, 2 (4): 241-256.

Appendix B

Table 2. Selected characteristics of health surveys with focus on early childhood development

Survey	Purpose	Organizational Sponsors and Contact Information	Sample Design, Respondents and Recall Period	Fielding History/ Frequency of Data Collection and Applicability of Data
<p>Promoting Healthy Development Survey (PHDS)</p> <p>Part of the Child and Adolescent Health Measurement Initiative (CAHMI)</p>	<p>CAHMI initiated in 1998 to create a comprehensive set of consumer-centered quality measurement tools.</p> <p>PHDS focuses on quality of pediatric & developmental care provided to children birth to 4 years of age.</p>	<p>Sponsors: FACCT, CDC, AAP, Packard Foundation</p> <p>Contact CAHMI <i>Email:</i> cahmi@kpchr.org <i>Call</i> 503-528-3921 <i>Fax</i> 503-528-3100</p> <p>FACCT 1200 NW Naito Pkwy Suite 470 Portland, OR 97209 Tel: 503-223-2228 Fax: 503-223-4336</p>	<p>Sample size: See next column.</p> <p>Respondent: Asks parent/caretaker about pediatric healthcare provider (doctor or nurse who provides well child care)</p> <p>Reference period: Last twelve months, or since child's birth</p>	<p>Fielded four times from 1999-2001, to three health Plans (N=580), a state-wide sample of Medicaid clients in Maine (N=2204), a state-wide sample of Medicaid clients in Washington (N=3513), and state-wide samples of Medicaid clients in three States.</p> <p>Applicability: Varies – can be compared to selected states.</p>
<p>Website: http://www.facct.org/facct/site/CAHMI/CAHMI/home</p>				
<p>National Survey of Early Childhood Health (NSECH)</p>	<p>To provide national baseline data on pediatric care from the parent's perspective. Questions focus on parental concerns about their child's health and pediatric care provided to families with children 4 months to 3 years. Most quality of care measures are from the PHDS.</p>	<p>Funded by the Gerber Foundation, MCHB, and the AAP Friends of Children Foundation.</p> <p>NCHS Office of Information Services Hyattsville, MD 20782 Tel: (301) 458-4000</p>	<p>Sample size: 2,068 children</p> <p>Over sample of African-American and Hispanic children</p> <p>Respondent: Asks for parent or guardian who is primarily responsible for the health care of the focus child.</p> <p>Reference period: Last 12 months</p>	<p>Fielded February-July 2000</p> <p>Applicability: National data useful for context and comparisons, but sample inadequate for state estimations.</p>
<p>Website: http://www.cdc.gov/nchs/about/major/slait/nsech.htm</p>				

Survey	Purpose	Organizational Sponsors and Contact Information	Sample Design, Respondents and Recall Period	Fielding History/ Frequency of Data Collection and Applicability of Data
National Survey of Children's Health	To examine the physical and emotional health of children from birth to 17 years of age. Special emphasis on medical home, family interactions, parental health, school and after-school experiences, and safe neighborhoods.	Sponsoring organization: MCHB NCHS Office of Information Services Hyattsville, MD 20782 Tel: (301) 458-4000	Sample Size: 102,000 children (2,000 per state & DC) Respondent: Asks for parent or guardian who knows the most about the child's health. Reference period: During past 12 months, during past month, or since child's birth.	Data collected January – December 2003, national and state level estimates will be available in late 2004 Applicability: National and state level estimates will be available.
Website: http://www.cdc.gov/nchs/about/major/slaits/nsech.htm				

ⁱ This brief is based on the skills building session, “Enhancing State Measurement for Early Childhood Preventive Health and Developmental Services,” supported by The Commonwealth Fund and presented at the Association of Maternal and Child Health Programs 2004 Annual Meeting. The session web cast and visuals are available at: <http://128.248.232.90/archives/mchb/amchp2004/>.

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