

## Introduction

The purpose of this manual is to provide detailed guidelines for implementing the Promoting Healthy Development Survey-PLUS (PHDS-PLUS) in Medicaid and other programs and settings. The PHDS-PLUS is a parent survey that assesses whether young children (3–48 months old) receive nationally recommended preventive and developmental services. It is a telephone-administered version of the original PHDS, containing additional items about the child’s health, health care utilization, parent’s health, and other socio-demographic characteristics

There are six steps necessary to implement the PHDS-PLUS:

**Step 1: Learn about the PHDS-PLUS**

**Step 2: Specify your PHDS-PLUS implementation strategy**

**Step 3: Prepare for and conduct survey administration**

**Step 4: Monitor survey administration and prepare for data analysis**

**Step 5: Construct quality measures and analytic variables**

**Step 6: Report your PHDS-PLUS findings**

This manual is organized according to the above-listed steps and their respective sub components. Each step is vital to successfully implement a PHDS-PLUS project in your program or setting.

## **Step 1: Learn about the PHDS-PLUS**

This section contains an introduction to the development and implementation of the PHDS-PLUS.

### **1.1 What is the PHDS-PLUS?**

### **1.2 What is measured by the PHDS-PLUS?**

### **1.3 How has the PHDS-PLUS been used in Medicaid?**

### **1.4 What is the added value of the PHDS-PLUS to Medicaid?**

### **1.5 Development of the PHDS-PLUS**

### **1.6 Requirements to implement the PHDS-PLUS**

### **1.7 PHDS-PLUS resources**



### **1.1 What is the PHDS-PLUS?**

The Promoting Healthy Development Survey-PLUS (PHDS-PLUS) is a parent survey that assesses whether young children age 0–3 (under 48 months of age) receive nationally recommended preventive and developmental services. This tool captures information about the provision of preventive and developmental services recommended by the American Academy of Pediatrics provided in the context of discussions and information exchanges between parents and their children’s pediatric clinicians. A listing of the items in the PHDS-PLUS can be found in Appendix 1. The PHDS-PLUS is summarized in the *Fast Facts* illustration on the following page.

## PHDS-PLUS Fast Facts

<p><b>Overview of the Survey</b></p>	<p><b>The Promoting Healthy Development Survey-PLUS (PHDS-PLUS) is a parent survey</b> that assesses whether young children age 0–3 (under 48 months of age) receive nationally recommended preventive and developmental services. The PHDS-PLUS is designed for telephone administration and takes approximately 15–18 minutes to complete. The PHDS-PLUS is an enhanced, telephone version of the Promoting Healthy Development (PHDS) and includes additional items related to the child’s health and health care use and information about parent health. There is also a reduced-item version of the PHDS that can be administered in pediatric provider offices. To date, PHDS-PLUS data have been collected for approximately 14,000 young children enrolled in Medicaid. Results have been analyzed and reported to various audiences, such as health plans, pediatric providers, families, and state policymakers.</p>
<p><b>Quality of Care Topics Assessed in the PHDS-PLUS</b></p>	<p><b>The PHDS-PLUS collects data on 10 health care quality topics</b> related to clinical and patient-centered care preventive and developmental services for young children:</p> <p><i>Appropriate Clinical Care</i></p> <ol style="list-style-type: none"> <li>1. Anticipatory guidance and parental education (AGPE)</li> <li>2. Family psychosocial assessment (FA)</li> <li>3. Assessment of smoking, alcohol, and drug use in the home (SDA)</li> <li>4. Assessment of parent concerns about child learning, development, and behavior and provision of specific information for parents with concerns (ASKINFO)</li> <li>5. Follow-up for children at risk for developmental, behavioral, or social delays (FURISK)</li> <li>6. Coordination of care for children requiring multiple types of health care services or seeing more than one health care provider (CC)</li> </ol> <p><i>Patient-Centered Care</i></p> <ol style="list-style-type: none"> <li>7. Provision of family-centered care that respects, listens to, and partners with parents (FCC)</li> <li>8. Helpfulness of care provided to parents (HELP)</li> </ol> <p><i>Health Information and Community Resources</i></p> <ol style="list-style-type: none"> <li>9. Education and information on community resources and issues in the community that may affect child health and well-being (CR)</li> <li>10. Provision of health information on caring for their child, preventing injuries, and ensuring optimal development (INFO)</li> </ol> <p><i>Minimum Comprehensive-Care Composite</i></p> <ol style="list-style-type: none"> <li>11. Provision of comprehensive care, meaning they were provided a minimum threshold of care for four measures listed above (AGPE, FA, FURISK, FCC)</li> </ol>
<p><b>Additional Information Collected by the PHDS-PLUS</b></p>	<p><b>The PHDS-PLUS also gathers information useful for quality improvement and community assessment:</b></p> <ol style="list-style-type: none"> <li>1. Child health (risk for developmental, behavioral, or social delays, special health care need, overall health status, premature birth)</li> <li>2. Parent health (risk for depression, overall health, physical and mental health)</li> <li>3. Parenting behaviors (reading, actions parents take to protect their child from injury)</li> <li>4. Child’s health care utilization (number of regular or routine care visits, ER visits)</li> <li>5. Access issues (problems getting the child necessary care)</li> </ol>



## 1.2 What is measured by the PHDS-PLUS?

Eleven health care quality topics assess clinical and patient-centered care as well as other important aspects of preventive and developmental services for young children:

### Appropriate Clinical Care

1. Anticipatory guidance and parental education (AGPE)
2. Family psychosocial assessment (FA)
3. Assessment of smoking, alcohol, and drug use in the home (SDA)
4. Assessment of parent concerns about child's learning, development, and behavior and provision of specific information for parents with concerns (ASKINFO)
5. Follow-up for children at risk for developmental, behavioral, or social delays (FURISK)
6. Coordination of care for children requiring multiple types of health care services or seeing more than one health care provider (CC)

### Patient-Centered Care

7. Provision of family-centered care that respects, listens to, and partners with parents (FCC)
8. Helpfulness of care provided to parents (HELP)

### Health Information and Community Resources

9. Education and information on community resources and issues in the community that may affect child health and well-being (CR)
10. Provision of health information on caring for their child, preventing injuries, and ensuring optimal development (INFO)

### Minimum Comprehensive-Care Composite

11. Provision of comprehensive care, meaning they were provided a minimum threshold of care for four measures listed above (AGPE, FA, FURISK, FCC).

The PHDS-PLUS also provides information on a wide range of critical health care utilization and child and parent health and socio-demographic characteristics, including:

- Child access to and use of health services and financial burden of health care expenses on the family
- Parent/family activities and behaviors to prevent injuries and promote the healthy development of children
- Child and adult/parent respondent socio-demographic information
- Child and adult/parent respondent health status and risks, such as whether a child is at-risk for a developmental or behavioral problem, whether a child has a

special health care need, or whether the child's mother experiences symptoms of depression



### **1.3 How has the PHDS-PLUS been used in Medicaid?**

Medicaid programs have used the PHDS-PLUS for three overarching purposes:

1. Quality Measurement and Improvement
  - Demonstrate performance across a broad range of important services
  - Compare performance across different health plans, pediatric providers, or service areas
  - Learn about differences in quality within and across many groups of children
2. Program and Policy Planning and Evaluation
  - Identify unmet needs of parents across aspects of care and specific care topics
  - Target and track strategies to improve quality of care
  - Stimulate partnerships and coordinate efforts to improve care across sectors and agencies
  - Determine health risks and health care service needs of children and their families
  - Compare policies for organizing and paying for health care services for children
3. Educate and Empower Families, Providers, and Other Partners
  - Inform and activate providers, families, health care leaders, and others as partners

See Table 1.1 on the following page for specific examples of how the PHDS-PLUS has been used in the field.

**Table 1.1: Examples of PHDS-PLUS Applications in the Field**

<p><b>Federal and State Reporting</b></p>	<ul style="list-style-type: none"> <li>• <i>Washington State</i> used the PHDS-PLUS to complement the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) measures. It compared differences in the prevalence of parents of young children being counseled on various topics by type of well-visit (EPSDT well-visit rates, chart review, or any type of well-visit). The results were disseminated to individual health care providers.</li> </ul>
<p><b>Contracting and Purchasing</b></p>	<ul style="list-style-type: none"> <li>• <i>Maine</i> used the PHDS-PLUS to evaluate the quality of care provided by health care providers enrolled in the Primary Care Case Management (PCCM) program. Findings were inserted into the PCCM newsletter and were used to inform quality improvement priorities for PCCM providers.</li> </ul>
<p><b>Monitoring</b></p>	<ul style="list-style-type: none"> <li>• <i>Vermont</i> used the PHDS-PLUS findings to inform efforts to improve the Healthy Babies, Kids and Families program (HBKF). They analyzed the findings by whether the parent received a home visit and examined where variations and improvements could be achieved. Furthermore, Vermont is using the PHDS-PLUS items in their HBKF client satisfaction survey to trend their efforts over time.</li> <li>• The <i>Institute for Health Care Policy</i> has used the PHDS-PLUS as its measurement and evaluation tool for children enrolled in the Florida Healthy Kids program.</li> <li>• The Commonwealth Fund established the <i>Assuring Better Child Health and Development</i> (ABCD) program to help state Medicaid agencies build capacity to provide health promotion and developmental services to young children and their families. CAHMI was funded to implement the PHDS-PLUS in three out of four of these states to provide baseline information to inform their efforts.</li> <li>• <i>Vermont</i> analyzed their PHDS-PLUS findings at practice-level for providers enrolled in the PCCM program. Provider-level reports were then disseminated to inform health care providers about quality of care issues and hopefully to inform their improvement efforts.</li> </ul>
<p><b>Quality Improvement</b></p>	<ul style="list-style-type: none"> <li>• <i>Three health plans</i> used the PHDS-PLUS as part of their quality improvement programs. They collected health plan-level information, which was then disseminated to quality improvement directors and key provider committees focused on quality improvement implementation initiatives.</li> <li>• <i>Washington State</i> implemented the PHDS-PLUS at a practice level to inform practice-level improvement efforts via their EPSDT focus area projects.</li> <li>• The <i>Maine Department of Human Service</i> used the PHDS-PLUS to inform preventive services and quality improvement activities for young children and to enhance their implementation of chart-based encounter forms to guide health care providers.</li> <li>• <i>Pediatric health care providers</i> in Vermont implemented the reduced-item PHDS in their pediatric practices to inform their quality improvement efforts. Analyses were conducted at the medical group, office, and provider level.</li> </ul>
<p><b>Consumer Reporting and Education</b></p>	<ul style="list-style-type: none"> <li>• A pilot study was conducted in <i>pediatric practices in Vermont</i> to develop and test feedback templates to parents displaying the findings from the PHDS tools. Overall, the templates were very well received and parents expressed high interest in receiving this type of information.</li> </ul>
<p><b>Public Health Monitoring</b></p>	<ul style="list-style-type: none"> <li>• As part of its Medicaid external quality review, <i>Washington State</i> used the PHDS-PLUS to collect information at both the health plan and county levels. Public health initiatives related to preventive care were focused on county-level implementation efforts.</li> <li>• The <i>Vermont Department of Children with Special Health Care Needs</i> analyzed the PHDS-PLUS by special health care need status to evaluate the need for targeted outreach efforts.</li> </ul>

**Table 1.2: PHDS-PLUS Measure Scores Across Seven Medicaid Programs**

PHDS-PLUS Quality Measure	Quality Measure Scores Overall and Across Seven State Medicaid Programs		
	<i>Overall</i>	<b>Lowest State Score</b>	<b>Highest State Score</b>
<b>Anticipatory Guidance &amp; Parental Education (AGPE)</b> (% reporting discussion OR that it was okay to not have discussed certain topics on all items)	49.6% <sup>S</sup>	36.9%	58.8%
<b>Family-Centered Care (FCC)</b> (% of parents reporting care was “usually or always” provided across the three FCC survey items asked in the 01 and 04 PHDS-PLUS)	71.2% <sup>S</sup>	61.3%	76.5%
<b>Family Psychosocial Assessment (FA)</b> (Proportion reporting that at least 2 of 3 topics were discussed)	47.8% <sup>S</sup>	37.2%	58.0%
<b>Assessment of Concerns About Child Development (ASKINFO)</b> (% of parents asked about their concerns and, if concerned, got information specific to their concerns)	50.1% <sup>S</sup>	34.2%	61.0%
<b>Follow-up for children at-risk for behavioral, social, or developmental delays (FURISK)</b> (% of children at risk for delays for whom some type of follow-up was provided)	59.5% <sup>NS</sup>	54.2%	66.7%
<b>Smoking, Drug, Alcohol Assessment (SDA)</b> (% asked about smoking and drug or alcohol use in the family)	69.0% <sup>S</sup>	62.6%	75.0%
<b>Help with Care Coordination (CC)</b> (% of children requiring more than one type of health care service who received needed help coordinating care)	59.6% <sup>NS</sup>	56.5%	68.1%
<b>Helpfulness of Information and Education Provided (HELP)</b> (% reporting that care was helpful or very helpful to all items answered)	64.6% <sup>S</sup>	59.3%	69.3%
<b>Health Information (HI)</b> (% reporting receipt of written or other type of information about caring for their child, injury prevention, and child development)	77.4% <sup>S</sup>	67.4%	81.9%
<b>Minimum comprehensive care composite</b> (% meeting threshold scores for each of the AGPE, FCC, FA, SDA, and FURISK measures)	25.3% <sup>S</sup>	17.8%	29.8%

Source: 2001–04 CAHMI PHDS-PLUS Data from Seven State Medicaid Programs

<sup>S</sup> Denotes variables for which statistically significant variation exists among states for the PHDS measures score. <sup>NS</sup> No significant variation exists among states for the PHDS measures score.



## 1.4 What is the added value of the PHDS-PLUS to Medicaid?

Medicaid agencies play a pivotal role in ensuring the quality of the preventive and developmental health care services that they provide to nearly two of five children under age 4 in America. Not only does Medicaid have significant leverage to influence the quality goals and improvement efforts of health plans and providers, federal regulations also require state Medicaid programs to demonstrate whether children receive needed services and quality care. The Early and Periodic Screening, Diagnostic and Treatment (EPSDT) health care services regulations set forth in the federal Omnibus Budget Reconciliation Act of 1989 (OBRA 89) and the 2003 Balanced Budget Act regulations both require Medicaid programs to demonstrate results and implement a health care quality strategy to assess and improve services to children enrolled in Medicaid.

Prevailing quality measurement strategies in the area of preventive and developmental services for young children primarily rely on counting how many children in certain age groups have had a well-child visit and received recommended childhood immunizations. Common strategies also include medical chart abstractions to assess provision of physical screens such as provider measurement of height, weight, and head circumference.

While important first steps, these methods fail to provide a comprehensive, valid picture of performance across each of the distinct aspects of services recommended. For example, a recent national study found that while children who have at least one well-child visit are much more likely to receive some level of preventive and development services compared with children who do not have such a visit, the majority of children who have visits are still unlikely to receive all recommended services.

Critical aspects of care commonly left out or inadequately addressed in current quality measurement efforts include the many aspects of preventive and developmental services that occur in the context of the relationship and conversations between health care providers and parents and children. These aspects are best assessed by collecting data directly from parents. These include:

1. Provision of parental ***anticipatory guidance and education*** in the areas of child physical health and injury prevention and child cognitive, social, and emotional development;
2. Provider assessment of a ***child's developmental status and follow-up*** for children at risk for developmental delays;
3. Provider assessment of ***family well-being and psychosocial risks*** that affect a child's health and development such as smoking, drug and alcohol use, parental mental health, and family stress; and

4. ***Accessibility of care and family experience*** of care that is family-centered, coordinated, and culturally sensitive.

These aspects of care cannot be reliably or validly measured using billing/encounter data or medical chart reviews.

Medicaid programs can enhance the value and maximize the use of quality measurement resources if a comprehensive set of consumer-centered survey data and utilization and program data is collected and integrated at the child level as outlined in this manual. Doing so allows for more robust and actionable evaluations that can inform efforts to improve care across a range of EPSDT services, including areas often not measured such as anticipatory guidance, developmental screening, and follow-up and family psychosocial assessment.

#### **Summary of Medicaid Applications of the PHDS-PLUS**

To date, **nine Medicaid programs** have used the PHDS-PLUS (or the shorter PHDS) to assess and shape efforts to improve preventive and developmental services for young children. The programs are in Florida, Louisiana, Maine, Minnesota, Mississippi, North Carolina, Ohio, Vermont and Washington. In addition, at least three **External Quality Review Organizations (EQROs)** with whom Medicaid programs contract for purposes of fulfilling federal requirements have used or currently use the PHDS-PLUS to advance state Medicaid program quality improvement efforts in the area of preventive and developmental services for young children. Other **national and local efforts** have used all or part of the PHDS-PLUS to assess and inform strategies to improve policies and health care services, including the federal Maternal and Child Health Bureau's National Survey on Early Childhood Health (NSECH), the Vermont Child Health Improvement Program (VCHIP), the National Initiative for Children's Healthcare Quality (NICHQ), and the North Carolina Child Health Improvement's (NC-CHI) Healthy Collaborative project.



## 1.5 Development of the PHDS-PLUS

The PHDS-PLUS was designed and tested by The Child and Adolescent Health Measurement Initiative (CAHMI) using an explicit peer-reviewed measurement development process. It was designed to fill important gaps in available methods to evaluate quality in the many areas of recommended preventive and developmental services that require parent-reported information in addition to program-wide assessments. Versions of the PHDS-PLUS have been developed for use by Medicaid to assess care provided by health plans and pediatric practices.

The following selection criteria were used to select topics assessed in the PHDS-PLUS survey:

- Appropriateness for all children in the specific age group
- Strength of scientific evidence
- Professional consensus
- There was not a more reliable, valid, or efficient way to measure the topic
- The topic was important to parents (as derived from cognitive interviews and focus groups)
- The topic can be validly and reliably reported by parents
- Parsimony (e.g., topic is not already largely represented by another, related topic in the PHDS-PLUS)

The six stage development process included:

**Stage 1:** Develop conceptual framework and investigate relevance of measure

**Stage 2:** Develop starting point measurement proposal including initial feasibility studies

**Stage 3:** Develop draft instrument and implementation methodology

**Stage 4:** Conduct field-testing

**Stage 5:** Revise and refine as necessary

**Stage 6:** Develop scientific and technical documentation to support larger-scale implementation and dissemination

### **Special Note About Cognitive Testing and Reading Grade Level:**

An important component of the development of the PHDS-PLUS was to ensure that it had a low reading grade and cognitive-ease level. Computer programs were used to determine reading grade level estimates based on algorithms that take into account the length of the words used, etc. Therefore, a very common word that in a cognitive interview may be found to be easy to interpret and read may have a high reading grade level simply because of the length of the word. The cognitive ease of a survey can be assessed by conducting formal cognitive interviews with subjects on the survey items.

Reading grade level experts such as Mark Hochhauser, PhD, recommend that you conduct a formal reading grade level assessment with standard computer programs coupled with cognitive interviews.

In accordance with these recommendations, the CAHMI team conducted the following steps to ensure that the PHDS-PLUS is at a sufficient reading grade and cognitive level for parents of Medicaid clients:

- 1998 - Formal readability assessments were conducted indicating that the PHDS is written at the 8th–9th grade reading level using various reading grade level computer programs.
- 1998 - In-depth cognitive testing was conducted with 15 families representing a range of racial, income, and education groups as well as different types of health insurance coverage, age of child, age and sex of parent, and number of children in family. Parents were uniformly able to complete the self-administered survey in 10–15 minutes and the readability of the survey was confirmed.
- 2001 - A second round of cognitive testing was conducted to ensure that the PHDS-PLUS survey—when administered over the telephone—was feasible to administer to parents of children enrolled in Medicaid. The CAHMI team conducted cognitive interviews with 20 parents of children 3–48 months old who were enrolled in Medicaid. Five of these interviews were conducted in person, while the remaining 15 were conducted over the telephone in order to assess the response burden and cognitive ease of the PHDS-PLUS when using a telephone administration. For each item, instances where the respondent required clarification or did not appropriately answer an item were noted. Also, items for which the interviewer had difficulty asking the question without edits to the wording were noted. Survey modifications were made based on these findings in order to improve the reliability, validity, and cognitive ease of the PHDS-PLUS items.



## 1.6 Requirements to implement the PHDS-PLUS

This manual provides detailed technical guidelines for implementing the PHDS-PLUS in Medicaid. Below is a summary of the strategic and technical requirements for the successful use of the PHDS-PLUS in Medicaid, which are discussed in more detail throughout this manual.

### Summary of Strategic and Technical PHDS-PLUS Requirements for Medicaid

1. Determine **priority uses** of PHDS-PLUS Quality Data
2. Identify and Engage **key partners**
3. Construct and supply **sampling data set** to experienced survey vendor
4. Contract with and provide ongoing guidance to **survey vendor**
  - **Average time** required to administer the PHDS-PLUS: 12–15 minutes
  - Range of **costs** to administer the PHDS-PLUS: \$18–\$25 per completed survey
  - Range of observed **response rates** for Medicaid: 78%–94% of parents successfully contacted and 35–50% families included in the starting sample.

**Strategic Requirements:** The PHDS-PLUS requires Medicaid programs to (1) clearly define how this tool fits into their overall quality measurement and improvement strategy and (2) to identify key partners.

1. **Priority Application(s):** Medicaid agencies need to determine the priority application or applications for the PHDS-PLUS data. For example, will results be used to (a) assess and compare performance of health care plans; (b) compare quality of care across specific subgroups of children; and/or (c) determine health risks and unmet needs of children living in different parts of the state.
2. **Key Partners:** Medicaid agencies need to consider who to involve up front in order to ensure that information derived from the PHDS-PLUS is best used to inform, shape, and stimulate improvements in care. For example, (a) other state health agencies who also track and seek to improve preventive and developmental services for young children; (b) pediatric provider associations

and practices who will need to take action in order to improve care; and/or (c) parents of young children who can be key allies in stimulating improvements in care.

**Technical Requirements:** Medicaid programs will need to (1) supply Medicaid client/parent contact, sampling, and analytic information and (2) ensure survey vendors conduct sampling, administration, and scoring in a high-quality manner.

1. **Contact and Eligibility Information:** Medicaid agencies will need to construct a sampling data set that includes contact and eligibility information for all Medicaid clients who meet criteria to be included in the PHDS-PLUS sample. This will include providing (a) telephone and mailing information; (b) length of continuous enrollment; (c) whether the child received a well-visit in the past year; (d) number of visits in the past year; (e) child's age; and (f) other variables, such as health plan enrollment, that may be required to identify children for whom Medicaid agencies want to ensure are adequately represented in order to examine PHDS-PLUS quality scores.
2. **Survey Vendor Supervision and Guidance:** To get the most out of the PHDS-PLUS survey, most Medicaid programs will need to ensure that the survey vendor they contract with to sample, administer, and score the PHDS-PLUS has adequate guidance and supervision regarding (a) sampling to ensure sufficient completed sample sizes for different subgroups of children; (b) administering the survey to ensure the highest response rate possible; (c) coding and constructing quality scores and analytic variables based on survey data; and (d) scoring and presenting the data in different ways in order to inform the range of applications defined by Medicaid. (Average costs for survey vendors to administer the PHDS-PLUS have ranged from \$18–\$25 dollars per completed survey.)

**Requirements of Medicaid Clients:** Parents of young children (1) need to be able to be contacted and (2) respond to the PHDS-PLUS.

1. **Keeping Contact Information Up-to-Date:** Medicaid clients should be encouraged to keep their contact information up-to-date.
2. **Responding When Contacted:** Medicaid clients should be encouraged to respond to surveys about the health care their child receives as a way to ensure that Medicaid programs have information from parents to assess and ensure the highest quality of care possible. The PHDS-PLUS takes about 12–15 minutes of time to administer by phone. Across Medicaid programs to date, PHDS-PLUS response rates have ranged from 78%–94% of parents who were able to be contacted.

# Checklist for Planning, Implementing and Reporting PHDS-PLUS Results



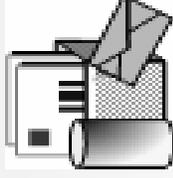
## Plan Your PHDS-PLUS Implementation Strategy

- Clarify where you want to end up!
- Identify & engage key partners
- Plan sampling strategy
- Confirm feasibility of sampling strategy
- Develop & test any supplemental survey items
- Identify analytic information to collect at time of sampling



## Prepare for Survey Administration

- Organize your implementation team
- Set up project implementation timeline
- Create sampling frame & analytic variable datasets
- Finalize survey administration process & management plans
- Finalize survey design & CATI program setup



## Conduct Survey & Prepare for Data Analysis

- Conduct survey & track responses
- Clean survey data
- Obtain updated enrollment & utilization information
- Weight survey data to represent the target population



## Construct Quality Measures & Plan to Report Findings

- Calculate core PHDS PLUS quality variables
- Calculate core PHDS PLUS analytic variables
- Calculate additional quality measures & analytic variables



## Report your PHDS-PLUS Findings

- Plan for communicating findings to each key audience
- Design & produce targeted reports
- Disseminate PHDSPLUS results



## 1.7 PHDS-PLUS Resources

More information on implementing the PHDS-PLUS is available at [www.cahmi.org](http://www.cahmi.org) or by contacting The Child and Adolescent Health Measurement Initiative at [cahmi@ohsu.edu](mailto:cahmi@ohsu.edu).

For more information on the development of the PHDS-PLUS, contact CAHMI or refer to the following publications:

- Bethell C, Peck C, Schor E. Assessing health system provision of well-child care: The Promoting Healthy Development Survey. *Pediatrics*. 2001 May; 107(5):1084–94.
- Bethell C et al. *Partnering with Parents to Promote the Healthy Development of Young Children Enrolled in Medicaid*. The Commonwealth Fund, September 2002. Available at: [http://www.cmwf.org/publications/publications\\_show.htm?doc\\_id=221310](http://www.cmwf.org/publications/publications_show.htm?doc_id=221310)
- Bethell, C et al. Measuring the quality of preventive and developmental services for young children: National estimates and patterns of clinicians' performance. *Pediatrics*. 2004 June; 113 (6): 1973–1983.

For more information on national guidelines:

### **MCHB's Bright Futures**

- <http://www.brightfutures.org>
- Green M, ed. *Bright Futures: Guidelines for Health Supervision of Infants, Children and Adolescents*. Arlington, VA: National Center for Education in Maternal and Child Health, 1994.

### **AAP Health Supervision Guidelines**

- <http://www.aap.org>
- American Academy of Pediatrics. Guidelines for health supervision III. Chicago, IL: American Academy of Pediatrics; 1997.

### **Healthy People 2010**

- <http://odphp.osophs.dhhs.gov/pubs/HP2000/2010.htm>
- U.S. Department of Health and Human Services. *Healthy People 2010*. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000.

**US Preventive Services Task Force**

- <http://www.ahrq.gov/clinic/uspstfix.htm>
- U.S. Preventive Services Task Force. Guide to Clinical Preventive Services, 2nd ed. Washington, DC: Office of Disease Prevention and Health Promotion, U.S. Government Printing Office, 1996.

For more information on the other childhood preventive care measures described in this section:

**Health Care Financing Administration (HCFA) Form 416** (Centers for Medicare and Medicaid Services)

- <http://www.cms.hhs.gov/medicaid/epsdt/416form.pdf>

**National Survey on Early Childhood Health (NSECH)**

- <http://www.cdc.gov/nchs/about/major/slits/nsech.htm>