Step 2: Specify Your PHDS-PLUS Implementation Strategy

Several steps are needed to design your PHDS-PLUS implementation strategy. You will need to:

2.1 Clarify where you want to end up
2.2 Identify and engage implementation partners
2.3 Plan and confirm the feasibility of your PHDS-PLUS sampling strategy
2.4 Develop and test any supplemental PHDS-PLUS survey items
2.5 Identify analytic information not based on the survey to be collected at the time of survey sampling

Each of these steps is further discussed in the pages that follow.

STEP 2.1: Clarify where you want to end up

WHAT IS THE PURPOSE OF THIS STEP?

The purpose of this step is to maximize the value of your PHDS-PLUS project by making sure that you design your project to meet specific goals and reporting requirements. It is easy to miss opportunities for collaboration, data collection, and dissemination of your PHDS-PLUS findings if time is not spent up front clarifying where you want to end up at the completion of the project.
In this step you will:

☑ Clarify the **purpose(s) for collecting PHDS-PLUS** data
☑ Set **overall goals** for what you want to accomplish by using the PHDS-PLUS
☑ Identify **overall measures** you will use to determine if you have achieved your goals
☑ Clarify internal or external **audiences that will evaluate** your project’s success
☑ Specify **evaluation measures** for each “evaluation” audience
☑ Confirm **audiences for reporting** PHDS-PLUS results (e.g., providers, families)
☑ Specify **key messages** for each “reporting” audience
☑ Identify project design and data collection **requirements to meet reporting goals**

**GUIDELINES AND ISSUES TO CONSIDER**

☑ **Be as specific as possible.**

As with any project, you need to set the goal(s) you wish to accomplish. Additionally, these goals need to be specific. For example, administering the PHDS-PLUS because you want to implement a quality measurement project is not specific enough.

Think about the precise priority topics for assessment (e.g., follow-up for children at risk for developmental delays) and unit of analysis (e.g., health plans, pediatric practices), why you want to use PHDS-PLUS, other ways to interpret/use the PHDS-PLUS findings (e.g., receipt of mental health or Title V services), who you want to provide that information to, and how you expect to use the results. When specifying your purpose and goals consider the following:
Purpose #1: Quality Measurement and Improvement

- **Demonstrate performance** of your state program and identify priority areas for improvement.
- **Compare performance** across different health plans, pediatric providers, or service areas and target and track improvement.
- **Learn about differences** in quality within and across many groups of children, such as those from different racial/ethnic or health status groups.

Purpose #2: Program and Policy Planning and Evaluation

- **Identify unmet needs** of parents and children.
- **Educate and stimulate partnerships** to improve 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.

Purpose #3: Educate and Empower Families and Other Partners

- **Inform** providers, families, health care leaders, and other partners about their roles in ensuring high-quality care and empower them to play active roles in the project.

☑️ **Involve each evaluation and reporting audience** in specifying goals, measures of success, and key messages. You can do this through in-person meetings, e-mail requests for input, or phone calls.

☑️ **Decide whether you want to be able to compare PHDS-PLUS findings** across groups such as health plans, state programs, geographic areas, and so on. If so, this will have many implications for your PHDS-PLUS project sampling, administration, and scoring steps.
Confirm whether you intend to repeat the PHDS-PLUS in the future or it this is a “one-time” effort. If you will repeat it, when? Repetition will allow trending of PHDS-PLUS measures and could impact the initial design of your project.

STEP 2.2: Identify and engage key partners

WHAT IS THE PURPOSE OF THIS STEP?

A key component of implementing the PHDS-PLUS in state programs is to identify and involve many partners up front. Doing so can lead to small but important changes to the design of your project that will enhance its relevance and value as well as “buy-in” by essential stakeholders. Like you, many stakeholders need and use information to guide their efforts and may have unique and valuable information about the health and health care of children.

Past users of the PHDS-PLUS have found that because it captures information beyond health care quality information (e.g., child health and health care characteristics, parental health and behaviors) they have been able to partner with multiple organizations with whom they do not normally collaborate on quality measurement projects.

In this step you will:

- Identify **other state agencies and private sector groups** that share responsibility for ensuring high-quality preventive and developmental services for young children (e.g., Department of Health, Title V Agency, Department of Children with Special Health Care Needs).

- Investigate **valuable data that may be available** through other state agencies and private sector partners. For example, you could indicate which children represented in the PHDS-PLUS survey sample are enrolled in other state programs or who have received certain types of medical, mental, or developmental services.

- Search for ways to **share costs and other resources** needed to implement your PHDS-PLUS project. For example, some other state programs may also have responsibility to demonstrate performance in the area of child preventive care services. Combining resources could lead to reduced costs for both agencies. By collaborating with Medicaid, other agencies may benefit from Medicaid’s ability to secure federal resources.
matching funds for quality of care related projects and offer other resources in exchange for this benefit.

GUIDELINES AND ISSUES TO CONSIDER

Broadening the scope of participants in your PHDS-PLUS project can help you:

☑ Standardize the performance measures being used in your area
☑ Share measurement costs
☑ Gain leverage to secure support from the health care sector
☑ Streamline communications with patients, consumers, and providers
☑ Craft a successful information dissemination strategy
☑ Establish a community-wide understanding about the use of quality information
☑ Achieve efficiencies in implementing measurement work
☑ Reduce the burden on the plans/providers being measured or the consumers/patients being surveyed
☑ Ensure the credibility of the initiative by including all prominent organizations in the community

There are many benefits to forming a collaboration to conduct your PHDS-PLUS project. However, there are some challenges as well. By increasing the number of participants, you also increase the likelihood of divergent perspectives about which health care organizations/providers should be held accountable. This also may create a forum for airing other unrelated differences among the organizations. Additionally, there is an inertia created that is inherent in the process with a larger set of participants. Finally, you may need to resolve certain requirements or constraints of individual organizations in specific areas such as data privacy or vendor procurement.
Therefore, before deciding on partnering with an organization, ask yourself the following:

1. Do potential co-sponsors share the same goals? If not, can you accommodate their goals?
2. Do potential co-sponsors have specific requirements or constraints that would make partnering unfeasible?
3. Are there any implementation partners that would make the data collection and analysis and/or the dissemination of the results easier?
4. When is the best time to include these partners?
5. How will these partnerships affect the timeline, staffing, and budget of the project?

The answers to these questions will help you to decide whether project partners will help or hinder your project. Additional tips for engaging partners are noted below.

**Be sure to:**

- Consider a **broad range of strategic partners**

There are various departments in state and local governments as well as many non-public organizations that are focused on providing, measuring, and improving preventive and developmental health services for young children. Obvious examples include:

1. State Medicaid and State Children’s Health Insurance Program (SCHIP)
2. Departments of public health, mental health, social services, and education
3. Health plans, pediatric practices, and community-based clinics
4. Family organizations and individual families, children, and youth
5. Child care organizations
6. Parks and recreation
7. Professional associations and schools (e.g., American Academy of Pediatrics, American Association of Family Physicians, medical and nursing schools)
8. Legislators and other public leaders who shape and influence policy
Table 2.1 Organizations and Groups to Consider As Partners

<table>
<thead>
<tr>
<th>Category of Persons in Your State</th>
<th>Those responsible for federal and state reporting requirements, health policy decisions</th>
<th>Those involved in purchasing and contracting health care for children enrolled in Medicaid, SCHIP, and Title V</th>
<th>Those focused on quality improvement activities</th>
<th>Those focused on consumer education/information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examples</td>
<td>• Federal reporting requirements (Medicaid, SCHIP, Title V)</td>
<td>• Health Plans</td>
<td>• External quality review organizations (EQROs).</td>
<td>• Persons focused on giving consumers information to inform their choice of health care providers for their child/adolescent</td>
</tr>
<tr>
<td></td>
<td>• State reporting requirements</td>
<td>• Front-line providers and provider groups (AAP, AAFP)</td>
<td>• AAP, AAFP</td>
<td>• Persons focused on giving consumers information about the health and health care for child/adolescent</td>
</tr>
<tr>
<td></td>
<td>• State legislature</td>
<td>• Employer purchasing groups</td>
<td>• Educational institutions, continuing medical education organizations</td>
<td>• Department of health</td>
</tr>
<tr>
<td></td>
<td>• Healthy People 2010</td>
<td></td>
<td></td>
<td>• Consumer advocacy groups</td>
</tr>
<tr>
<td></td>
<td>• Medicaid Managed Care Quality Assessment (EQRO)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• CMS Form 416</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Title V MCHB Reports</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1115 Waiver Requirements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- ✔ Clarify the **specific role for each potential partner** before initiating contact

There are several ways to consider partnering with other organizations or group for your PHDS-PLUS project. Partners can be **co-sponsors** or **implementation partners**.

**Co-sponsors** may be similar to your organization and have comparable goals for the project. They may share in the planning, decision-making, and/or the financing of the project. These organizations may have worked with you previously on a similar project or, perhaps, simply share your interest in quality information. For example, state Medicaid agencies may want to consider other agencies within the state, such as a Maternal and Child Health agency. Other examples of organizations that may be interested in co-sponsoring your project are:

1. State regulatory agencies
2. Other health care purchasers, such as private employers or business coalition
3. Consumer advocacy groups
4. Community-based quality advocacy groups
5. Provider groups and/or professional societies
6. Research/academic organizations

**In the state of Vermont, PHDS data collected at the provider level was used to inform the efforts of multiple state agencies, parent advocacy groups, consumers, and providers.**
**Implementation partners** are stakeholders who you want to make aware of your project, as these partners can aid in the implementation of the project. You may not necessarily want these partners to make content decisions about your project, and you may want to wait until after initial planning before you involve them. However, these partners may be critical to a successful project. One strategy for involving implementation partners is to form an advisory group, where members make suggestions and inform their representative groups about the project. For instance, if you are planning a provider-level quality measurement project, implementation partners may include:

1. Health plans that contract with the providers
2. Other health care purchasers
3. Professional organizations, such as the American Medical Association (AMA), American Academy of Pediatrics (AAP) or the American Board for Internal Medicine (ABIM)
4. Individual health care providers who will be receiving the information and asked to improve care
5. Consumer advocacy groups focused on children’s health care, such as Family Voices

Identify specific **benefits potential partners can receive** from the PHDS-PLUS project.

For each potential partner, consider what information you will have available in the PHDS-PLUS that they would find valuable. Examine each component of the PHDS-PLUS and think about topic areas of interest to potential partners. Consider issues or populations for which each group has responsibility or on which they can have an impact. Use the worksheet below to stimulate your brainstorming.
Example Worksheet 2.1: Information you have to share with key stakeholders

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Relevant Information from PHDS-PLUS</th>
<th>Rationale: Why is this information useful?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder #1:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholder #2:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholder #3:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

☑ Specify **information and resources partners can bring** to the collaboration.

Partnerships work best when everyone feels they have something important to contribute. Consider information that each stakeholder has or might have that you would find valuable. Use the worksheet below to stimulate your brainstorming.

Example Worksheet 2.2: Information key stakeholders have to share with you

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Relevant Information For You</th>
<th>Rationale: Why might this information useful to you?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder #1:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholder #2:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholder #3:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
STEP 2.3: Plan and confirm the feasibility of your sampling strategy

WHAT IS THE PURPOSE OF THIS STEP?

The purpose of this step is to ensure you will end up with the completed PHDS-PLUS data you need to meet your project goals.

In this step you will:

☑ Clarify all **units of analysis** for which you would like to construct PHDS-PLUS measures

☑ Specify **sampling eligibility criteria and the minimum completed and starting sample sizes** required to allow you to compare performance on PHDS-PLUS measures across groups

☑ Outline and verify the **technical soundness** of your sampling strategy

GUIDELINES AND ISSUES TO CONSIDER

Be sure to:

☑ Verify your **unit(s) of analysis**

This may seem like an obvious step, and you may have already done this while conceptualizing your project. However, it is critical that you are clear about your unit(s) of analysis. In other words, what entities, areas, or groups of children are you measuring? The PHDS-PLUS can be used to measure performance of health plans, provider groups or offices, individual health care providers, and even the population, regardless of the unit of health care delivery. Each of these units of analysis has different specifications for sampling, so you need to decide this first.
Second, you need to ensure that there are valid data to allow you to analyze at the desired unit(s) of analysis. For example, although you may want to analyze the data at the health care provider level, you may not have valid information at that level that can be linked to the child level PHDS-PLUS data. The CAHMI team has found that, while many states have a variable noting the provider with whom the child is enrolled, this variable is not valid for indicating the provider the parent is likely to have in mind when responding to the survey. This could be due to a variety of reasons:

1. The provider variable is based on the claims/bills database (this allows for one centralized billing code for a medical group) or
2. The child may receive well-child care from providers with whom they are not enrolled (e.g., they see a provider in the same office, therefore the claim is still paid).

Since this is the case, CAHMI recommends that you ask parents/survey respondents to indicate their child’s personal doctor or nurse and use that information for provider-level reporting.

The bottom line here is to think about what unit of analysis is most salient and relevant to your priority audiences for the PHDS-PLUS findings. Health care systems vary across markets, so the answers as to who is accountable and who will use the information will differ depending on your health care system.

Determine sampling eligibility for the PHDS-PLUS

Sampling is the process used to identify children whose parents will be asked to complete the PHDS-PLUS. For illustration, the sampling strategy described above is designed to measure the quality of care provided in a health plan. If you are planning to use the PHDS-PLUS to assess a different group, such as a medical group, office, or individual health care provider, modifications will need to be made. Keep in mind that if you are planning to administer the survey in the pediatric office, a different survey and sampling methodology will need to be used (see guide for In-Office Administration of the PHDS, Reduced Item Version, listed in resources section).
The sampling algorithm illustrated in the text box above identifies children who will be 3 to 45 months old at the beginning of the survey and who were current health plan members continuously enrolled 12 months (commercial) or six months (Medicaid) or since child was born. Continuous enrollment allows for no more than one gap of up to 45 days (commercial) or one month (Medicaid). It also specifies that the sample should be stratified to ensure that sufficient numbers of children are represented in each age subgroup. Only one child per family will be selected and those families who do not speak English as their primary language will not be included in the sample.

**Important Tip!**

*If you plan to supplement your survey responses with data other than what is necessary for sampling, make sure to link the data NOW! You will not be able to go back and do this once the survey has been administered. (See Step 2.5 for more information)*

☑ Determine the **minimum completed sample** required

The sampling strategy that you implement is dependent on how you will be using the results. If you plan on using the results to compare health care providers, for example, then you will need more completed surveys than if you were using the results to examine the quality of preventive care at the population level. Table 2.2 represents recommended sampling strategies based on different uses for the results. If you are planning multiple uses for your results, choose the sampling strategy with the largest minimum sample required.
Table 2.2: Examples of Children Targeted in State-Specific Samples Developed by Past Users of the PHDS-PLUS

<table>
<thead>
<tr>
<th>Type of Characteristics you want to sample for</th>
<th>Targeted Samples for These Groups</th>
</tr>
</thead>
</table>
| Child Characteristics                          | • Race, ethnic groups (e.g., targeted samples for Hispanic children)  
                                              | • Special health care needs (based on billing code data) |
| Child health care characteristics              | • Children who had one or more office visit in the last 12 months  
                                              | • Children who had one or more well-child visit in the last 12 months  
                                              | • Type of provider who serves as child’s primary care provider (e.g., pediatrician, family practice) |
| Geographic location where child resides        | • Rural, Suburban, Urban  
                                              | • County |
| Program in which child is enrolled            | • Part C  
                                              | • SCHIP  
                                              | • Health Plan  
                                              | • Fee-for-Service, Managed Care Organization, Primary Care Case Management |

The minimum sample required to administer the PHDS-PLUS can be calculated from the information in Table 2.3 below using the following formula. Use the values in the table or substitute your own better estimates to determine the minimum sample required.

**Figure 2.1: Determining minimum sample size**

\[
\text{Minimum sample} = \frac{\text{Target completed surveys}}{(\text{Response Rate}) \cdot (1 - \text{Data error rate})}
\]
Table 2.3. Determining the minimum sample required to administer PHDS-PLUS

<table>
<thead>
<tr>
<th></th>
<th>Comparison of providers&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Comparison of health plans&lt;sup&gt;a&lt;/sup&gt;</th>
<th>State-level reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target completed surveys</td>
<td>50 per health care provider</td>
<td>250 per health plan</td>
<td>100&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Estimated data error rate</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Estimated response rate</td>
<td>40%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Minimum sample&lt;sup&gt;b&lt;/sup&gt;</td>
<td>126 per health care provider</td>
<td>632 per health plan</td>
<td>253</td>
</tr>
</tbody>
</table>

<sup>a</sup> Although a smaller sample could be drawn if you are not planning on using the results to compare, we recommend that you assume comparisons will be made if you are reporting results at the provider or health plan levels. Stakeholders will want to make comparisons and false conclusions could be drawn.

<sup>b</sup> We recommend that each sample contain members enrolled in the same type of health insurance coverage. Therefore, different samples should be drawn if you wish to assess quality of care for Medicaid beneficiaries and commercial enrollees.

<sup>c</sup> This is the minimum number of surveys. However, to date, all of the Medicaid agencies that have implemented the PHDS-PLUS have set their completed survey goal at N=2,000. This sample size has allowed the state to do a number of analyses that met their strategic and political goals.

Terms used in the determination of your minimum starting sample size are listed below along with an example.

**Minimum Sample:** The minimum number of children that should be sampled for the administration of the survey given the intended use of the results.

**Targeted Number of Completed Surveys:** The minimum number of completed surveys necessary for analysis. A completed survey has to have at least 80% of the items answered and will be discussed in greater detail later in this section.

**Estimated Response Rate:** This is the percentage of parents who respond to the survey. You can never know for sure what the response rate for your survey will be, however, you can estimate this rate based on your own previous survey experience. If you do not have previous experience to base this estimate, we recommend using 40%. This represents a conservative estimate for a response rate based on field-testing and the implementation of similar surveys and should ensure that you have enough completed surveys for analysis. Field testing and previous implementation results of the PHDS have yielded response rates from 20% to 70%. Any response rate estimate that you have from previous survey experience in your area should be substituted for the estimated response rate when determining the minimum sample size. There are a myriad of factors that can influence the response rate of your survey. Suggestions will be provided throughout this section to help you to maximize your response rate.
Estimated Data Error Rate: This is the rate of data errors that you expect within your sample or sampling frame. Data errors are incorrect or bad contact information, enrollment information, eligibility information, or any other information that is necessary for the administration of the survey. You may not know what the data error rate is for your sampling frame, but you are likely to find some data errors. We recommend using a rate of 1% to 2% if you do not know. If you do know the data error rate, this number can be substituted in the chart above and will increase or decrease your minimum sample size.

EXAMPLE 2.4: Determining Minimum Sample Size

State A chose to administer the PHDS-PLUS for its Medicaid program. The state primarily contracts directly with health plans and would like to use the PHDS-PLUS results mainly for quality improvement. However, they also will be publishing the results in a consumer guide. Because they contract with several health plans and want the plans to have enough time to implement a quality improvement plan, the state has decided to administer the PHDS-PLUS on a rotating basis. Parents of young children affiliated with plans in the northern counties will receive the survey this year with the southern counties following the next year. The survey will then be administered every other year on a rotating basis to measure improvement. Two years ago, the state administered the PHDS-PLUS at the state level and had a 52% response rate. They also conducted an audit of their provider records just last year and expect their data error rate to be less than 0.05%. Their minimum sample size for health plans for each of the three age groups in the PHDS-PLUS is 50. See Figure 2.2 below.

Figure 2.2: Calculating Minimum Sample Size

\[
\text{Minimum sample size} = \frac{50}{(.52) [1-.05]} = 102
\]
Specify and verify the **soundness of your sampling strategy**

Figure 2.2 provides an illustration of a sampling strategy for the PHDS-PLUS. You will need to specify and confirm the soundness of your strategy, and we recommend confirming the feasibility of obtaining all needed data before finalizing your plan. For example, it is not uncommon for data elements or contact information needed to administer the PHDS-PLUS to be lacking for key subgroups of children you would like to include in your sampling.

**Utilize Tele-match**, a telephone number verification service or similar kind of service to verify the telephone numbers of each case in your identified sample.
FIGURE 2.3:

Part 1: Identify Children Eligible for Sampling

Step 1: Identify children who will be 3 months to 45 months old at the time of survey administration.

Step 2: Identify children who have a valid phone number.

Step 3: Identify children who meet the continuous enrollment requirement.

Step 4: Deduplicate for families – Assure that only one family or household address is eligible for sampling.

Part 2: Select Children for the Core Sample

Goals and Objectives for the CORE SAMPLE

To identify a random, representative sample of continuously enrolled children in Medicaid who will be 3-45 months old at the time of survey administration. This sample will allow for assessment of quality of care across the state and will allow for comparative analysis to other states who have used the PHDS-PLUS.

To stratify the Core SAMPLE by the child’s age at the time of survey administration to assure that sufficient samples of children in three age groups are identified.

To identify a sufficient starting core sample that will be able to yield n=625 completed surveys from the Core SAMPLE via telephone administration.

Part 3: Select Children for the State-Specific Sample

Goals and Objectives for the STATE-SPECIFIC SAMPLE

To target specific groups of children in the state. This sample will allow for assessment of quality of care for specific groups of particular interest to the state.

Within each of these groups, to identify a random, representative STATE-SPECIFIC SAMPLE of continuously enrolled children in Medicaid who will be 3-45 months old at the time of survey administration.

Within each of these groups, to stratify the STATE-SPECIFIC SAMPLE by the child’s age at the time of survey administration to assure that sufficient samples of children in three age groups are identified.

To identify a sufficient starting STATE-SPECIFIC SAMPLE that will be able to yield n=1375 completed surveys via telephone administration.
STEP 2.4: Develop and test any supplemental survey items

WHAT IS THE PURPOSE OF THIS STEP?

The purpose of this step is to consider whether there are a small number of items (3–5) you can add that will enrich your PHDS-PLUS data for you or your strategic partners.

In this step you will:

☑ Identify any important topics to add to the PHDS-PLUS that would enrich the PHDS-PLUS data

☑ Identify existing and tested survey items for topics of interest or develop and test new items

☑ Double check the impact of new items included in your sampling strategy to be sure you will have a sufficient completed sample to meaningfully evaluate responses to your new items

GUIDELINES AND ISSUES TO CONSIDER

Be sure to:

☑ Make sure the items you add are age-appropriate for children under age 4.

☑ Only include new survey items that cannot be found more reliably using another data source, such as the medical record or administrative data.

☑ Do not develop new survey items if there are already reliable and valid items about the topic of interest. In many instances, existing survey items have already been tested and implemented.
You may wish to examine the following surveys for supplemental items:


✔ Test any new items you design yourself to make sure the wording is interpreted in the way you intended. Do this “cognitive testing” even if only with a small group of parents of young children.

✔ Think about the placement of any new survey items. The survey should flow from topic to topic with similar items grouped together rather than jumping between different topics. Discontinuity complicates the cognitive task of completing the survey and can frustrate the respondent. All items that collect demographic information should be in the last section of the survey. Also, adding an item in a certain place in the survey can lead to unintended “order effects.” This occurs when the answer to a previous question can “prime” or influence how a person responds to a following question in an undesirable way.

✔ Minimize the number of different time frames and response options included in a survey. Wherever possible, ensure that added items have similar framing and response option language to that used throughout the rest of the survey. For example, if you are asking about discussions with their child’s doctor use the anchoring text: “In the last 12 months did your child’s doctor or other health provider talk with you about...” as well as the response options included in the PHDS-PLUS for similar items.
Examples of PHDS-PLUS Supplemental Survey Items

Tailoring the PHDS-PLUS by adding 3–5 questions has been an important and valuable component for states. Below are examples of items that the states who participated in the Promoting Healthy Development State Learning Network (PHDSLN) added to the PHDS-PLUS.

**Topic: Parent Perception About Well-Child Care (items derived from the NSECH)**

Well-child care visits are visits that are made to a doctor or health care provider who takes care of (CHILD) when (he/she) is not sick, but needs a check-up or a shot. (In the last 12 months/Since CHILD’S birth), how many times has (he/she) had a well-child visit for a check-up or shot?

Let’s talk about the well-child care (CHILD) has received (in the last 12 months/since [his/her] birth). Think about the last time you took (CHILD) for a check-up. How long was the doctor or health care provider who examined (CHILD) in the room with you?

How would you rate (CHILD)’s check-ups (during the last 12 months/since [his/her] birth)? Please include all the doctors, nurses, and other health providers that (CHILD) may have seen (Scale of 0–10).

**Topic: Home Visiting Nurse**

A public health nurse is a nurse or visiting nurse that comes to your home for a visit about (CHILD). In the last 12 months, how many times did a public health nurse visit your home?

**Topic: Care Coordination (items derived from the NSCH)**

In the last 12 months (or since child’s birth), did your child need any special services, equipment, or other care for his/her health?

1a. How much a problem, if any, was getting the special services, equipment, or other care that he/she needed? Would you say you had a big problem, moderate problem, small problem, or no problem at all?

**Topic: Day Care (items derived from the NSECH)**

In a typical week, how many hours does your child spend in the care of someone other than a parent or guardian?

1a. Is the person who usually cares for child a relative or non-relative?

1b. Is your child mostly cared for in your home, in someone else’s home, or in a day care center?

**Topic: Obesity**

How much does your child currently weigh? * What is your child’s current height? *

*Items used to calculate the child’s Body Mass Index. Only applicable to children 2 years or older.*
STEP 2.5: Identify analytic information to be collected at the time of sampling

WHAT IS THE PURPOSE OF THIS STEP?

The purpose of this step is to identify data that can be linked to PHDS-PLUS results in order to enhance the value of the data collection. Supplemental data, in this case, refer to any data that are not directly needed for the administration of the survey but can be used for analytic purposes. For example, you may want to add an indication of whether the child had a HEDIS-defined well-care visit, or you may even want to have the child’s claims history for more detailed analyses. Due to new federal regulations on data privacy (from the Health Insurance Portability and Accountability Act, or HIPPA), it is best to collect any child-level information prior to administering the survey, since obtaining information retroactive to receipt of completed surveys is often not acceptable. The confidential survey administration process recommended in this manual does not allow for any person-identifying information, such as the enrollee ID, to be linked with completed survey data.

In this step you will:

- Identify **data elements to collect** at the same time as survey sampling such as those outlined in Figure 2.4 below (e.g., child enrollment and utilization). These data file elements will be used for **analytic** purposes.

- Obtain and **link data elements to the sampling data file** before pulling the starting sample.
Figure 2.4: Examples of Data Elements to Collect at the Time of Sampling

**Child Characteristics**
- Race-ethnicity
- Date of birth
- Gender
- County
- Geographic region (e.g., urban, suburban, rural)
- Public health district

**Child Enrollment Characteristics**
- Months of continuous enrollment
- Program child is enrolled (Medicaid, SCHIP)
- Medicaid Program child is enrolled (fee-for-service, managed care organization, primary care case management)
- Where applicable, child’s health plan
- Where applicable, child’s primary care provider (including specialty, e.g., pediatrician, family medicine)
- Enrollment in Part C program

**Child Health Care Utilization Characteristics**
- Number of office visits (non-emergency room, urgent care)
- Number of well-child visits
- Number of urgent care visits

(For each of the above, the provider who delivered the care and the setting in which the care was provided e.g., private practice, federally qualified health center, rural health center)

**Whether Child Utilized Services in Other Departments**
- Dept. of Health services (e.g., whether the child received a visit from a public health nurse)
- Dept. of Children with Special Health Care Needs services (e.g., whether the child received care coordination services)
- Dept. of Mental Health Services services (e.g., whether the child received care from a Dept. of Mental Health provider)
GUIDELINES AND ISSUES TO CONSIDER

Be sure to:

- **Align dates** for utilization and enrollment data elements to survey timeframe (e.g., past 12 months from start of survey administration).

- **Include utilization data** if possible. In the PHDS-PLUS data that has been collected to date with Medicaid clients, more than 95% of families who complete the survey respond that their child has seen a doctor or other health care provider in the last 12 months or since the child’s birth. As such, details on utilization will be available for most children and can be valuable when analyzing PHDS-PLUS results. For example, it can be very useful to examine findings for children according to the number of visits they have had in the past year or by whether utilization indicates the presence of certain types of health problems.
## Example 2.5: State-Specific Analyses Conducted Using Analytic Variables

<table>
<thead>
<tr>
<th>State</th>
<th>Example Research Questions</th>
<th>Example of Analytic Variables Constructed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louisiana</td>
<td>Examine quality of care findings by whether the child is enrolled in the Community Care Program, and to examine if there are variations in the findings by the length of time the child has been enrolled in the CCP program</td>
<td>Binomial variable of whether the child is enrolled in the Community Care program. Categorical variable related to the length of enrollment (e.g., more than 12 mos., less than 12 mos., not currently enrolled)</td>
</tr>
<tr>
<td></td>
<td>For children enrolled in the CCP program, to examine quality of care findings by the type of provider who serves as the child's primary care provider</td>
<td>Categorical variable of the type of pediatric clinician who provided a majority of the well-child care</td>
</tr>
<tr>
<td></td>
<td>Examine quality of care findings for children enrolled in the Part C program</td>
<td>Binomial variable of whether the child is enrolled in the Part C program</td>
</tr>
<tr>
<td></td>
<td>Examine quality of care findings by place where the child receives care (private practice, federally qualified health center, rural health center)</td>
<td>Categorical variable of the place where child received well-child care</td>
</tr>
<tr>
<td>Minnesota</td>
<td>Examine quality of care findings by health plan</td>
<td>Categorical variable of the health plan child is enrolled</td>
</tr>
<tr>
<td></td>
<td>Examine quality of care findings by child's race-ethnicity</td>
<td>Categorical variable of the child’s race/ethnicity</td>
</tr>
<tr>
<td></td>
<td>Examine quality of care findings by whether child received visits from a public health nurse</td>
<td>Categorical variable of the number of public health visits the child had</td>
</tr>
<tr>
<td></td>
<td>Examine quality of care findings by the number of and kinds of health care services the child utilized</td>
<td>Categorical variable of the number of well-child visits the child had in the last 12 months</td>
</tr>
<tr>
<td></td>
<td>Examine quality of care findings by where the child has received care</td>
<td>Categorical variable related to the place where child received well-child care</td>
</tr>
<tr>
<td>State</td>
<td>Example Research Questions</td>
<td>Example of Analytic Variables Constructed</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mississippi</td>
<td>Examine quality of care findings ONLY for children who had one or more office visit</td>
<td>Binomial variable of whether the child had an office visit in the last 12 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Binomial variable of whether the child had a well-child visit in the last 12 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Categorical variable of the number of well-child visits the child had in the last 12 months</td>
</tr>
<tr>
<td></td>
<td>Examine quality of care findings for children enrolled SCHIP</td>
<td>Binomial variable of the program to which the child is enrolled (Medicaid, SCHIP)</td>
</tr>
<tr>
<td></td>
<td>Examine quality of care findings by the number of and kinds of health care services the child used</td>
<td>Categorical variable of type of pediatric clinician who provided a majority of the well-child care</td>
</tr>
<tr>
<td></td>
<td>Examine quality of care findings by where the child has received care</td>
<td>Categorical variable of the place where child received well-child care</td>
</tr>
<tr>
<td></td>
<td>Examine quality of care findings by WHO delivered the care</td>
<td>Categorical variable of type of pediatric clinician who provided a majority of the well-child care</td>
</tr>
<tr>
<td>Ohio</td>
<td>Examine quality of care findings by geographic region where the child resides</td>
<td>Categorical variable of the region the child resides (e.g., urban, suburban, rural/Appalachian, rural/non-Appalachian)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Binomial variable of whether the child lives in a zip code that is at high risk for lead poisoning</td>
</tr>
<tr>
<td></td>
<td>Examine quality of care findings by child’s race/ethnicity</td>
<td>Categorical variable of the child’s race/ethnicity</td>
</tr>
<tr>
<td></td>
<td>Examine quality of care findings for children enrolled in the Title V program</td>
<td>Binomial variable of whether the child is enrolled in the Title V program</td>
</tr>
</tbody>
</table>