



MEASURING WHAT
MATTERS: EXERCISES IN
DATA MANAGEMENT

**EXERCISE 1: PREPARE** 

#### **Acknowledgments**

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Management—Exercise 1: Prepare.







# **Measuring What Matters Exercise 1: Prepare**

**Exercise 1** is about **preparing** for data collection. Preparation means that you start with what you already know and consider what new questions you need to explore to strengthen your work with children and families.

This exercise presents a scenario about a fictional Head Start and Early Head Start program. It introduces you to measurement ideas ("measures of effort" and "measures of effect") that you can use as you identify data tools or methods for tracking progress.

You can use this exercise to:

- Identify the Head Start Parent, Family, and Community Engagement (PFCE) Framework Family Outcomes and program goals you want to achieve in partnership with families.
- Guide the process of reviewing related program objectives, services, and activities for families.
- Understand measures of effort and measures of effect to help determine the difference your program is making for families.

#### **How to Use Exercise 1:**

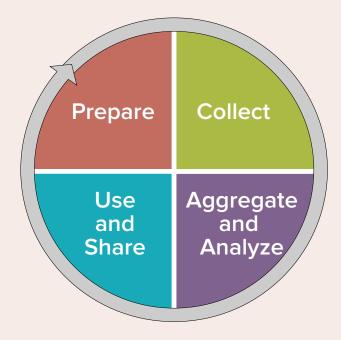
#### On Your Own

- Read the scenario, Program Planning and Preparing for Data Collection.
- Reflect on similarities with your program's PFCE work.
- Review the instructions for completing Tables 3 and 4.
- Complete Tables 3 and 4 using information from your program.

#### With a Group

- Share your answers to the prompts in Tables 3 and 4.
- Create a plan for applying the data concepts to your program.

## The Four Data Activities to Support Family Progress Toward Positive Family Outcomes



The exercises in this series are organized to follow the Four Data Activities. Each of these exercises focuses on a specific activity:

- Prepare: Get ready for data collection by thinking about the program goals, objectives, services, and expected outcomes that you need in order to show the reach and impact of your work.
- Collect: Identify how to gather data that are useful and easy to interpret.
- Aggregate and Analyze: Learn ways to look at data to examine progress for families and your program.
- Use and Share: Understand the importance of sharing data in accurate, appealing, and accessible ways and how data can inform various aspects of programming.

Begin with the Prepare exercise and follow with Collect, Aggregate and Analyze, and Use and Share. There may be times when it is useful to revisit one of the Four Data Activities as you learn more about your program's data and progress.



#### **Parent and Family**

In this resource, "parent" and "family" refer to all adults who interact with early childhood systems in support of their child, including biological, adoptive and foster parents, pregnant women and expectant families, grandparents, legal and informal guardians, and adult siblings.

## Head Start Parent, Family, and Community Engagement Framework

The Head Start PFCE Framework is an organizational guide for collaboration among families and Head Start and Early Head Start programs, staff, and community service providers to promote positive, enduring outcomes for children and families. The Framework identifies equity, inclusiveness, cultural and linguistic responsiveness, and positive goal-oriented relationships as important drivers for these outcomes.

The PFCE Framework shows how family engagement strategies can be systemic, integrated, and comprehensive across services and systems in line with the Head Start Program Performance Standards

You can use data to engage families and support progress toward one or more of the seven PFCE Framework Family Outcomes. You can also use data to track progress as your program sets goals and develops and implements plans within the five-year project period.

Positive & Goal-Oriented Relationships			
Equity, Inclusiveness, Cultural and Linguistic Responsiveness			
PROGRAM FOUNDATIONS	PROGRAM IMPACT AREAS	FAMILY OUT COMES	CHILD OUTCOMES
Program Leadership Professional Development Continuous Learning and Quality Improvement	Program Environment Family Partnerships Teaching and Learning Community Partnerships Access and Continuity	Family Well-being Positive Parent-Child Relationships Families as Lifelong Educators Families as Learners Family Engagement in Transitions Family Connections to Peers and Community Families as Advocates and Leaders	Children are:  Safe  Healthy and well  Learning and developing  Engaged in positive relationships with family members, caregivers, and other children  Ready for school  Successful in school and life

#### **LEARNING OBJECTIVES**

- Help program staff align goals, objectives, and services with related PFCE Framework Family Outcomes.
- Understand the differences between measures of effort and measures of effect.
- Guide program staff in deciding how they will track progress toward expected family outcomes, beginning by asking the right questions.



Did you know the word data is plural?

For example, "Data refer to information. They can be presented in numbers and/or words."

# Sunnyside Head Start and Early Head Start Program Scenario: Program Planning and Preparing for Data Collection

Tyler Robbins, the Executive Director of Sunnyside Head Start and Early Head Start, was proud of the program's partnerships with families. He was able to talk about the great family programming they had in place. For example, his program made home visits and hosted a number of well-attended parenting workshops. But Tyler knew there was room for improvement. He recognized what his program was doing and wondered how to show the ways that families were making progress.

#### **Reviewing Data and Setting Goals**

Tyler turned to Sunnyside's data for guidance. He reviewed data from the program self-assessment and the Head Start Program Information Report (PIR). Tyler also looked at data collected from other program activities. He noted that the data focused mainly on the types of services families received. For example, the PIR data showed the number of families who attended parent education programs. The program activities data reported the number of fathers involved in father engagement efforts.

These data provided important information about Sunnyside's services for families. But Tyler needed more information. He wanted to know whether these services were making a difference. For example, he knew how many families received Early Head Start home visits. He also wanted to understand how families were connecting with their children after the home visits.

Tyler knew that Sunnyside needed to continue to collect the type and number of program activities delivered (measures of effort). He also wanted to collect new data about the results of program activities (measures of effect). This would help him know more about the differences the program was making for families. To collect these new data, Tyler and his staff would need to prepare.

#### **Developing Goals, Objectives, Services, and Expected Outcomes**

Tyler formed a committee with key staff, Policy Council members, and parent leaders. Together this group would plan for the new data collection process. They would ask important questions about their program goals, objectives, services, and expected family outcomes. These questions can be called evaluation questions. The committee could then identify measures and data sources to track progress related to these family outcomes.

**Goals:** The group began by thinking about program goals. Tyler explained that a program goal is a broad, inspirational statement. A goal describes what the program wants to accomplish. Group members reviewed summaries of individual family goals from family partnership agreements (FPAs). These data provided rich and descriptive information. The members also looked at responses to annual surveys about family engagement activities.

The committee members found that their program needed to strengthen partnerships with families in three areas. They needed to focus on children's social and emotional development, early reading skills, and the transition from Head Start to kindergarten.

Based on the data, the committee asked themselves an important question: "What does our program want to accomplish in our PFCE work?" The committee set the following program goal:

Sunnyside will offer guidance, support, and tools for families to:

- 1. Nurture positive relationships with their children
- 2. Guide their children's learning and development
- 3. Advocate for their children's transition to kindergarten

**Objectives:** The group went on to develop objectives for their program and families. Tyler explained that objectives break down goals into SMART elements (Specific, Measurable, Attainable, Realistic, and Timely). Tyler asked the committee members to think about what they were planning to do to reach their program goal. The group discussed questions such as:

- What does a nurturing relationship with a child look like?
- How can staff support parents and families to guide their children's learning?
- Do the actions we propose promote equity? Are they culturally and linguistically responsive?
- How can we ensure two-way communication with families?
- What are some of the challenges that we might face?

For guidance about establishing program goals and measurable objectives consult Head Start Program Performance Standards Subpart J—Program Management and Quality Improvement.

Program goals for the provision of family and community services describe what a program intends to accomplish in its work with and in support of families.

Program goals should be BROAD: Bold, Responsive, Organizationwide, Aspirational, and Dynamic.

An objective expands on a goal. It describes what the program is intending to do to reach the goal.

Objectives should be SMART:
Specific, Measurable, Attainable,
Realistic, and Timely.



**Services:** Next, the group reviewed the existing program services that support their new goal and related objectives. They identified which services might already contribute to progress toward the goals and objectives. Parents shared important insights. They talked about the services that supported their relationships with their children. Parents also identified the services that helped them support learning, development, and successful transitions. (See Table 1 for a few examples of these services.)

**Expected Outcomes:** Finally, the group began to think about the expected outcomes that related to Sunnyside's goals, objectives, and services. Tyler explained that expected outcomes are the results that Sunnyside wants to achieve for families. The program would be responsible for showing progress toward these outcomes each year.

The group was already familiar with the Head Start PFCE Framework. Tyler reminded them that the blue column outlined seven general Family Outcomes. He encouraged his team to think about which Family Outcomes in the PFCE Framework they wanted to address. The group agreed on the following:

- 1. Positive Parent-Child Relationships
- 2. Families as Lifelong Educators
- 3. Family Engagement in Transitions

Tyler encouraged the group to get more specific. He suggested they identify expected outcomes related to their goals, objectives, and services (actions). (See Table 1 for the outcomes they identified.)

See the revised Foundations for Excellence: A Guide for Five-Year Planning and Continuous Improvement, 2nd Edition, on the Head Start Early Childhood Learning and Knowledge (ECLKC) website for more information about goals, objectives, and expected outcomes.

**Table 1.**Sunnyside Head Start and Early Head Start: What Do We Want to Know about Goals, Objectives, Services, and Expected Outcomes?

Goal	Objectives	Services (Actions)	Expected Outcome
What program goal do we want to accomplish to support family outcomes?	What are we planning to do to reach our program goal? Over a five-year period, our program will establish processes and offer services so that families:	What actions are we going to take to reach our objectives?	What are our expected outcomes related to our goals, objectives, and services (actions)?
Sunnyside Head Start and Early Head Start will offer guidance, support, and tools for families to  1. nurture positive relationships with their children,  2. guide their children's learning and development, and  3. advocate for their children's transition to kindergarten.	1. Nurture relationships with their children Objective 1a: Increase families' knowledge and skills to engage in warm and responsive parent-child interactions through at least one program activity each week. Objective 1b: Build on family strengths and cultures to create two-way conversations with families and staff about child development through at least one program activity each week.  2. Guide their children's learning Objective 2a: Help program staff acquire the knowledge and skills to develop positive goal- oriented relationships with families in at least two training events each year. Objective 2b: Offer materials, training, and services for families to acquire the knowledge and skills to promote children's learning in at least one program activity each month.	Early Head Start home visits focused on strengthening parent-child relationships Parenting discussions on children's social-emotional development Staff training and coaching on developing positive goal-oriented relationships  Staff training and coaching on developing positive goal-oriented relationships Family literacy programming Parent-teacher conferences and home visits	Families apply knowledge about child development to interactions and experiences with their children. (Parent-Child Relationships)  Families develop the knowledge and skills necessary to promote children's learning (Families as Lifelong Educators)
	3. Advocate for their children  Objective 3: Help families build their capacity to be advocates during their children's transition to kindergarten and beyond through at least two activities each year.	Orientation about success in kindergarten and school School tours for children and families	Families have increased capacity to be advocates during their children's transition to kindergarten and school (Family Engagement in Transitions)



#### MEASURES OF EFFORT AND MEASURES OF EFFECT

<u>Measures of effort</u> count what and how much family programming is offered. They describe whether and to what extent activities were carried out as planned. For example, a measure of effort is a count of the number of parent education workshops or the number of families who participate in them. These measures show what was done, but do not tell you about the results of your services and activities.

<u>Measures of effect</u> measure changes in knowledge or behavior as a result of the activity. They track whether your activities have made a difference. For example, a measure of effect shows how reading routines change in the home after (or "as the result of") a family literacy intervention.

Both types of measures are important to help you understand whether your program is making progress partnering with families and on program goals or objectives that relate to family outcomes.

### **Reflecting on Family Progress**

#### **Developing Measures of Effort and Measures of Effect**

As a final step, the committee needed to develop measures to track two important types of information. First, Sunnyside needed to measure whether they were offering services that reflected their goals. They needed to know how much staff and families were participating in those services (measures of effort). The Sunnyside team asked themselves questions about what their program does (e.g., activities that they have implemented).

Second, Sunnyside needed to measure whether family and staff knowledge and behavior were changing as a result of the services (measures of effect). The group asked questions about results—how their program impacts the knowledge, skills, or behaviors of children, families, or staff. The committee developed Table 2 as a way to record their questions and relate the measures of effort and measures of effect to the services delivered. These are also called evaluation questions..

With a new plan in place, Tyler and the staff felt prepared to collect the data they needed to show how families and the program were making progress.

**Table 2.**Sunnyside Head Start and Early Head Start: Tracking Family and Program Progress

Services (Actions)	Questions for Tracking Family and Program Progresss		
What actions are we going to take to reach our objectives?	Measures of Effort: How much programming are we offering? Are we carrying out services as planned?	Measures of Effect: What difference is our program making? What are the changes in the knowledge and behavior of families and staff?	
1. Early Head Start home visits focused on strengthening parent-child relationships  2. Parenting sessions on children's social-emotional development  3. Staff training and coaching on developing positive goal-oriented relationships	<ol> <li>What is the percentage of time that home visitors spend discussing children's learning and development at each home visit?</li> <li>How many families attend each parenting discussion about children's social and emotional development? How many discussions does each family attend?</li> <li>How many staff training and coaching activities does the program offer about building positive goal-oriented relationships with families?</li> </ol>	<ol> <li>How are parent-child relationships becoming more nurturing and responsive?</li> <li>How are families gaining the knowledge and skills to encourage positive social and emotional development?</li> <li>How are teaching staff changing their partnerships with families to encourage children's positive social and emotional development?</li> </ol>	
Staff training and coaching about developing positive goal-oriented relationships     Family literacy programming     Parent-teacher conferences and home visits	<ol> <li>How many staff training and coaching activities does the program offer about building positive goal-oriented relationships with families?</li> <li>How many family literacy activities does the program offer? How many families attend each family literacy activity? How many activities does each family attend?</li> <li>How many parent-teacher conferences are offered? What percentage of families attend parent-teacher conferences?</li> </ol>	<ol> <li>How are teaching staff improving their knowledge, skills, and attitudes about working with families to support children's learning?</li> <li>How are parents gaining the knowledge, skills, and attitudes to foster a love of reading?</li> <li>How are teachers changing their practices to welcome families' thoughts, ideas, and observations about children's learning?</li> </ol>	
Orientations about success in kindergarten and school     School tours for children and families	How many families participate in orientations?     How many families participate in school tours?	<ol> <li>Do families have an increased understanding of kindergarten expectations for their children?</li> <li>Do parents feel comfortable communicating their child's strengths and challenges with kindergarten teachers after meeting them?</li> </ol>	

## How can you engage families as you prepare to collect data?

- Share information about why you are preparing to collect data.
- Build family awareness and comfort about data. Encourage families to participate in meetings where data are used and shared.
   Display data charts about program-wide progress toward child and family goals in your program's public spaces (e.g., parent resource room or lobby) and in parent newsletters.
- Share data in the languages spoken by families in the program, whenever possible.
- Invite families to help you identify measures of effort. Ask them what questions they would ask to improve and strengthen a specific process (e.g., goal-setting), services (e.g., health referrals), or participation in an activity (e.g., parent peer groups). This can help you discover meaningful measures of effort.
- Invite families to help you identify measures of effect. Ask them to describe the types of family changes that are important to assess the impact of your services and activities. What does progress look like? This can help you develop culturally sensitive measures of effect.

#### **Your Turn**

Now that you have read about Sunnyside's **preparation** for data collection, you can take the first step to clarify what you want and need to know about your own program. Tables 3 and 4 give you an opportunity to:

- Clarify your program's goals, objectives, services, and expected outcomes related to the PFCE Framework Family Outcomes.
- Ask questions about what your program is doing—measures of effort—and what is changing as a
  result of these activities—measures of effect. These are called evaluation questions.

#### Instructions:

- 1. Turn to Table 3.
- 2. Identify one or more program goal related to expected program outcomes for families and children.
- 3. Consider SMART objectives that will help you achieve your goal(s). Think about the difference that you can make for your families and staff.
- 4. Identify the services and strategies that align with or can be effective in reaching your objectives.
- 5. Relate your goals, objectives, and services (actions) to the expected outcomes.
- 6. Turn to Table 4.
- 7. Copy the services (actions) you wrote in Table 3.
- 8. Write questions that will help you measure your program's efforts (how much programming you are offering) and effects (what difference your program is making). Refer to the Sunnyside program example in Table 2 for guidance.
- 9. Reflect on your responses. Are you creating a balance between measures of effort and measures of effect?

**Table 3.**What Does Our Program Want to Know about Goals, Objectives, Services, and Expected Outcomes?

Goal	Objectives	Services (Actions)	<b>Expected Outcomes</b>
What program goal do we want to accomplish to support family outcomes?	What are we planning to do to reach our program goal?  Over a five-year period, our program will establish processes and offer services so that families:	What actions are we going to take to reach our objectives?	What are our expected outcomes related to our goals, objectives, and services (actions)?
Goal 1.			
Goal 2.			
Goal 3.			

# **Table 4.**How Can We Track Family and Program Progress?

Services (Actions)	Questions for Tracking Family and Program Progress	
What actions are we going to take to reach our objectives?	Measures of Effort: How much programming are we offering? Are we carrying out services as planned?	Measures of Effect: What difference is our program making? What are the changes in the knowledge and behavior of families and staff?

#### **Closing Thoughts**

The first activity in the data management cycle is **prepare**. Preparation helps you plan for new data collection and informs your program planning process. To be most effective, program managers, staff, and families engage in this process together.

Preparation involves several steps. First, it includes reviewing data about families that has already been collected. Next, it involves asking evaluation questions to clarify and prioritize goals, objectives, and expected outcomes.

Preparation also involves asking evaluation questions that focus on measures of effort and measures of effect. Measures of effort show the amount of effort needed to provide high-quality services to families and meet program goals. Measures of effect show changes in knowledge and behavior that result from the services or activities your program offers. Both measures of effort and measures of effect are useful in determining your progress.

Now that you have completed the steps in this exercise, you are ready for the next activity in this series. In Exercise 2, **Collect**, you will learn how to choose data collection tools and plan for gathering the data.

Explore related resources on the Head Start Early Childhood Learning and Knowledge Center (ECLKC) website:

Foundations for Excellence: A Guide for Five-Year Planning and Continuous Improvement, 2nd Edition

Integrating Strategies for Program Progress

Strategies for Implementing the Head Start Parent, Family, and Community Engagement Framework

ARE YOU INTERESTED IN LEARNING MORE ABOUT USING DATA TO SUPPORT FAMILY PROGRESS?

Explore other Measuring What Matters Resources on ECLKC, including:

- Overview
- Exercises in Data Management
   Series
- Resource Guide





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