The Four Data Activities

Prepare

Planning for data collection ensures that programs know up front what data they need to collect to make sure they are completing tasks in a timely manner and to track progress towards their goals and objectives. If you don’t think ahead, you may not be able to retrieve missing data. Planning ahead for data oftentimes eliminates data paralysis, which happens as a result of collecting too much data.

Here are some things to consider in planning for data use:

➢ What do we want to know?
  o What are our significant questions? How do we determine this?
    ▪ What would have the biggest impact on our program?
    ▪ What changes are under our control?
    ▪ What would our end point (destination) look like?
  o What data are important, given the stated program goal(s) and objective(s)?
    ▪ How will we know if we are moving toward reaching our goal(s) and objectives? (What are our indicators of progress?)
  o What are our measures of success?
    ▪ What are our “bright spots”? 
    ▪ What “small wins” can we accomplish in reaching our broad goals and SMART (specific, measurable, attainable, relevant and timely) objectives?

➢ What do we already know?
  o What data do we already have through our ongoing monitoring and Self-Assessment systems?
  o What established data collection methods exist via our recordkeeping and reporting system? (Use both quantitative and anecdotal data.)
  o Are we collecting enough data? Too much data? The right data?
  o Who collects the data? When is it collected?
  o Who reviews it?

➢ What new questions do we have?
  o What additional data might we need?
  o What quantitative and qualitative methods (e.g., new data-surveys, interviews, and focus groups) will we use to get it?
Collect

Head Start programs are required to collect a lot of data. This wealth of data can be both a blessing and a curse. Sometimes Head Start programs are so inundated with data that data paralysis results. To be effective, data collection must be intentional and organized. Follow the “Goldilocks” principle for collecting data. Too much data is overwhelming. Too little may not provide what you need. Collect “just right” data, and only collect data that will be used. Use a variety of methods to collect data. You will want to have multiple sources of data to inform your decisions.

Major data sources in Head Start and Early Head Start include:
- Community assessment
- Program Information Report (PIR)
- Ongoing monitoring
- Self-Assessment
- Child outcomes data
- Individual reports from Aligned Monitoring System events (Years 1 – 3) and comprehensive report (Year 4)
- Fiscal reports
- Health services data tracking
- Family services data tracking
- Other services related to tracking (e.g., mental health, disabilities)

Much of the data collected by Head Start programs is what Peter Drucker calls “Operational Data.” Through their recordkeeping and reporting and ongoing monitoring systems, Head Start programs are able to make sure that their service delivery is on target. For example, they can track whether all required screenings are completed on time, whether families have a medical home, and whether families have signed Family Partnership Agreements.

Management staff reviews this data regularly to make sure that the program has good quality data—data that is complete, accurate, and timely. Remember: “Garbage in, garbage out.”

In the “Collect Data” activity, you decide:
- How will data collection fit into the everyday work of management and staff?
- How will it be entered into recordkeeping systems? Who will enter it?
- How will we check it for accuracy? Who will check it?
How will we make adjustments to our data collection while we are implementing our strategies?

Aggregate and Analyze

“Aggregate and analyze” means putting the data to use by looking at it in different ways. This is where you begin to turn data into usable information. You examine data in different ways to identify what is working and what is not working; identify trends and patterns that pinpoint needs, strengths, and challenges; connect different types of data and sources to get a bigger picture; and compare data—such as conducting a longitudinal analysis that compares the same data from year to year or comparing Head Start data to external local, regional, state, or national data.

Aggregated data gives you an overview of your entire program. However, you may miss significant things if you only look at aggregated data. To disaggregate data, you break it down by different, significant subgroups. For instance, the aggregated data may show that a large percentage of your children are meeting expected literacy outcomes. However, if you disaggregate the data, you may learn that the children in your program who are dual language learners or who are homeless are not meeting this expected outcome.

In the aggregate and analyze data activity, you decide:

- How will we organize our data in ways that help us understand what it says?
- How will we coordinate a variety of different data sources?
- How will we work together to ask questions about it (e.g., what is working and what is not)?
- How will we use our data to determine trends of needs, strengths, and challenges?
- How will we compare data over time?
Use and Share

“Use and share” are the most relevant parts of the data process for Head Start leaders. This is where programs continue to turn data into information and then use it to make significant program decisions, guide program improvement efforts, solve problems, and identify new critical questions based on the results of their data analysis. It is how you know that your organization is basing its decisions on sound information rather than on hunches, where you move from “We think” or “We believe” to “We know.”

Once you have looked at your data in different ways, you can begin to make inferences and identify root causes. It’s important to remember that sometimes people looking at the same set of facts can disagree about the interpretation and that sometimes you will end up with more questions than answers and need to dig deeper. When programs spend time in the discussion of their data, a shared understanding of the meaning of data occurs. Here are some ways to approach interpreting data:

- I believe that the data suggests ________________________ because ___________
- Here are some tentative conclusions we’ve reached . . .
- What are some additional data that would help me confirm or refute my conclusion?
- What are possible causes?

Head Start programs share data with a range of audiences, from parents to the Office of Head Start. In addition, programs are required by the Head Start Act to deliver an annual report to the public. Many of these audiences need information about the same thing. For example, staff, parents, the governing body and Policy Council, the local education agency (LEA), and the regional office all need information related to child outcomes. However, what they need, how they need it presented, and what they do with the information differ. It is helpful to present data graphically and visually to provide information in user-friendly ways. Consider thinking about it as the four A’s of data: accurate, appealing, accessible, and audience specific.