# Evaluating Practice Change and Practice Fidelity

## **Session 3 Pre-Work**

## *What do we do with all this data? Pulling everything together and preparing for data analysis and use*

To help you prepare for Session 3, this pre-work addresses the following topics:

* Aggregating (summarizing) data
* Aligning unit of analysis with evaluation questions

## Aggregating Data

Data about implementation of evidence-based practices are key to informing state work related to the State Systemic Improvement Plan (SSIP). When reporting the results of the evaluation in the SSIP, it is important to **aggregate**, or summarize, data collected in local programs across the state into a state-level result that can be compared to the pre-established performance indicator. These data will be reported in the SSIP submission to OSEP, but they are also useful for states and locals to understand and improve implementation of evidence-based practices. Local program administrators use data on individual practitioners, children, and families to support practitioners in improving practices. State administrators and other state level stakeholders use aggregated data across programs to identify successes and challenges experienced at the local level. These data then inform adjustments and supports needed at the state and/or local level to support implementation of evidence-based practices.

Data aggregation involves collapsing data collected at the local level on individual programs, practitioners, families, and children into concise data summaries. The goal of aggregation is to represent all practitioners involved in the improvement efforts systematically and consistently in a single data summary. To obtain data from local programs that can be collapsed into a single data summary, the state must clearly communicate with local programsthedata needed on program implementation and practice change to ensure data are collected and aggregated in a uniform manner across the state.

Table 1 presents examples of different ways data can be aggregated and the steps to calculate each.

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| **Table 1: Data Aggregation Examples** | | |
|  | **Example Data Summary** | **Steps** |
| **Average Practitioner Change Scores** | *“Across implementation sites, practitioners’ scores on the HORVS-A+**assessment increased by 5 points, on average, from baseline to 6 months following the baseline assessment.”* | 1. Calculate the change in scores on a practice change/fidelity assessment between two time points by subtracting the time 1 score from the time 2 score (e.g., Spring – Fall) for each individual. 2. Calculate an average change score for the time period being examined (e.g, from Fall to Spring) by adding the change in scores for all practitioners included in the calculation, then dividing by the number of practitioners included.   A positive score means that, on average, practitioners’ performance improved, and a negative score indicates performance declined. |
| **Percentage of Practitioners with Improved Scores** | *“Scores on the HORVS-A+ increased between the Fall 2016 and Spring 2017 assessments for about three-fourths (72%) of the practitioners doing early intervention home visits statewide,”* | 1. Calculate the change in scores on a practice change/fidelity assessment between two time points by subtracting the time 1 score from the time 2 score (e.g., Spring – Fall) for each individual. 2. Calculate the percentage of practitioners with a positive change score. |
| **Percentage of Practitioners Meeting Fidelity Threshold** | *“By the end of the 2016-17 school year, 64% of practitioners were implementing the family engagement practices with fidelity. This compares to 52% at the end of the 2015-16 school year.* | 1. Calculate each practitioner’s score on the practice change/fidelity assessment. 2. Compare each practitioner’s score to the fidelity threshold. 3. Calculate the percentage of practitioners meeting the fidelity threshold. 4. Compare this percentage to other time points to see if the percentage is increasing over time. |
| **Percentage of Programs Meeting Performance Indicator for Practitioner Fidelity** | *“At the Spring 2017 time point, 75% of local programs met the performance indicator for practitioners implementing family-centered practices with fidelity. This compares to 45% of local programs meeting the performance indicator for practitioners implementing the practices with fidelity at the Fall 2016 time point.”* | 1. Set criteria for determining whether a local program is considered meeting a performance indicator for the percentage of practitioners implementing with fidelity (e.g., if 75% of practitioners within a program meet fidelity, the program is considered meeting the performance indicator). 2. Calculate the number of practitioners within a local program who meet the fidelity threshold on the fidelity measure (see instructions above). 3. Compare this number of practitioners to the criteria set for determining whether the program meets the performance indicator. 4. Repeat for each local program. 5. Compare the number of local programs meeting the performance indicator to the total number of local programs to determine the percentage of programs meeting the performance indicator. 6. Compare across time points. |

## Aligning Unit of Analysis with Evaluation Questions

Think through the questions you would like to answer to determine the analyses that need to be run. These questions and analyses may be at the practitioner, local program, and/or state level. Sample questions are below.

Example Questions about Practice Implementation at Different System Levels[[1]](#footnote-1)

Practitioner Level

* Is the practitioner implementing with fidelity?
  + For which practices has the practitioner made progress since the initial fidelity measurement?
  + For which practices is the practitioner still not meeting fidelity?

Local Program Level

* Are practitioners implementing the EBP with fidelity?
  + What percentage of practitioners are meeting the criteria for fidelity across all components of the fidelity tool?
  + Which components of the fidelity tool have the highest average score across practitioners? The lowest?
  + Which components of the fidelity tool show the greatest growth across practitioners? The least growth?

State Level

* Are practitioners within local programs implementing the EBP with fidelity?
  + What percentage of programs are showing growth in the average scores on fidelity assessments across practitioners?
  + What percentage of programs meet a performance indicator for percentage of practitioners at fidelity?

## Pre-Work for Session 3

Please complete one response per state team.

### Specify Your State and Program: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

At what levels do you plan to analyze your data on implementation of SSIP evidence-based practices? (check all that apply)

* + Practitioner
  + Coach
  + Local program
  + Region
  + State
  + Don’t know/not determined

What questions do you have about aggregating data for different audiences and/or purposes?

What other questions do you have about analyzing and using data?

1. Adapted from <http://ectacenter.org/~pdfs/calls/2017/learninglab_s4-1_data_questions.pdf> [↑](#footnote-ref-1)