Fundamentals of Data Quality and Local Data Quality Topical Burst and TA Workshop

Topical Burst: Fundamentals of data quality (Mary Watson)

TA Workshop: Data

Tools:

Objective: to provide a brief overview of the fundamentals of data quality.

- Issues related to confidence, completeness, reliability, validity
- High quality data is timely, accurate and complete
 - Timely data are current and available.
 - Accurate data are:
 - Reliable, that is, consistent across time, methods, and locations, and;
 - Valid, that is, represent what they intend to measure.
 - *Complete* data represent the expected population
 - That is, no missing data.
- Factors affecting timeliness?
 - Frequency of collection
 - Length of time needed to process the data after it is submitted
 - Preventing errors on the front end
 - Manual vs automated processes for data validation/verification
 - What is the gap of time between what the data describes (i.e. point in time or the reporting period) and when it is available for use?
 - The shorter the time from initial data entry to when the data is used, the stronger the feedback look to correct the data.
- Factors affecting accuracy
 - Clear and consistent definitions
 - $\circ \quad \text{Clear and consistent guidance}$
 - Automated data quality checks
 - Restrictions on valued that can be submitted
 - o Data quality reports that allow submitters to review data
- Factors affecting completeness
 - Clear and consistent guidance on what data should be reported and for whom
 - System checks to notify submitter when no data has been submitted for a specific element and/or groups of elements
 - Ability to view trend data (i.e. year to year comparisons) to check for reasonableness

TA Workshop: Moving data quality downstream – building a culture of data quality at the LEA level (Tiffany & Chris)

State Participants:

Kansas City, MO		Savannah, GA	
State	Contact/Team	State	Contact/Team
Kansas	Mason Vosburgh	Georgia	Carol Saey
lowa	Meredith McQuigg Barbara Guy	Wisconsin	Amy Owen Barbara Vanharen Nancy Furman

Tool:

- Data Manager Training Modules; (Topical Burst perhaps)
- Pre-submission Edit Check Tools (System Development Strategies);
- Interactive Application for Ed Environments (3-5) (Communication)
 Decision Tree

Objective: Building upon the fundamentals of data quality, explore how these principles can be implemented closer to the source by working with LEAs to develop a culture of data quality. Specific focus on how to communicate and support LEAs in collecting, evaluating and using high quality data.

Summary: This session will build on the Topical Burst, *Data Quality: What It Means and Why It Is Important*. As part of the session, strategies will be discussed that SEAs may use to assist LEAs in collecting Section 618 and other State required data that is of high-quality. IDC's Knowledge Lab that lists various resources around different data collections will be explored. The Knowledge Lab contains many resources designed to assist SEAs and LEAs to gather, collect, validate and report high-quality data. The discussion will allow for State input on how it utilizes or may utilize these resources.

For each section provide a brief introduction of the questions that states may discuss with one another:

- Communication Strategies
 - How do you promote the importance of data quality to your LEAs?
 - What guidance materials are available for LEAS
 - Do you have a data dictionary? Is it published and available to the public?
 - Do you provide guidance on how to report data i.e. scenarios that help explain when to use specific permitted values?

- What training opportunities do you provide to LEAs?
 - Do you have an annual training? What does it comprise of?
 - What mechanisms are in place for LEAs to ask question?
 - Helpdesk email or phone
 - Annual data conferences?
 - Webinars or conference calls?
 - Others?
- What other ways do you (or could you) promote the message of data quality?
 - Does your state solicit feedback or comments on new data elements?
 - Do you have an LEA stakeholder group or advisory committee to provide LEA input for data collections?
- System Development Strategies
 - Does the timing or method of data collection from LEAs have an impact on data quality? How "fresh" is the data when you collect it?
 - How do you ensure that the data being submitted meets expected data quality standards?
 - What kinds of business rules or edit checks are embedded into the system?
 - What business rules or edit checks are missing that can be added?
 - What manual processes are you doing to verify and validate data postsubmission that could be incorporated into the data collection system?
 - Is the same data collected in multiple places through multiple systems? How might you reduce the risk that data will be reported differently in different systems?
 - What opportunities are there for integration of data systems so data is collected and stored in one place?
- Data Use/Reporting Strategies
 - Do the LEAs know how the data being submitted is used? By the SEA? By ED?
 - How does the quality of data impact funding? Accountability? SSIP evaluation?
 - How is the data used to promote SEA initiatives and policies?
 - How is data used in LEA determinations for compliance monitoring?