

Collecting, Storing, Analyzing, and Using Data FAQ's

Key Points-

- 🔑 Elements of necessary data collection are found **throughout the ROMA cycle**.
- 🔑 Data and information can be translated into knowledge to **increase capacity** and improve an **agency's success** at reaching its intended results.
- 🔑 Data analysis can be both proactive and retroactive. It is used in predicting future trends and explaining past trends.

What is “data”?

- ➔ Data is facts that are observed, measured, collected, and aggregated.

How can data be used?

- ➔ Data can be examined to become information. This helps inform decision making in any sector of work. For instance, it is important to identify the population we serve, study trends, find patterns, predict future trends, and understand underlying factors of causal relationships.
- ➔ Analyzing data helps us go beyond just what is obvious, to fully understand what is not necessarily noticed right away.

What does it mean to have quality data collection?

- ➔ It is complete. There is no information missing from the data.
- ➔ It is accurate. There are no typos in the reporting of the data and all of the information is correct.
- ➔ It is timely. The data was collected on time, on a regular basis, and/or is recent enough to be pertinent.
- ➔ It is reliable. The data collected is meaningful to the topic, it is collected in the same way every time, and the people involved in collecting data understand what they are responsible for collecting.

Where should I store my data?

- ➔ Data needs to be stored in a safe and accessible environment. It should be backed up regularly and have adequate security measures in place to protect the information.
- ➔ People need to be trained on accessing the data and internal policies should govern storage procedures.

What do I do before I analyze my data?

- ➔ Before analyzing data, it needs to be organized.
- ➔ Identify what it is you are looking for. Having a goal in mind before analyzing data will help the process of finding the information that is useful in your decision making. Goal setting narrows down where to look to find the data.
- ➔ Organize the data to depict relationships among different components or show pathways of information, materials, money, personnel, etc.
 - They may include geographical representations or other kinds of graphing or using tools such as maps to help visualize relationships between data points.

What is data analysis?

Data analysis is the process of interpreting the meaning of the **data we** have collected, organized, and displayed in the form of a table, bar chart, line graph, or other representation.



What does data analysis do?

- Analyzing data turns the data into information. Information comes from organizing, processing, and interpreting data so as to make the data meaningful or useful. It allows the agency to examine the data elements for completeness and accuracy. This includes inspecting and “cleaning” data.
 - An example of “cleaning” data is the memo that NASCSP sends out in response to the submission of the annual report. This memo may ask about missing data or information that seems out of the expected range.
- Analysis includes questioning, comparing and confirming the numbers and finding what is important and pertinent. It includes identification of trends.

Why is it important to identify trends?

- Trend analysis compares data – such as from previous years data with data from the current year to find any patterns. Trend analysis can help you establish a target for the upcoming year.
 - For example, in collecting data on how many individuals are served, an agency may find that over five years they increased their reach by 10%. This number would help them project both a goal and expected amount of individuals to serve for the upcoming year.
 - It would also demonstrate the relationship between numbers served and numbers achieving outcomes in prior years. An agency may find that over the past five years the number they are serving has decreased but the number achieving outcomes has increased. This could help them analyze changes in delivery of services and make decisions about the coming year.
- Trend analysis helps you identify anything new or different that is happening in the community that would require you to change your focus or your direction

Can existing management reports be used in this process?

- Management reports are a great tool to use in analysis. They can help answer questions about:
 - Quality of data- is the data complete, accurate, and timely?
 - Presentation of data- is the data easy for the reader to find what is important to him/her/them?
 - Usefulness of the data- is the data relevant to the task of managing the program/service?
 - Performance focus- does the data include results of outcomes and performance?

How can I use what I learn to improve my agency's services/programs?

- Data analysis interprets data to provide context about *why* something is happening and not just that it is happening. Rather than knowing that an agency has seen an increase in a certain population, analysis of the data (putting it into context) will help you find answers about *why* there has been an increase.
- Knowing why something is occurring allows for agencies to make good decisions and plan programs well.
 - For example, if an agency sees a steady increase over time in a specific demographic served, the agency can analyze the data, also use other available information and data and draw conclusions to assist in program development.

