

Data Collection – When is it Needed?

Data collection is an important, often necessary, part of quality improvement. It becomes necessary when existing data are not sufficient for identifying or analyzing problems or for developing, testing, or implementing solutions to those problems. It also helps maximize the usefulness of QI tools.

Types of Data

Both *qualitative* and *quantitative* data help us understand the situation where a problem exists, test hypotheses of causes, and demonstrate the effectiveness of interventions. **Qualitative** data use words to describe a situation and can provide in-depth information about why a problem may occur. This type of data is collected through a variety of techniques, such as focus group discussions, unstructured interviews, observation, and role-play. **Quantitative** data describe the problem through numbers to provide information such as averages and variability. Quantitative data collection involves a wide range of methods, including formal survey sampling and the review of existing data.

When to use Existing Data

The most efficient and economical means of using data is often to analyze existing data. For instance, data collected on a regular basis may indicate the characteristics of external clients or the percentage that return for follow-up visits. Examples of existing data include the data from patient medical records, facility logbooks, and health information system reports. The review of existing data reduces the denial that organizational members might experience when addressing needs for quality improvement. Data can also be used to switch the focus of improvement from blaming people to improving the overall process or system. Use existing data reviews when: (a) relevant existing data are available, (b) there is not enough time or funding to collect data, and/or (c) there is a need for proof or credibility.

How to Collect Data

If existing data are not accurate or do not provide enough or the right kind of information, then actual data collection may be necessary. A few common data collection methods include, but are not limited to, the following:

Direct observation involves watching and noting the behavior of and/or interactions between service providers and external customers. One way to observe these interactions is through a simulation, where trained observers enter a health facility under the guise of being a customer seeking services. This technique allows an observer to assess the actual services provided and how patients are treated.

Customer feedback can be gathered in a number of ways, such as comment cards and exit interviews. Information about how customers perceive health services or how these services could better meet their needs helps to identify opportunities for improvement.

Interviews with healthcare providers are a way to get information through questions designed for short (“yes,” “no,” “somewhat”) answers and/or lengthy, detailed ones. It is important to remember, however, that while interviews may provide information about a provider’s knowledge; they do not actually measure provider performance.