

Collecting High Quality Outcome Data, Part 2 Developing a Data Collection Schedule

Special Note

This skill building activity can be used to apply the concepts and principles covered in this module to real world situations.

Introduction

This exercise allows learners to develop a data collection schedule for one or more of their own instruments.

Key Points – Definitions

A **data source** is any person, group, or organization that has information on whether the intended output or outcome occurred.

A **method** is a process or set of steps one follows to systematically collect performance measurement data.

An **instrument** is a paper or electronic form used to record information from a data source.

Reliability is the ability of a method or instrument to yield consistent results each time. Reliability is strengthened by using well-designed instruments and by providing data collectors and respondents with clear instructions on how to administer and complete instruments.

Validity is the ability of a method or instrument to accurately measure what it intends to or what it is supposed to measure. Measurement is valid when it produces results addressing the specific outcome you wish to measure. Valid measurement collects data on all relevant aspects or dimensions of an outcome. Validity is also supported when the results produced by an instrument are corroborated by information from other sources. For example, the validity of a math test is supported when students who score high (or low) on the test also perform well (or poorly) at solving math problems in class and on homework assignments.

Results are **biased** when they are systematically skewed or distorted. Results can be biased due to the over- or under-representation of particular groups in the dataset, and due to question wording that tends to encourage or discourage particular responses. The timing of data collection can also systematically bias results.

Sticking Points and Common Issues

Below are some issues that may come up as learners consider the material, along with notes on how to respond to these issues.

What do I do if I cannot get data collection in place before my program begins?

It is always best to make key decisions about methods and instruments before starting your program. However, we recognize this may not always happen perfectly. Development and improvement of methods and instruments is an ongoing process. Programs start from wherever they are, but should strive to develop and strengthen data collection systems as quickly as possible. For example, if a program needs to collect pre-and-post data, then, ideally, instruments need to be developed and tested before the program starts. Otherwise, the program will not be able to conduct a true pretest since the intervention will have already begun. In this situation, the program would still need to conduct the pretest as early as possible and note in the progress report that pretest data were collected late after the intervention started.

Under what circumstances may one modify an instrument?

In general, care should be taken when modifying instruments to avoid compromising the rigor, quality, and usefulness of data. Sample instruments provided in support of national performance measures may be modified as long as the instrument can still collect key data elements required by the performance measurement instructions. Instruments that come from other sources can be modified to fit your program context. However, modifying an instrument that has been validated will compromise the integrity of the instrument, so it is not advisable to revise these instruments or the instructions for their administration. When modifying an instrument always remain mindful of the instrument's original purpose and avoid modifications that deviate from this purpose or that will weaken the rigor, quality, or usefulness of the data.

On the one hand, I am advised to pilot test and revise instruments. On the other hand, I am advised not to revise standardized instruments. Does this mean that I should not pilot test standardized instruments, since I cannot revise them?

The purpose of pilot testing is to improve instruments. Piloting includes testing the instrument itself as well as the data collection process. If you plan to use a standardized instrument, pilot testing can help you understand how well (or poorly) the instrument works in your context. This is actionable information even if you are not revising the instrument or the procedures for administering it. Sometimes modest changes to how an instrument is administered can fix problems without compromising quality. If you encounter serious problems using a standardized instrument then you know in advance that it cannot be used and you will have to consider alternatives. Part of the value of pilot testing is simply learning about whether any problems exist – and gaining greater confidence in your instruments if you find that they are free from serious problems.

Exercise

A data collection schedule or plan describes how you will measure performance and what information will be collected. The schedule or plan identifies the instruments that are to be used to measure specific outputs or outcomes, methods, data sources, and data collectors. A data collection schedule provides a framework for implementing data collection by specifying when data collectors will be trained, and when data will be collected, how often, and by whom, as well as when data need to be analyzed in time to be used for reporting and program improvement.

Use the blank data collection schedule on the next page to plan data collection for your program. The form can accommodate information for two instruments. Use additional forms as needed to develop plans for all your instruments. A set of instructions and an additional worksheet to identify stakeholders in the data collection process are also included in this packet.

DATA COLLECTION SCHEDULE

Program Name: _____ **Program Director:** _____

Data to be collected	Schedule for Training Data Collectors and Collecting Data	Data Analysis Schedule	Report Due Dates	Reflection (discuss findings and ideas for program improvement). Meeting Dates and Attendees
Instrument: _____	Training Date(s): _____	Date (1) : _____		
Output/ Outcome: _____	Data Collection Dates:	Date (2) : _____		
Method: _____	Date (1) : _____	Date (3) : _____		
Data Source: _____	Date (2) : _____	Date (4) : _____		
Data Collectors: _____	Date (3) : _____			
Instrument: _____	Training Date(s): _____	Date (1) : _____		
Output/ Outcome: _____	Data Collection Dates:	Date (2) : _____		
Method: _____	Date (1) : _____	Date (3) : _____		
Data Source: _____	Date (2) : _____	Date (4) : _____		
Data Collectors: _____	Date (3) : _____			

Collecting High Quality Outcome Data, Part 2
Skill Building Activity #2 – Developing a Data Collection Schedule

Instructions for Completing the Data Collection Schedule

Use one row of the data collection schedule for each instrument. Use additional sheets as needed. Share a draft of the data collection schedule with those who will be involved in the data collection process and other key stakeholders to get feedback on whether your plan is realistic and achievable. Be prepared to modify the schedule based on this feedback.

A separate worksheet for identifying stakeholders is provided on the following page.

Instrument: Identify the title or name of the instrument you will use to collect the data.

Output/Outcome: Identify the output or outcome that the instrument is intended to measure.

Method: Identify the type of process used to collect the data. Examples of methods include survey, interview, observation, standardized test, tracking sheet, focus group, diary, journal, and secondary data. This is also where you can identify if the instrument will be administered as a pre-post, post-only, etc.

Data Source: Identify the person, group or organization that will provide the data for this instrument. Members of the data source group are typically referred to as “respondents”.

Data Collectors: Identify the persons who will be responsible for collecting data from respondents.

Dates: Use the first line to identify the date or dates when data collectors need to be trained. Use the remaining lines to identify when data need to be collected. Add or remove date lines as needed. Most outcome instruments are administered twice (pre-post) or once (e.g., post-only) during the program year, while output instruments are typically completed more frequently (e.g., weekly). In deciding on the dates for collecting data, consider that certain types of data (e.g., from secondary sources) may be available only on set schedules. In addition, respondents may not be available at certain times. Avoid scheduling data collection for times when data may be unavailable. For best results, consult agency calendars and involve stakeholders in the planning process.

Data Analysis Schedule: Identify the date or dates when data need to be analyzed. Data analysis is typically done prior to developing a progress report.

Report Due Dates: Identify the date or dates when progress reports are due. In addition to any required reports for your CNCS grant, consider if you need to prepare reports for other stakeholders.

Reflection: Identify dates and attendees for at least one meeting each year to review performance measurement results, discuss key findings, and come up with ideas to improve your program and your performance measurement system.

Identifying Stakeholders in the Data Collection Process

Instructions: List each stakeholder or stakeholder group, describe their roles and responsibilities, and how you want them to be involved in data collection. Stakeholders include anyone who will be involved in the data collection process or who otherwise has a stake in data collection. Typical stakeholders include program staff, participants and volunteers, service recipients, and partner agencies. Involving stakeholders in the planning process can eliminate questions or issues that may impede or delay data collection. Stakeholder roles can include (but are not limited to):

- Direct involvement in data collection
- Granting access to a data source (e.g., parental permission for student surveys)
- Being kept informed of the data collection plan and its progress
- Receiving reports or data from you to meet their own performance measurement needs

Stakeholder	Roles and Responsibilities	Involvement
1.		
2.		
3.		
4.		
5.		
6.		

(Add rows as needed.)

Answer Key and Points to Consider

This exercise can be done individually or in pairs. If done in pairs, learners can exchange draft plans with each other and discuss/critique. Discussion questions can include:

- Are dates and timelines for collecting, analyzing, and reporting data realistic? Has the program taken into account the schedules and availability of the various parties involved in the data collection process, especially data collectors and respondents? Do data collection dates coincide with major holidays or other important dates that may interfere with the plan?
- Are the data collectors capable of collecting unbiased data? Are they the best option? Who else could play the data collection role if the program's first choice is inappropriate or unavailable?
- Have all relevant stakeholders been identified? Have their roles, responsibilities, and involvement been fully described? (If the learner has completed the worksheet on "Identifying Stakeholders in the Data Collection Process" then this can be included in the material learners share when discussing each other's data collection schedules.)
- Does the plan account for potential sticking points with regard to gaining access to the data? Whose permission might be needed to collect the data, and how would the program go about getting permission? How will the program approach each stakeholder to get buy-in to the plan?

Strictly speaking, there are no right or wrong answers in this exercise. Each learner will need to develop a data collection schedule that reflects his or her own unique program or project and the instruments he or she plans to use to measure performance. The data collection schedule that learners develop for this exercise should be viewed as a draft that they can take home to refine and strengthen in consultation with program staff and other stakeholders. If this is the first time that a program is developing a data collection schedule, then they are likely to gain valuable experience and discover new information during the first year of implementation that can be used to revise and improve the plan.