

Data Collection

Participant training objectives:

- To understand the characteristics of a well-designed data collection system
- To consider how to better define the HIV program's data collection system on-the-job

Target audience:

Quality Improvement committee members, QI project team members, and other staff involved in the data collection phase of quality improvement projects

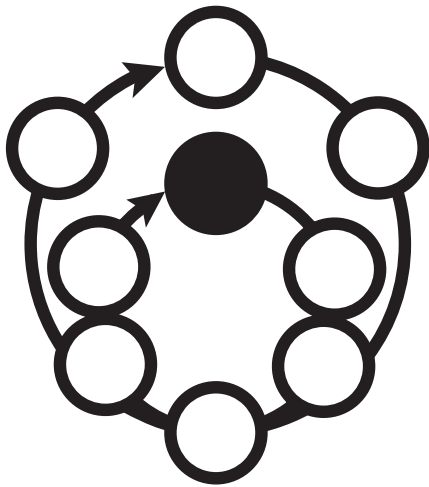
Type of exercise:

Quiz; individual and group exercise, 60 minutes

Key concepts:

A well-designed system for collecting process data has the following characteristics:

- Requires the most current and accurate data available
- Clearly documents the data collection process
- Identifies roles for the collection process
- Incorporates training and testing



The Big Picture:

Data collection occurs in the HIVQUAL model during Step 1 of the project cycle: Review, collect and analyze data. Baseline data helps to define the current state, thereby providing the information needed to make informed improvement decisions. It also serves as a point of comparison for future measurements, allowing the team to track progress.

SESSION AT-A-GLANCE	WHO	HOW LONG
1. Welcome, Learning Objectives, Agenda	Facilitator	5 minutes
2. Group Exercise: Quiz	Facilitator	30 minutes
3. QI Background: Well-Designed Collection	Participants	10 minutes
4. Learning Transfer: Worksheet	Participants	10 minutes
5. Wrap-up	All	5 minutes
		60 minutes

Materials

For this group learning session, you will need the following materials:

- Participant handouts:
 - Quiz
 - Learning Transfer Worksheet
 - Copy of slide presentation
- Overhead projector/LCD panel (optional)
- Wipeboard/chalkboard (optional)

Preparation

To prepare for the group learning session, complete the following tasks:

Familiarize yourself with the session's structure and content:

- Read through the Group Exercise notes in their entirety, including the exercise answer key, presentation slides, and participant handouts.
- Practice the presentation outlined in the Group Exercise notes.

Photocopy the Quiz, Learning Transfer Worksheet, and slide presentation for each participant.

Prepare your presentation slides for display:

- Photocopy the slides, or write the slide content on transparencies or on flipchart paper.
- For display using an LCD panel, enter the content into a computer file.

Prepare the training room.

- Arrange the tables and chairs in a circle or square shape, if possible.
- Set up and test equipment (e.g. overhead projector), if applicable.
- Make sure you have enough chalk or wipeboard markers, if applicable.

Notes

Data Collection: Group Exercise

Welcome and Introductions

To begin the group learning session, welcome participants and thank them for their participation. If necessary, ask individuals to introduce themselves to the group.



Learning Objectives

Tell participants that by the end of the session they will:

- Understand the characteristics of a well-designed data collection system
- Have at least one idea for how to better define the facility's data collection system

Agenda

Provide a brief description of the session's primary components:

- Group exercise on evaluating facilities' data collection systems
- Presentation of the characteristics of a well-designed collection system
- Learning Transfer Worksheet

Getting Started

Divide the participants into teams of roughly equal size, 4-6 people per group. You can assign participants to teams yourself or ask them to count off by a given number and form teams with other participants who have the same number.



Quiz

Group Exercise

Distribute the Quiz face down to each participant and provide directions for completing the exercise:

- Complete the quiz individually. (10 minutes)
- Review the quiz as a team and reach consensus on each answer. (10 min.)


Call time after the first 10-minute interval and remain available to answer questions and facilitate the process. Assist teams who have problems getting started or become stuck on a particular point.

Reporting Back


Call time after the second 10-minute interval. Read each statement out loud and then alternate between teams for a response. If a team's response differs from yours, ask for the members' rationale. Then provide the rationale given in the answer key, keeping in mind that the ultimate goal is to discuss data collection systems, not to defend any particular response.

Quality Improvement Background

Distribute a copy of the slides to each participant for note taking and/or future reference.

-  Begin by explaining that a facility's data collection system consists of the tools and techniques used to collect baseline data. Baseline data helps to define the current state, thereby providing the information needed to make informed improvement decisions. It also serves as a point of comparison for future measurements, allowing the team to track progress.

Teams typically collect baseline data from patient medical records. For example, a project team may collect data on how many patients received PCP prophylaxis in the previous year. The final percentage is a starting point for process improvement and a baseline for future measurements.

-  Explain the characteristics of a well-designed data collection system:

Requires the most current and accurate data available. When data is collected with little regard for accuracy, they become a project liability. The data collection system must place a premium on obtaining the most current, complete, and accurate information possible.

Clearly documents the data collection process.

To ensure that data is collected as intended, it's important to write detailed instructions to guide team members through the process. Be clear on what data is needed and why. Tools such as data entry forms and procedure checklists help lower the margin for collection error.

Identifies roles for the collection process. The collection process should have clearly defined roles. A single person might oversee the data collection process while others remain available to answer questions that arise.

Incorporates training and testing. Written review criteria have the greatest impact when explained in person. During a brief training session, team members can practice the collection process and ask questions. Field testing new instruments or measures is best accomplished by reviewing a few charts and fine-tuning the data collection tools.

Utilizes data sampling. In case computerized medical record systems can not provide accurate information for all patients, it is unrealistic and inefficient to collect data from every patient file. By sampling data, teams can make inferences about the total population based on observations of a smaller subset of that group (sample).

- **Respects patient confidentiality.** A team's right to review confidential medical records for health care system oversight is protected by law, however team members should respect patient confidentiality throughout the collection process. For example, data should be identified using patient ID numbers rather than patient names whenever possible.

Conclude by emphasizing that deficient patient care always takes precedence over data collection. If team members discover negligent care in a medical record, they have an obligation to immediately alert a person who can investigate the issue further.



Learning Transfer Getting Started

Distribute the Learning Transfer Worksheet and give participants 5 minutes to complete it.

Debrief

If time permits, ask participants to individually share one area in which they are doing well and one area in which they could improve.

Finally, ask participants to select one area that requires improvement and to write down one or more things they could do in the next month to better define the facility's data collection system.



Wrap-up

Ask participants to provide feedback on whether or not they have achieved the objectives introduced at the beginning of the group learning session:

- To understand the characteristics of a well-designed data collection system
- To have at least one idea for how to better define the facility's data collection system

Schedule an informal follow-up session with any participant(s) who has not reached the objectives.

Data Collection: Quiz

Instructions:

In the statements below, staff members comment on their facilities' respective data collection systems. Read the statement and then respond "yes" or "no" to the following question:

Does the statement reflect a well-designed data collection system?	YES/NO
1. For our annual measurement project, we manually collect data from all 200 patient files. It's the only way to get really accurate information.	_____
2. When I started here, I was trained on data collection and the forms we use.	_____
3. By the time we review data, they are at least 12 months old.	_____
4. Sometimes the medical record is too unorganized to read the entire chart, so I just check 'N/A' (not applicable) on the collection form.	_____
5. Once in awhile, I notice that a patient has a serious medication error, so I have told the supervisor right away—even if it pushes back the collection schedule.	_____
6. Due to concerns for patient confidentiality, we only ask MDs and nursing staff to do reviews.	_____
7. Although we have written data collection forms, the 'yes' and 'no' responses are not always clear to me—so I use 'NA'.	_____
8. We use patients' names when we collect data. It is easier to identify patients later for follow-up.	_____
9. During the training sessions, new team members collect data from the same medical records just for practice.	_____
10. To generate a random number table, we always need to call a statistician.	_____
11. When I have a question about the data collection process, I always know whom to call; her number is even on the form.	_____
12. After a new measure is developed, we test it out on all applicable patients to see whether the new review.	_____

Data Collection: Learning Transfer Worksheet

Instructions:

How well defined is your facility's data collection system? Using the information from today's session, complete the grid below and briefly describe your program's strengths and weaknesses.

	DOING WELL	NEED TO DO BETTER
REQUIRES CURRENT AND ACCURATE DATA		
DOCUMENTS THE PROCESS		
IDENTIFIES PROCESS ROLES		
INCORPORATES TRAINING AND TESTING		
UTILIZES DATA SAMPLING		
RESPECTS CONFIDENTIALITY		

Data Collection: Answer Key

Does the statement reflect a well-designed data collection system? YES/NO

1. For our annual measurement project, we manually collect data from all 200 patient files. It's the only way to get really accurate information. NO

Rationale: Data sampling is more efficient and allows teams to make inferences about a total population. It also saves time and resources for improving the quality of care.

2. When I started here, I was trained on data collection and the forms we use. YES

Rationale: Written review materials have the greatest impact when explained in person.

3. By the time we review data, they are at least 12 months old. NO

Rationale: Baseline data should be the most current patient data available.

4. Sometimes the medical record is too unorganized to read the entire chart, so I just check 'N/A' (not applicable) on the collection form. NO

Rationale: Inaccurate data collection is misleading and wastes team members' time and energy.

5. Once in awhile, I notice that a patient has a serious medication error, so I have told the supervisor right away—even if it pushes back the collection schedule. YES

Rationale: Patient care always takes precedence over data collection.

6. Due to concerns for patient confidentiality, we only ask MDs and nursing staff to do reviews. NO

Rationale: With the proper training, most staff member can collect data and still maintain patient confidentiality.

7. Although we have written data collection forms, the 'yes' and 'no' responses are not always clear to me—so I use 'NA'. NO

Rationale: Even the most skilled staff members make data collection mistakes. Instructions and forms which include an explanation of 'Yes,' 'No,' and N/A' help reduce the margin for collection error.

8. We use patients' names when we collect data. It is easier to identify patients later for follow-up. NO

Rationale: Team members should respect patient confidentiality throughout the collection process and use other patient identifiers, such as medical record numbers.

9. During the training sessions, new team members collect data from the same medical records just for practice. YES

Rationale: Team training is a good opportunity for members to try out the process and ask questions.

10. To generate a random number table, we always need to call a statistician. NO

Rationale: There are several ways to get a random number table. You can use the HIVQUAL tool or generate a random number table using common spreadsheet programs, such as MS Excel.

11. When I have a question about the data collection process, I always know whom to call; her number is even on the form. YES

Rationale: One person should always be assigned to answer any questions about the data collection process, its forms, and the gathered results. In the long run, it saves time.

12. After a new measure is developed, we test it out on all applicable patients to see whether the new review. NO

Rationale: Testing is a good component of a sound data collection system. However, testing a new instrument or measure on a few patients and, subsequently re-tuning the tools, is a more efficient way.