

SESSION 7: DATA COLLECTION

Aim of the session:

Session 7 aims to provide an understanding of the tools needed for the collection of data to meet reporting requirements. The role of data collection policies and procedures is also explored.

LEARNING OUTCOMES:

By the end of this session, participants should be able to:

- ❖ Locate where data is collected
- ❖ Assess whether current tools are optimal for collecting necessary data
- ❖ Suggest improvements to data collection tools
- ❖ Explain the relevance of data flow procedures

SESSION TIME:

2 hours

SESSION PLAN:

40 min	1. Assessing where data is collected	Group work
20 min	2. Introduction to data collection tools	Facilitator presentation
30 min	3. Exploring data collection tools	Group work
10 min	4. Data flow policies and procedures	Facilitator presentation
20 min	5. Exploring data flow procedures	Group work

PREPARATIONS FOR THE SESSION:

- ❖ A3 printout of longitudinal patient monitoring register page (Annex to Session 7)
- ❖ Examples of data collection tools from various sites (Facilitator to provide)
- ❖ Background reading:
 - Comprehensive HIV and AIDS Programme individual patient forms:
 - Patient Demographic Form
 - ART Assessment and Baseline Form
 - ART Follow-up Form
 - Transfer Form.

- Department of Health, Republic of South Africa (undated) Instruction manual for the completion of the Patient Demographic Form, ART Assessment and Baseline Form, ART Follow-up Form and Transfer Form. Coordinated by Monitoring and Evaluation Unit
- Department of Health, Republic of South Africa (2005) Data flow and data management protocol. Comprehensive HIV and AIDS Care, Treatment and Management Programme

Activity 1 - Assessing where data is collected

Time: 40 minutes (40 min group discussion, no feedback session)

Method: group work

Aim: to locate the points where the required data elements are currently collected or could be collected in the future

Facilitator instructions

- ❖ Introduce the activity:

Data for different aspects of the comprehensive programme on HIV and AIDS may need to be collected from different places, e.g. VCT clinic, PMTCT clinic, ART site. Even within a single clinic, different staff members collect different types of data, e.g. a clerk who registers patients may collect data on new and follow up patients, a nurse may collect data on weight gain, a doctor on treatment regimens, and a pharmacist on treatment defaulters. It is important to think about the best place to collect the data and about which staff members should collect what data.

Participant instructions

- ❖ Work in small groups, using one participant's facility as an example for the group
- ❖ Refer to Tables 6.1 and 6.2
- ❖ In the "source" column, write down the place where each data element is currently collected.
- ❖ For those data elements not yet collected, write down the place most suitable to collect the data in future.
- ❖ In the "staff responsible" column, write down the staff member responsible for collecting the data.
- ❖ Note: It may be helpful to draw the path that a patient would follow through your facility, and at each point where care is provided, list the types of data that is or could be collected at each point, e.g. registration desk, nurses' station, doctor's consulting room, laboratory, counsellor, etc.

Facilitator notes

Data should be collected at points which are convenient and which ensure that entries are neither missed nor double counted. After identifying the best place to collect data, the next step involves choosing the right tools for data collection.

Activity 2 - Introduction to data collection tools

Time: 20 minutes

Method: facilitator presentation

Aim: to describe various data collection tools and to emphasize the difference between individual patient monitoring tools and aggregated data collection tools

Facilitator notes

We have identified data elements and indicators that must be reported on. We have also looked at what data facilities are currently collecting. We identified what should be collected and what is currently being collected. Then we looked at where data is collected. Now we are going to look at how the data is collected.

Data collection tools are the entry point of data into the information cycle.

Collecting data usually involves recording data about an individual patient on individual patient forms/records, in a longitudinal monitoring register and/or, in some cases, a computerised patient information system.

The next step is to obtain aggregate data (i.e. totals of individual patient entries). In order to obtain aggregate data, we need to have easy ways of adding up data entries at the end of the reporting period or at specific intervals during the reporting period (e.g. collect tally sheets weekly and sum up the totals, and then add these weekly figures together at the end of the month). In some cases, aggregate data can be extracted from individual patient monitoring tools. In other cases, separate tools must be set up to collect aggregate data.

It is important to distinguish between tools used for individual patient management and those used to collect aggregate data for programme management. Examples:

❖ Individual patient monitoring tools:

These tools are used to document information for monitoring the status of an individual patient. Decisions based on this information affect the particular patient.

- patient records, including individual patient information forms
- patient registers with entries for the same patient over a period of time (longitudinal patient monitoring registers) (Show A3 register pages.)
- electronic (computerised) patient information systems –the same information as on paper forms is now entered in the computer

National individual patient monitoring tools

A set of individual patient forms has been developed by the National Department of Health to capture a minimum set of patient demographic, clinical and laboratory information for the Comprehensive HIV and AIDS Care, Management and Treatment Programme. The forms have been developed in accordance with the National Antiretroviral Treatment Guidelines (2004).

The set includes the following forms:

(Refer participants to forms.)

1. Patient demographic form
2. ART assessment and baseline (adult: 15 years and older)
3. ART assessment and baseline (child: <15 years)
4. ART patient follow up (adult: 15 years and older)
5. ART patient follow up (child: <15 years)
6. Transfer of ART patient between service points

A detailed instruction manual for completing the forms is available. (Refer participants to the manual.) This manual notes that these forms are the main source of patient output and outcome indicators for the Comprehensive Plan.

(Refer participants to page 2.)

Note: It is acknowledged that provinces may have developed their own patient forms and may therefore choose not to use the national set. Provinces are however expected to ensure that, as a minimum, their patient information forms are able to collect the same data as the national forms.

❖ **Aggregate data collection tools for programme monitoring:**

These tools are used to collect data which is added up (aggregated) at the end of the reporting period. This aggregated data is used to monitor the status of a program or service. Decisions based on this information affect the groups of patients accessing the service.

- tick registers
- handwritten books
- tally sheets
- forms
- computer programmes

Two aggregate data collection tools are important for monitoring of the comprehensive plan:

National monthly data collection tool for the comprehensive HIV and AIDS care, management and treatment plan

These forms are intended to collect data for the primary set of 12 indicators in the M&E framework, as well as some additional indicators. They are to be completed at provincial level and submitted to the national level on a monthly basis. Provinces may have designed their own weekly or monthly summary forms for use by service points.

DORA reporting format

Table 6.3 provides the list of data elements and indicators intended for quarterly reporting from provincial to national level.

Allow participants a few minutes to look over the sets of forms and the instruction manual. Then allow time for comments and questions.

Activity 3 - Exploring data collection tools

Time: 30 minutes (20 min small group discussion, 10 min feedback)

Method: facilitator presentation, group work

Aim: to stimulate discussion on the design of tools for collection of the required data

Facilitator instructions

- ❖ Introduce the activity: (use PowerPoint)

It is important that data collection tools should enable the easy collection and counting of necessary data. If the data collection process is made easy, the chances of getting good quality data are increased. The tools should be user friendly and avoid repetition or the collection of unnecessary data. It is a management responsibility to ensure that overlapping data collection tools are synchronised and streamlined. It is frustrating for staff if they have to collect the same data repeatedly on different forms for different programmes/managers.

Data collection tools must be designed to collect the required data, e.g. registers or tally sheets may have columns representing required data element headings. The design of such tools requires careful preparation. Tools should also be tested to make sure that they work and that they are accepted by staff, before introducing them on a large scale. Testing of tools involves using them on a daily basis, as well as experimenting with extracting the necessary data for aggregation. Badly designed tools can result in unnecessary work collecting the wrong data, and perhaps in the end being unable to obtain what is necessary. Furthermore, if staff do not like the tools, they may not use them correctly or may even refuse to use them.

- ❖ Participants work in small groups.
- ❖ Assign three data elements from Tables 6.1 and 6.2 to each small group.

Participant instructions

- ✧ Work with the three data elements assigned to your group.
- ✧ In the "tools" column, write down the type of tools currently used to collect each data element. If not collected currently, suggest appropriate tools. Include individual and aggregate tools, e.g. individual patient form, register, form, tally sheet,
- ✧ Are the current data collection tools suitable for collecting the data?
- ✧ Suggest improvements needed to data collection tools to enable collection of the above.

Facilitator notes

Provide examples of data collection tools used at various sites, e.g. forms, registers, spreadsheets, etc. Emphasize the fact that it is important to think through the process of obtaining data from individual patients and then transferring it to another tool for adding up to obtain aggregate data.

Activity 4 - Data flow policies and procedures

Time: 10 minutes

Method: facilitator presentation

Aim: to highlight the need for defined data flow procedures

In the previous activities we looked at places of data collection and at data collection tools. The information cycle involves the **flow of data** through a number of stages from the point of collection to the points at which the information will be used. (*Refer to information cycle diagram.*)

In the next session, we will be looking at data quality. In order to ensure that good quality data is collected, is available when needed and used, procedures and responsibilities for data collection and submission must be clearly defined.

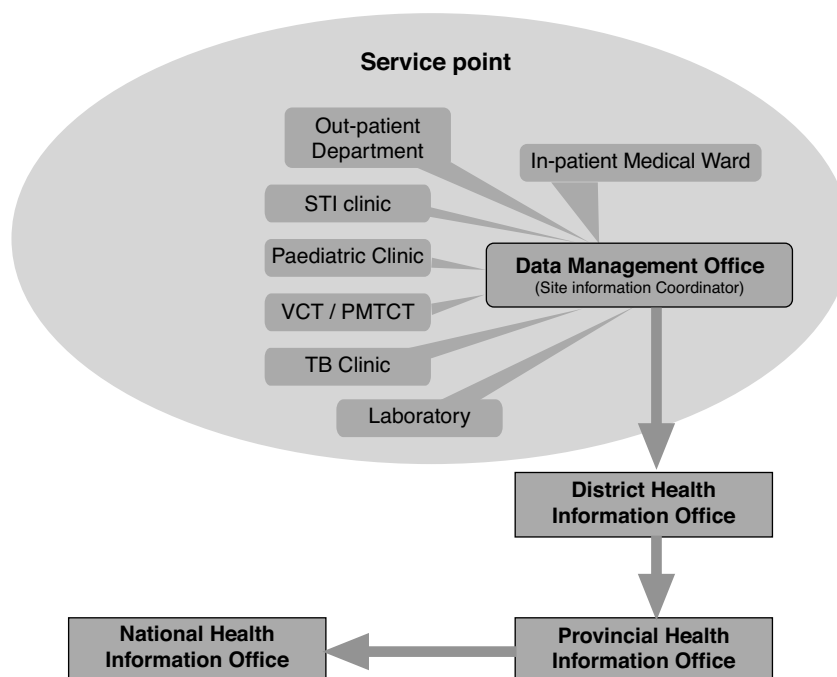
Where there are no clear procedures or defined responsibilities, confusion may result and it may be difficult to ensure accountability. This will result in difficulty in solving data quality problems. Breakdown in an information system can often be traced a lack of clearly defined procedures and responsibilities.

Data flow procedures must therefore be developed and documented, based on a data flow policy.

Data flow procedures should also include feedback mechanisms. (Feedback will be discussed in more detail later.)

The Department of Health has formulated a national data flow and data management protocol for the Comprehensive Plan. This document provides guidelines on roles and responsibilities at various levels, as well as guidance on security of data. (*Refer participants to protocol.*)

Figure 7.1: Data flow diagram



Source: Department of Health, Republic of South Africa (2005) Data flow and data management protocol. Comprehensive HIV and AIDS care, treatment and management programme

Data flow procedures should be clearly defined in terms of the following:

- ❖ Procedures for data collection
- ❖ Procedures for quality checks
- ❖ Formats for reporting
- ❖ Timelines for collection, submission and feedback
- ❖ Path of data flow and feedback
- ❖ Staff responsible and staff member identified for each step