



Republic of Kenya  
Ministry of Medical Services  
Ministry of Public Health and Sanitation

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National AIDS/STD  
Control Programmes

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**HMIS for HIV/AIDS**

TRAINING MATERIALS  
(FACILITATOR'S GUIDE)

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(NASCOP)

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## CONTENTS

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Introduction to the training package .....	ii
Overview of the Package .....	ii
Guidelines for Materials distribution .....	ii
MODULE 1: Introduction.....	1
MODULE 2: Health Information Systems: An Overview .....	6
MODULE 3: Data Collection for HIV/AIDS Programmes .....	11
MODULE 3, UNIT 1: Overview of Routine data collection systems .....	12
MODULE 3, UNIT 2: HIV Testing and Counselling .....	18
MODULE 3, UNIT 3: Prevention of Mother to Child Transmission.....	20
MODULE 3, UNIT 4: HIV-Exposed Infant Follow-up .....	23
MODULE 3, UNIT 5: Care and Treatment.....	27
MODULE 3, UNIT 6: Voluntary Male Medical Circumcision .....	33
MODULE 3, UNIT 7: Post-Exposure Prophylaxis .....	34
MODULE 4: Data Collation and Aggregation .....	36
MODULE 5: Using Data for Management Decisions .....	39

## INTRODUCTION TO THE TRAINING PACKAGE

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### OVERVIEW OF THE PACKAGE

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This Facilitators' Guide is part of a training package for HMIS for HIV consisting of

- FACILITATOR'S GUIDE- this contains guiding instructions for the training facilitators to enable them conduct the training effectively. It also contains numerous examples which the facilitator can use in the course of the training
- FACILITATOR'S WORKBOOK – this contains the answers to the exercises to be done by the participants in the workshop including the pre-test/post-test answers
- PARTICIPANT'S WORKBOOK - this contains a variety of case studies and exercises to help the participants grasp the course concepts and enhance participation in the workshop
- PARTICIPANT'S NOTES - this is a collection of all the presentations that will be made in the course of the workshop that have printed out and bound as handouts. They contain space where the participants can make their own notes
- INDICATORS MANUAL - this contains a list of the reviewed and harmonised indicators, their definitions, data sources, data flow and information use.
- PROCEDURES MANUAL – this contains a set of instruction on the purpose and use of various data collection tools and how to fill the appropriate data in the appropriate columns together with how to summarize the data.

This Facilitators' Guide is divided into five (5) modules:

- MODULE 1 - A pretest which also serves as a post test for the participants
- MODULE 2 - An overview on information systems for health and their relevance to health management
- MODULE 3 - Introduction to the various data collection and collation forms and their application in health care delivery and systems management
- MODULE 4 - Introduction the reporting requirements and procedues for all facility levels
- Module 5- Using data for management decisions

### GUIDELINES FOR MATERIALS DISTRIBUTION

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#### TRAINING OF TRAINERS

Each trainer should have the following documents:

1. Facilitator's Guide
2. Facilitator's Workbook
3. Participant's Notes
4. Participant's Workbook
5. Indicators Manual
6. Procedures Manual

All trainers will be provided with electronic copies of PowerPoint presentations and the listed training materials on CD in Adobe Acrobat format.

#### END USER TRAINING

Each health facility staff member who comes for the course should have the following materials, for use during training and as reference materials for by the sending facility:

1. Participant's Notes
2. Participant's Workbook
3. Indicators Manual
4. Procedures Manual

## MODULE 1: INTRODUCTION

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### PURPOSE:

- To introduce the facilitators and the participants to each other
- To go through the training schedule and communicate the course objectives to the participants
- To explain administrative arrangements to the participants
- To find out participants' expectations from the course
- To agree as a team, on the best way to effectively manage the training

### OBJECTIVE:

- Upon completion of this module, participants should be able to understand the purpose and the organisation of the course.

### METHOD:

- Self introduction of facilitators and participants
- Brief presentation

### MATERIALS:

- Overheads/Slides
- HIV/HMIS Training Materials: *Facilitator's Guide*
- Course preparation: Flip chart to write down the participants expectations
- Handouts: Course programme, folders, pens and paper.
- **Note:** DO NOT handout the training package including pre-test at this point until the pre-test is done

### PREPARATIONS:

- Ensure that LCD (or Overhead projector) is working. (Be prepared to use hard copies of the presentation in case the LCD is unavailable).
- Ensure a white board with pin cards or flip chart is available
- Prepare set of stationery and course materials for each participant
- Set the tables and chairs in the most suitable arrangement, depending on the number of participants
- Course moderator to allocate facilitators for all the modules and ensure their readiness prior to the training.

### LEARNING ACTIVITIES

90 MINUTES

#### 1.1 WORKSHOP ADMINISTRATION

##### 1.1.1 WELCOME NOTES

WELCOME the participants to the training and thank them for having found time to come.

EXPLAIN that the course will begin with a round of introductions. Each participant to give their

- Name
- Designation
- Station
- Something unique about themselves

EXPLAIN the logistical arrangement of the course and show them the person to contact in case of any problem.

### 1.1.2 TRAINING PROGRAMME

ASK the participants to turn to the Programme that has been distributed with the course materials.

Go through the Programme with the participants.

### 1.1.3 EXPECTATIONS OF THE PARTICIPANTS

ASK each participant to say what their expectations of the workshop are. With the assistance of the Co-facilitators write the expectations down on multicolored cards and pin them on the pin board while attempting to group them thematically.

EXPLAIN to the participants the expectations the training will address and those that are unlikely to be met.

### 1.1.4 NORMS OF THE TRAINING

ASK the participants to say what they want the norms of the training to be.

WRITE them down on a flip chart. For example:

- To be punctual
- To participate actively
- To respect each other's opinion
- To keep phone on silent mode

## 1.2 COURSE INTRODUCTION

SHOW *Module 1 Slide 1*

GO over the Introduction to the Course.

Highlight the main objectives of the course, its contents and how the different modules of the course have been organized.

SHOW *Module 1 Slide 2*

EMPHASISE that this training is in response to the changes in the data collection system for HIV/AIDS programmes, necessitated by the following, among others:

- Revision of the strategic plan for HIV/AIDS response
- Changes in treatment protocols and guidelines at both national and international levels
- A growing demand towards evidence-based decision making in health system management
- The need to re-emphasize the roles and responsibilities of each level in facilitating availability of data.
- A shift towards indicator driven-data collection rather than collecting data then later deciding what to do with it (e.g. for some on the old 711, it has been difficult to identify the numerators and the denominators of the different indicators from the data list).

INFORM participants that not every datum collected in the process of health care delivery is tied to an indicator.

SAY that data required for patient management may not necessarily be tied to an indicator but are essential for the management of the patient in question.

EMPHASISE that all data for programme management must be tied to an indicator (=essential data set).

STATE that previously, only the ART programme had an elaborate training package. Therefore the current training is an attempt at making the delivery of the training for all programmes, uniform and standardized.

EMPHASISE that although the revised national list of indicators covers non-routine and routine sources, this training package only covers health facility-managed routine data sources.

### SHOW *Module 1 Slide 3*

STATE THAT material content of the course covers:

- General basics about the information systems and their role in health care delivery
- Meaning and application of various data collection and summary tools and role of each level in data management.

OUTLINE the different modules that will be covered by the course

CONCLUDE by stating that this content will be delivered mainly through lecture presentations, exercises and interactive open discussions.

Welcome the participants once more to the training and wish them a fruitful time.

## 1.3 COURSE PRE-TEST

### 1.3.1 OVERVIEW OF THE PRETEST

EXPLAIN to the participants the following points

- The purpose of the pretest is to give the facilitators an idea of what the participants already know or do not know from the content of the course
- The facilitators will use the results of the pretest to adapt the course to suit the needs of the participants
- The pretest aims at motivating and arousing the interest of the participants, and also gives an idea of the knowledge they are supposed to acquire from the course.
- The participants will not be graded and the results of the test will not and should not affect the participants participation of the course
- The facilitator will discuss the correct responses during the relevant modules of the course

### 1.3.2 INSTRUCTIONS FOR THE PRETEST

EXPLAIN to the participants that:

- Every participant should do the test on their own
- The participants do not have to put their names on the pretest but they should put a code that they can remember to reuse at post test
- The text includes questions on mathematical skills, clinical knowledge and the use of data. No one is expected to know all the answers
- The participants can use calculators if they have them.

### 1.3.3 ADMINISTRATION OF THE PRETEST

The time allocated for the pretest is 30 minutes. However, extra time may be allowed to allow those who may not have finished doing so. It is more important to finish the pretest than to ensure that the participants stick to allocated time.

REMEMBER; do not go over the test after the pretest. Do not answer any questions about the pretest since the participants will undertake the same test at the end of the course.

### 1.3.4 GRADING THE TEST

ANALYZE the results in the evening of the first day of the course. Each question is awarded 1 point (for a totally correct answer) or 0 points (for incorrect or only partially correct answer). Remember this is not for certification; it is for you as facilitators to be able to know in which area your participants need more input.

The correct answers are at the end of the *Facilitator's Workbook*, as an appendix.

Here is how to analyse the pre- and post-test results. For each question, we want to find out the percentage of correct answers. (This quickly shows us where people had difficulty; the lower the percentage, the fewer people were able to answer the question.)

The formula for the percentage of correct answers is:

$$\frac{\text{Number of persons who got a particular question right}}{\text{Total Number of respondents}} \times 100$$

This will give you the percentage of persons who got question 1, 2, 3, 4 etc. correct

For example, if 5 people got question A1 right out of 20 respondents,

It will be:

$$\frac{5 \times 100}{20}$$

= 25% of the respondents gave a correct response to question one.

Then LOOK at all the questions to see which ones have higher frequencies of incorrect responses.. Those questions that have not been answered well require more emphasis during the training.

### 1.3.5 DISCUSS THE RESULTS (15 MINUTES)

DISCUSS the results during the evening meeting for facilitators and decide whether to make any changes in the course content, or timing based on the results.

The next morning TELL participants in a general way how they did in the test. You may tell them which type of questions they did well or poorly on, but do not tell them any answers or answer any questions about test questions, since they will be taking the same test at the end of the course.

This chart will help you organise your grading of the pre-test. (We were to finalise on this table)

Question #	Covered Module	in	Number who answered correctly	% who answered correctly (number who answered correctly /total number of respondents)
A1	4	Unit 2		
A2	4	Unit 3		
A3	4	Unit 5		
A4	4	Unit 6		
A5	4	Unit 7		
B1	3	Unit 3		
B2	3	Unit 3		
B3	3	(introduction)		
B4	5			
B5	6			
C1	3			
C2	5			
C3	4			
C4	4			
C5	6			



## MODULE 2: HEALTH INFORMATION SYSTEMS: AN OVERVIEW

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### PURPOSE:

- To provide a brief overview of Information System for Health

### OBJECTIVE:

- At the end of this module the participants should be able to describe
  - Overview of Health Services Organization in Kenya
  - Health Information System (HIS) and Management Planning Cycle (MPC)
  - Common Linkages of HIS with MPC
  - Common Uses of HIS within MPC
  - Data Needs and Health System Structures

### METHOD:

- Presentation
- Plenary Discussion

### MATERIALS:

- The following materials are necessary to deliver this module:
  - Overheads Projector/Slides
  - HIV/HMIS Training Materials: Facilitator's Guide & Participant's Notes
  - White board or flipchart with markers in case the facilitator may need to write.

### PREPARATIONS:

- Ensure that all the materials: LCD projector is working and the white board or flipchart including the markers are available

### LEARNING ACTIVITIES

60 minutes

#### 1. INTRODUCTION

##### SHOW *Module 2 Slide 1*

STATE the objectives of the module

HIGHLIGHT that this module attempts to show

- The role of health information systems in management planning
- The link between information management processes and the planning cycle
- How the demand for data in management planning assists in determining how much data to collect – the essential dataset.

##### SHOW *Module 2 Slide 2*

SAY that there is need to understand the health delivery system in Kenya by appreciating the role of each administrative layer, how these layers relate to each other to form a system (or systems).

Go through each administrative layer in health services organisation

ASK the participants: *“Is the public health care delivery system in Kenya a centralised or decentralized?”*

LET the participants give reasons or examples of real life practice

Instruction: With help from co-facilitators, write down the justification for each on separate flip charts.

CONCLUDE with this question without opening it for debate: *Is NASCOP a centralised or decentralised structure?*

## 2. HEALTH INFORMATION SYSTEM AND HEALTH SERVICES ORGANIZATION

### SHOW *Module 2 Slide 3*

EXPLAIN to the participants that health service provision exists with the sole purpose of ensuring that the population's health needs (within a given jurisdiction) are equitably provided and accessible.

EMPHASISE that it is therefore the responsibility of health managers to ensure that these services are always available to the population within a given framework.

### SHOW *Module 2 Slide 4*

STATE that health information is cardinal to improving health care delivery.

EMPHASISE that its main objective is to contribute to improved health services management by informing the decisions being made.

### SHOW *Module 2 Slide 5*

EXPLAIN to the participants that an HIS is a function of health system management.

EMPHASISE that the success or failure is usually a reflection of health system performance

STATE that a well-functioning and properly management information system, can identify weak "joints" in the health system for targeted improvement.

INFORM participants that, there two sides to an information system for health:

- Data handling processes or data management process
  - Defining data needs
  - Data flow policies
  - Standard guidelines for processing
  - Analysis
- Data usage

EMPHASISE that human capacity is crucial to carry out these functions

### SHOW *Module 2 Slide 6*

Give examples of the different steps in data management process emphasizing that it is the focus of this course

Read from the slide

### SHOW *Module 2 Slide 7*

Introduce this slide by asking the question: *why do you think information systems fail?*

Proceed to explain that systems fail because they were either;

- ill-defined from the beginning (the system can't fit to the needs of the user) or
- Not properly implemented (lack of adequate support infrastructure, human resource, attitude etc) or
- A combination of both.

CONCLUDE by stating that the greatest blame is usually placed on design – because assumptions about the target users are not usually contextual to the reality on the ground (design-reality gap) thereby resulting into a “data-quality-usage deterioration” cycle.

ASK the participants to give examples of “design-reality gap” from their past and current experiences with information system at any stage and level.

Examples may include, insisting on reporting only confirmed cases of malaria without universal and continuous availability of rapid diagnostic test kits.

### 3. HIS AND THE MANAGEMENT PLANNING CYCLE

SHOW *Module 2 Slide 8*

ASK participants to open their participants notes and locate the slide for the “HIS and Management Planning Cycle”.

EXPLAIN to the participants that the chart showing is a hybrid of the traditional management planning cycle (MPC) (priority-setting, devising strategies, implementing interventions and review of plans).

DRAW the attention of the participants to the superimposed cycle of the information management cycle

- What data do we need
- What do we want to do with it,
- How are we going to present it
- Does the information measure what we intended to measure

DIRECT participants the fact that the centre of the cycle is an assurance for quality data to support decision at each stage.

### 4. COMMON LINKAGES OF HIS WITH MPC

SHOW *Module 2 Slide 9*

EXPLAIN the management planning cycle with the following points

- In the planning cycle the management begins with assessing the current status through a situational analysis or collecting baseline data
- Depending on the need, priorities are set and goals, objectives with indicators and strategies are formulated.
- These are operationalized through action and operation plans into tangible interventions
- At the end of the cycles the plans are reviewed to see whether the goals and objectives have been achieved.

DEMONSTRATE that information system follows the same cycle:

- Data are collected for situational analysis/baselines. Data from the previous planning cycle forms the baseline for the next cycle. This enables priority setting.
- Once the goals, objectives and indicators have been set, the data set to be collected is tethered to the indicators (essential indicator set).
- The data collected for each objective are translated into monitoring and evaluation reports which serve to determine whether the programme is on the right track and if the goals and objectives are being met.
- Data from Monitoring and Evaluation serve as the baseline data for the next planning cycle and informs where the priorities need to be set.

CONCLUDE by stating that not all data that go into the planning cycle is collected routinely. Some data is collected through surveys or setting up of sentinel sites.

EXPLAIN that the MPC is inadequate or incomplete in the absence of a viable source of information.

## 5. COMMON USES OF HIS WITHIN MPC

SHOW *Module 2 Slide 10*

PHRASE to the participants these hypothetical questions

- How would you know that catchment X needs behavioural change interventions on STIs than catchment Y, when making a district plan?
- How do you tell that it is better to use the available resources on family planning as opposed to safe abortions
- How do you know that health workers are not providing care according to protocol (for example, starting ART without baseline investigations?)

SAY that effective data utilization forms the basis for calling for multi-sectoral approach to different challenges.

## 6. DATA NEEDS AND HEALTH SYSTEMS STRUCTURES

SHOW *Module 2 Slide 11 &12*

STATE that data requirements at different levels are determined by the management functions at each level.

ADD that in a decentralized (or district system), lower levels are not expected to have the same data needs as the higher levels.

GIVE examples:

A community may collect household data on the all the pregnant women and under fives for the purposes of the Insecticide Treated Nets (ITNs) distribution. It may not be necessary to pass the household data to the health facility level. Rather the community may just give the total number of ITNs distributed.

The patient's card has detailed information; this information is important for patients' management. The facility will only pass to the district levels the totals- that is the information needed to manage the facility rather than to manage the patients.

CLARIFY that some data may not be utilized at the facility but the facility has the responsibility to collect it and hand it over to the next level.

Example:

Patient-staff ratio: The facility will collect this information but will not utilize it at the facility level since they are not responsible for hiring staff, but pass it to the district that can influence staff deployment.

SHOW *Module 2 Slide 13*

SUMMARIZE the session by projecting the data flow pyramid.

STATE that as one moves up the hierarchy data requirements also change from measuring inputs to measuring outcome/impact.

CLARIFY that the pyramid applies to routinely collected data therefore; data generated through nationally-managed projects do not fit into this framework

## MODULE 3: DATA COLLECTION FOR HIV/AIDS PROGRAMMES

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### PURPOSE:

- Review the Routine Data Collection for HIV/AIDS Programmes

### OBJECTIVE:

- Refresh participants on data management processes
- Familiarise/introduce participants to the revised data collection and reporting requirements/tools.

### METHOD:

- Presentations
- Group exercises
- Plenary discussions

### MATERIALS:

- LCD Projector
- Slides- *Module 3 slides*
- HIV/HMIS Training Materials: *Facilitator's Guide & Participant's Notes with exercises*
- Writing materials, pens, paper (if possible calculators-can use phones)
- Old and new tools
  - HTC register(Old & New)
  - ANC, Maternity & Postnatal registers (Old & New)
  - CCC card, PreART, ART monthly, Summary and aggregation tools ((Old & New)
  - PEP register (Old & New)
  - Nutrition register(Old & New)
  - Facility & District Reporting forms (Old & New)

### PREPARATIONS:

- Ensure that LCD projector is working, the participants have the relevant pages with the exercises

### LEARNING ACTIVITIES

60 minutes

#### 1. INTRODUCTION

##### SHOW *Module 3 Slide 1*

REMINDE participants about the reasons behind this training. Echo that existing tools have been revised while completely new ones have been introduced for some programmes.

SAY that this module attempts to:

- Highlight the programmes which have been covered by the revised indicator set and data collection tools
- Review guidelines on how to complete these tools and how they relate reporting requirements and utilization.

INFORM the participants that the module is delivered through

- Presentations
- Group exercises
- Plenary discussions

SHOW *Module 3 Slide 2*

READ from slide 2 to highlight the reasons behind the revisions

SHOW *Module 3 Slide 3*

ANNOUNCE that this module has six (6) units. Each unit is a programme under NASCOP namely:

- HIV Testing and Counselling
- Prevention of Mother-to-Child Transmission(PMTCT)
- HIV-Exposed Infant(HEI)
- Care and Treatment(C&T)
- Post-Exposure Prophylaxis(PEP)
- Voluntary Male Medical Circumcision(VMMC)

STATE that besides the six (6) programmes, the following programmes were also included in the revision of indicators:

- Blood Safety
- ABC
- MARPs
- PwP,
- HCBC and
- Systems Governance and Support.

Data collection systems for these programmes have not been covered under this course: this course focuses on routine data collection – under the first six (6) programmes on slide 2.

SHOW *Module 3 Slide 4*

REMIND the participants that one of the main reasons for revising the indicator set is to standardize the reporting requirements.

- However, unlike facility-managed services, non-facility tethered activities are implemented under different frameworks thereby making it difficult to equally standardize the data collection systems and data flow policies.
- Nevertheless, regardless of which channel of reporting or frequency, all these programmes will abide by the standard definitions as outlined under respective indicators – in the Indicator Manual.

## 2. INTRODUCTION TO ROUTINE DATA COLLECTION TOOLS

SHOW *Module 3 Slide 5*

EXPLAIN to the participants that under this system, there are four categories of data tools namely:

- Individual client records
- Group patient listings
- Collation forms
- Aggregation/reporting form.

These data tools are used at facility level with only the aggregation or reporting form being used both at local level (service delivery) and higher levels as shown in the proceeding slides.

### 3.1 INDIVIDUAL PATIENT/CLIENT CARDS

#### SHOW *Module 3 Slide 6*

INFORM the participants that individual records can either be held by a client or retained by the institution.

#### 3.1.1 PATIENT/CLIENT-HELD

STATE that when patient cards are held by a client, registers for those services usually contain as much detail about the patient/client as possible. This is a way of keeping (at the facility) a record of services provided to the patient at each interaction.

INFORM participants that the choice to let the patient client keep the card is premised on a number of reasons namely:

- The need for the patient to receive service from any facility should the need arise and as such use the card as source of information by the host facility.
- To involve the patient/client in monitoring their own health

EXAMPLES include the Antenatal Care Card, Under-five Card and TB treatment Card.

#### Show *Module 3 Slide 7*

HIGHLIGHT the pros and cons of the patient/client-held cards

SAY that although this type of cards provide a basis for continuity of care and an avenue for quality of care, they do take a lot of health workers' time as similar information has to be filled out twice- in the card and in the register.

ASK trainees, to add their experiences to this presentation – on the application of such type of cards.

#### 3.1.2 FACILITY-RETAINED

#### SHOW *Module 3 Slide 8* and;

EXPLAIN that most facility-retained cards are kept by the institution for confidentiality and privacy especially so for curative care services which demand for detailed patient history.

EXPLAIN that when the file/card is held by the facility, accompanying registers usually contain only those data elements necessary for health unit management and upward reporting.

STATE that when detailed information is sought, the cards/file can be retrieved and reviewed.

EXAMPLES include the CCC card, HEI card, and the outpatient/in-patients files.

#### SHOW *Module 3 Slide 9*

PROCEED and go through the pros and cons of facility retained cards.

EMPHASISE that despite the challenges posed by use of these cards, they still occupy an important place in health information management



STATE that with advance in technology some of these problems can be resolved through computerization.

ASK participants to share their experiences in the use of such cards.

### 3.2 PATIENT LISTINGS OR REGISTERS

THERE are two commonly used types of registers in HIV/AIDS, which can be grouped as either;

- Cross-sectional
- Longitudinal

#### 3.2.1 CROSS-SECTIONAL REGISTERS

SHOW *Module 3 Slide 10*

EXPLAIN that cross-sectional registers are those where one patient or client has a chance of being entered more than once even if they are receiving the same service as long as it is at different times.

EXPLAIN that the order of entry is determined by the timing of receiving a particular service.

STATE that they are designed for use on episode basis or short/defined periods of time.

SHOW *Module 3 Slide 11* and PROCEED to give examples from the slide

EXAMPLES include the HTC register, ANC register.

SHOW *Module 3 Slide 12*

STATE that this design of cross sectional registers usually makes data collection easy since patients are grouped in the order of dates on which they received a particular service,

SAY that it does not require retrospective updates on the same entry,

Therefore makes it possible to include page summaries for each page. These then can be totaled (for the reporting period) to make a routine report.

INFORM the participants that the disadvantage of the cross sectional register is that the entry is virtually independent any other entry in the same register or period.

In the absence of a facility-retained individual patient card, it is difficult or impossible to link services received at different intervals.

STATE that other problems associated with this design include:

- High propensity for columns gaps as not all listed services are provided on each visit
- Health workers are made to repeat static parameters for every entry

### 3.2.2 LONGITUDINAL REGISTERS

DISPLAY *Module 3 Slide 13*

CONTRAST Cross-sectional and Longitudinal registers

- Cross-sectional register focus is on visits,
- Longitudinal registers is premised on fact that each patient is the same what differs are the services received on each visit.
  - Each line in the register represents a unique patient.
  - EMPHASISE that when the register be filled up and new one is opened; it is simply called “continuation.
  - SAY when the longitudinal registers are accompanied by patient cards, these registers do not contain detailed patient-provider interaction as such only data needed for health unit management and reporting are collected.
  - EXAMPLES include the HEI register and the ART Monthly register.

SHOW *Module 3 Slide 14*

TELL participants that advantages of this design are usually to do with information for one patient stored in one place (line)

However there also challenges, mostly to do with data management.

### 3.2.3 HYBRID REGISTERS– COMBINES CROSS-SECTIONAL & LONGITUDINAL ATTRIBUTES

SHOW *Module 3 Slide 15*

SAY that some registers such as the Pre-ART register lie between cross-sectional and longitudinal designs.

### 3.3 COLLATION FORMS

ASK for volunteers to define “Collation Forms”.

Then GIVE a summary definition as “those forms used for summarizing data (usually from multiple containers) into one place”.

STATE that this is often data in preparation for generating an aggregation form/report. Collation forms usually serve as a bridge between patient listings and aggregation forms.

GIVE the following processes as examples of collation:

- Adding page totals from a cross-sectional register if more than one page was used during the reporting period (month), before transferring the consolidated totals to the MOH711.
- Summarizing entries from patient listing (e.g. register) if the same type of register is used in more than one location with the same institution.
- Examples are the HTC and Lab Register which can be used in the STI clinic, TB clinic, VCT and others but within the same facility.

INFORM participants that, there two common types of collation forms: Activity sheets and Tally sheets.

### 3.3.1 ACTIVITY SHEETS

#### SHOW *Module 3 Slide 16*

GIVE the definition of activity sheets as a special form of patient listings.

SAY that they are different from registers because they only contain data meant for eventual aggregation.

Therefore, all data on activity sheets are used for health unit management and reporting.

GIVE examples as *Care and Treatment Activity Sheet*.

REMINDE the participants that there are countless innovations of activity sheets in our facilities (in the form of hard cover books) to fill the gaps left by incomplete or incompatible system designs.

EXPLAIN that activity sheets are preferred for most preventive services over the tally sheets - It is possible to tell which day a service was provided thereby making it possible to audit the totals

EXPLAIN that since activity sheets are also listings just like registers; their relationship with registers most times remains unresolved - in terms of whether the design should keep both.

### 3.3.2 TALLY SHEETS

#### SHOW *Module 3 Slide 17*

SAY that tally sheets just like activity sheets are used as a remedy to difficulties arising from extracting aggregates directly from service forms such as registers and cards.

GO THROUGH the attributes on the slide.

GIVE examples including the *Care and Treatment Tally Sheet*.

STATE that there countless innovations in our facilities where health workers use rough paper to tally from service forms before transferring to the reporting form.

Unfortunately, this record is lost because the “rough papers” are usually thrown away.

STATE that tally sheets are indispensable especially in collating data for curative care services with a long list diseases to pick from, making it uneconomical to use activity sheets.

GO THROUGH the rest of rest of the slide to highlight the pros and cons.

## 3.4 AGGREGATION AND REPORTING FORMS

### 3.4.1 DESCRIPTION OF THE FORM

#### SHOW *Module 3 Slide 18*

EXPLAIN that depending on the administrative responsibilities of each level, there may be different types of related forms for each level of health service delivery.

Each level will have data for its local use with additional data for upward reporting. The concept behind this is that some data may be dropped or added to the form as it flows up the hierarchy.

GIVE examples- MOH 711.

### 3.4.2 NOMENCLATURE – INDICATORS AND DATA ELEMENTS

EXPLAIN that once data is transferred to the aggregation forms, it provides a building block for calculating indicators.

SHOW *Module 3 Slide 19* and summarise the rationale for coding then highlight the examples.

SAY that it is important that each data element is uniquely identified on the form to reduce ambiguities.

A provisional coding scheme has been introduced – awaiting adoption and review for use by other services – to differentiate one indicator or data element from the other.

Indicators have been coded according to the different programmes.

GIVE Example of indicators:

- HTC is HIV01-01
- PMTCT are coded HIV02-1 to 12.
- SAY that the number after “HIV” prefix, represent the programme and the number preceded with a “dash” represents the indicator count number within each programme.

### 3. A PREVIEW OF MODULE 3 UNITS 2-7

SHOW *Module 3 Slide 20*

EXPLAIN that in the units to follow, the participants will be taken through the service provision frameworks and data management for different programmes.

For each programme, the course will walk the participants through:

- Indicators
- Data sources
- Data collection procedures
- Data flow and reporting requirements

SAY that in the next units the participants will spend most of the time doing exercises as a way of practicing the use of tools.

1. POSSIBLE SCENARIOS/OUTCOMES FOR HTC SERVICE PROVISION

Show *Module 3 Unit 2 Slide 1*

EXPLAIN that when a client/patient comes to HTC there can be several possible scenarios or outcomes and all these need to be captured for

- For client/patient management
- For reporting as they contribute to the indicator set.

GIVE Examples from the slide

SHOW *Module 3 Unit 2 Slide 2*

ASK participants to turn to their participant's notes and locate the "Possible Outcomes in HTC", currently on the screen.

Once everyone has located this chart in their books,

SHOW *Module 3 Unit 2 Slide 3*

TAKE the participants through the Generic Framework for HTC focusing on the Data Collection Points A to F

- Point A- Patient/Clients take a HIV test
- Point B- Patient/Clients Know their result
- Point C - Patient/Clients with a Positive Result
- Point D- Patient/Clients with a Positive Result Assessed for ART
- Point E- Patient/Clients Assessed for ART referred for ART
- Point F- Patient/Clients with a Positive Result who are pregnant and referred to PMTCT

2. OVERVIEW OF DATA MANAGEMENT FOR HTC

SHOW *Module 3 Unit 2 Slide 4*

EXPLAIN to the participants that the HTC and Laboratory register is the primary source of data for HTC.

- The same register can be used by any department, other than PMTCT, where HIV testing is done.
- As a result of this arrangement, it is possible to have more than one active register at any given time in the same facility.
- In this case, a collation process will be inevitable before transferring data to the aggregation form.

ASK the participants to compare the columns of the old and the new HTC register

EXPLAIN that very few changes have been done on the HTC register which are that there is now a column to indicate whether the client had been tested before and what the results were.

TELL the participants that HTC has only one indicator on the essential list coded HIV01-01.

- This indicator requires 16 data elements:
- 14 are collected
- Two (2) are calculated from the 14 data elements

### 3. UNDERSTANDING THE HTC LABORATORY REGISTER

#### 3.1 INSTRUCTIONS FOR COMPLETING THE REGISTER

ASK participants to turn to *page 1* of the *Procedure Manual* and give them 10 minutes to read through the instructions for completing this register.

At the end of 10 minutes, open the meeting for comments and clarification.

TIP: It is recommended that participants are asked to read through instructions during the evening before the exercise

#### 3.2 GROUP EXERCISE

DIRECT participants to page 1 of the Participants Workbook

ASK them to do exercise **3-2-1**

ALLOW them 30 minutes to do the exercise

WALK around the different groups and with the help of the co-facilitators assist the different groups with any questions the participants may have.

#### 3.3 PLENARY

REQUEST one group to present their answers. The rest of the participants should be confirming if the answers are the same with what they have.

PAUSE to clarify and build consensus around those questions with varying responses.

COMPARE the answers given with those in the facilitators work book

PROVIDE clarification if they are different from those given by the participants.

1. POSSIBLE SCENARIOS/OUTCOMES FOR PMTCT

SHOW *Module 3 Unit 3 Slide 1*

EXPLAIN to the participants that when a pregnant woman enrolls into PMTCT, there are different possible scenarios/outcomes that can occur and all the important ones need to be documented during data collection

SHOW *Module 3 Unit 3 Slide 2*

ASK the participants to turn to the Participant's notes and draw their attention to the PMTCT flow chart.

ASK them to identify from the flow chart possible scenarios that can occur with different clients

TAKE the participants through the Possible Scenario/Outcomes for PMTCT flow chart emphasizing the following Data Collection Points, A to L:

- Point A- Mother already on ART
- Point B- Mother already on ART but may need to substitute a drug e.g. from Efavirenz –based combination to Nevirapine-based
- Point C - Mother not on ART but eligible
- Point D- Mother eligible for ART and starts on ART
- Point E- Mother not Eligible and starts prophylaxis at 14 wks
- Point F- Mother missed starting AZT after 14wks
- Point G – Mother tests positive in labour and gets NVP
- Point H- Mother tests positive in labour and gets 3TC & AZT in labour
- Point I- Mother started AZT at 14wks and get NVP in labour
- Point J- Mother started AZT at 14wks and gets 3TC & AZT in labour
- Point K - Mother started AZT at 14 wks and gets NVP, 3TC & AZT in labour
- Point L- Baby whose mother did not receive any Prophylaxis

SHOW *Module 3 Unit 3 Slide 3-5*

EMPHASISE that it is important to collect data for the possible scenarios as it is important for

- Facility based programme management e.g. the drug combinations/regimens the clients/patients are on- so as to phase out the outdated regimens
- For onward reporting to contribute to the national PMTCT indicators

EXPLAIN that Patients/Clients get enrolled into the programme with under various circumstances:

- Those with known HIV positive status before coming for the 1<sup>st</sup> ANC visit would either be
  - On ART - and may Continue with the same treatment as prophylaxis
  - Eligible for ART- will be Started on ART
  - Not Eligible for ART –may commence prophylaxis around 14 weeks
- Those who get tested in the ANC and have a positive result would either be
  - Eligible for ART- and be Started on ART
  - Not Eligible for ART – waits to start prophylaxis at 14 weeks or immediately after
- Those known to be positive during labour and delivery will be eligible for
  - Prophylaxis during labour and postnatal

- Those who are tested positive within 72 hours of delivery is eligible for
  - Prophylaxis to the baby

## 2. DATA MANAGEMENT PROCEDURES FOR PMTCT

SHOW *Module 3 Unit 3 Slide 6*

EXPLAIN to the Participants that:

- Eleven (11) indicators have been selected for monitoring the PMTCT Programme
- 40 data elements - 31 are collected and 9 calculated from the 31 data elements.
- All derived from the possible scenarios/outcomes of PMTCT service provision

TELL participants that the main routine primary sources for PMTCT data are:

- Mother-baby booklet
- ANC, maternity and postnatal registers.

EMPHASISE that Data collection for PMTCT requires extra attention especially to ensure that the records for both the mother and baby match consistently.

SHOW *Module 3 Unit 3 Slide 7-8*

ASK the participants to turn to the separate copies of the old and the new ANC, Maternity and Postnatal registers provided.

ASK them to say what changes they notice between the old and the new registers.

HIGHLIGHT the changes that have taken place with the data collection tools for PMTCT.

READ from the slide

## 3. UNDERSTANDING DATA COLLECTION TOOLS FOR PMTCT

### 3.1 INSTRUCTIONS FOR COMPLETING THE ANTENATAL, MATERNITY AND POSTNATAL REGISTERS

REQUEST participants to turn to page 6-11 of the procedures manual

GIVE the participants 15 minutes to read through the instructions for completing the ANC, maternity and postnatal registers.

At the end of 15 minutes, open the meeting for comments and clarification.

TIP: It is recommended that participants are asked to read through instructions during the evening before the exercise

### 3.2 GROUP EXERCISE

EXPLAIN that in this exercise the participants will use the Antenatal, Maternity and Postnatal Registers to aggregate the PMTCT data in the facility reporting form.

DIRECT participants to page 4 of the Participants Workbook and do **exercise 3-3-1**.

ALLOW them 30 minutes to do the exercise.

WALK around the different groups and with the help of the co-facilitators assist the different groups with any questions the participants may have.



### 3.3 PLENARY

REQUEST one group to present their answers.

- The rest of the participants should be confirming if the answers are the same with what they have.

PAUSE to clarify and build consensus around those questions with varying responses.

COMPARE the answers given with those in the facilitators work book

PROVIDE clarification if they are different from those given by the participants.

1. POSSIBLE SCENARIOS FOR HIV-EXPOSED INFANT FOLLOW-UP SERVICE PROVISION

1.1 TIMING OF ENROLMENT

SHOW *Module 3 Unit 4 Slide 1*

EXPLAIN to the participants that HIV Exposed Infants enroll into the programme at different ages.

Timing of enrollment can be categorized as:

- 0 to 6 weeks
- 7 weeks to 9 months
- 10 months to 18 months

TAKE the participants through the Service Provision Matrix for HEI by timing of entry

EXPLAIN that the infants will receive different health services depending on the timing of their enrollment.

1.2 POTENTIAL SERVICES BY TIMING OF ENROLMENT

Using *Module 3 Unit 4 Slides 2-4*, TAKE the participants through the different timings of enrollment and explain the services that will be received depending on timing at enrollment.

1.2.1 ENROLLED FROM 0-6 WEEKS

EXPLAIN that an infant who is enrolled between 0-6 weeks of delivery may have either of the following scenarios:

- HIV Testing
  - Take a PCR test at 6wks
  - If the PCR is negative (in the presence of breastfeeding) at 6 wks, the infant will take the 1st Antibody test at 9 months
  - If the confirmatory PCR test at 9 months is negative (and baby is still on breast milk), a 2nd Antibody test will be done at 18 months
- Cotrimoxazole
  - Start Cotrimoxazole at 6wks
- ARVs
  - Prophylaxis (ARVs) at birth (or within 72hrs)
  - Prophylaxis (ARVs) after 72hrs
- Nutrition
  - Known to be Exclusively Breastfed from birth
  - Known to be Exclusively Replacement Fed from birth
  - Received Mixed feeding from birth
  - At 12 months, the infant may be still be
    - Breastfeeding
    - Not Breastfeeding

### 1.2.2 ENROLLED FROM 7 WEEKS-9MONTHS

EXPLAIN that an infant who is enrolled between 7 weeks – 9 months of age is likely to undergo the following:

- HIV Testing
  - Have a PCR before 9 months
  - Have 1st Antibody test at 9 months
  - In addition if the test are negative at nine months the infant may have
    - 2<sup>nd</sup> Antibody test at 18 months
- Cotrimoxazole
  - Started cotrimoxazole within 2 months
  - Started cotrimoxazole after 2 months
- ARVs
  - Started Nevirapine after 6 weeks
- Nutrition
  - Exclusive Breastfeeding (0-6months)
  - Exclusive Replacement Feeding (0-6months)
  - Mixed feeding ( before 6 months)
  - In addition the infant later be may be
    - Breastfeeding ( at 12 months)
    - Not Breastfeeding (at 12 months)

### 1.2.3 ENROLLED FROM 10MONTHS -18 MONTHS

EXPLAIN that an infant who presents after 9 months may have a combination of these services

- HIV Testing
  - 1st Antibody test after 9 month
  - 2nd Antibody test at 18 months
- Cotrimoxazole
  - Cotrimoxazole (After 2 months)
- ARVs
  - Nevirapine after 6 weeks
- Nutrition
  - Breastfeeding ( at 12 months)
  - Not Breastfeeding (at 12 months)

## 2. DATA MANAGEMENT PROCEDURES FOR HEI FOLLOW UP

SHOW *Module 3 Unit 4 Slide 5-7*

INFORM THE workshop that the HEI programme has

- Six (6) selected indicators for routine monitoring
- Seventeen (17) data elements; of which thirteen (13) are directly collected while four (4) are calculated from within the 14 collectable elements.
- The main source of data is the HEI card and the HIV Exposed Infant Follow-up register.

SHOW the participants the data elements on the facility reporting form explaining their numbering from (HV02-24 to -40+]

EMPHASISE that HEI data collection tools are new, and therefore there are no old ones to compare with.

### 3. UNDERSTANDING DATA COLLECTION TOOLS FOR HEI

#### 3.1 HIV-EXPOSED INFANT FOLLOW-UP CARD

##### 3.1.1 UNDERSTANDING INSTRUCTIONS FOR HEI FOLLOW-UP CARD

REQUEST participants to turn to page 16 of the procedures manual

GIVE them 10 minutes to read through the instructions for completing the HEI follow-up card

At the end of 10 minutes, INVITE comments or clarifications from the participants.

TIP: Encourage participants to read through instructions during the evening before the exercise so that only clarifications are sought during the meeting.

##### 3.1.2 GROUP EXERCISE

EXPLAIN to the participants that in the next exercise they are going to be practice how to complete the HEI card.

ASK them to work in groups of two's.

Three case scenarios have been given and for each they shall use the sample cards on the participants' manual to fill out the data.

DIRECT participants to page 14 of the Participants Workbook and do **exercise 3-4-1**.

ALLOW them 20 minutes to do the exercise.

##### 3.1.3 PLENARY

REQUEST for volunteers to the front share their answers with the rest of the participants.

CONFIRM the answers with the class

COMPARE the answers given to those in the facilitators work book

Focus more on those questions with different answers among participants.

#### 3.2 HIV-EXPOSED INFANT FOLLOW-UP REGISTER

##### 3.2.1 UNDERSTANDING INSTRUCTIONS FOR COMPLETING THE HIV-EXPOSED INFANT FOLLOW-UP REGISTER

REQUEST participants to turn to page 21 of the procedure manual

GIVE them 15 minutes to read through the instructions for completing the HEI follow-up register.

At the end of 15 minutes, INVITE comments or clarifications from the participants.

##### 3.2.2 GROUP EXERCISE

DIRECT participants to page 26 of the Participants Workbook and do **exercise 3-4-2**.

ALLOW them 30 minutes to do the exercise.

### 3.2.3 PLENARY

REQUEST for volunteers to the front to come and share their answers with the rest of the participants.

CONFIRM the answers with the class

COMPARE the answers given to those in the facilitators work book

Focus more on those questions with different answers among participants.

### 3.3 AGGREGATION FOR HIV-EXPOSED INFANT SERVICES

#### 3.3.1 GROUP EXERCISE

ASK participants to turn to pages 30 of the participants' workbook

ASK them to do **exercise 3-4-3**.

ALLOW them 15 minutes to do this exercise.

#### 3.3.2 PLENARY

REQUEST for volunteers to the front to come and share their answers with the rest of the participants.

CONFIRM the answers with the class

COMPARE the answers given to those in the facilitators work book

Focus more on those questions with different answers among participants.

1. PROCESS FLOW EVENTS FOR CARE AND TREATMENT SERVICE PROVISION

1.1 POSSIBLE EVENTS FLOW CHART

SHOW *Module 3 Unit 5 Slides 1-2*

SAY that there are different possible scenarios and events that can happen in Care and Treatment

SAY that they need to be captured in data collection as they contribute to the data elements and the indicators

SHOW *Module 3 Unit 5 Slide 3*

ASK the participants to open the participants' notes and locate slide 3

Go through the flow chart on *slide 3* highlighting the different events.

GIVE Examples

SHOW *Module 3 Unit 5 Slides 4-7*

HIGHLIGHT different examples for different possible events

1.2 ENTRY

SAY that Entry can be from different sources

- Those confirmed positive can come from PMTCT, VCT, TB Clinic, OPD and IPD.
- Transfer-in from another facility-
  - May already be on ART and therefore continues with therapy
  - or
  - May not be on ART and therefore goes through the eligibility procedures

1.3 ASSESSMENT FOR ART ELIGIBILITY

EXPLAIN that for Pre-ART clients/patients, assessment for eligibility may yield two possible outcomes: eligible or not eligible to start therapy.

- Not Eligible
  - EXPLAIN that this group will be initiated or continue on CTX and are periodically reassessed for ART eligibility and TB status.
  - REMIND participants that whilst in "Pre-ART", these are the possible exit points: enrolled for ART, transfer out, lost-to- follow up or die.
- Eligible
  - EXPLAIN that at times, even those who are eligible for ART may not necessarily commence on therapy within the reporting period due to a number of reasons:
    - Client/patient not being ready (due to adherence issues)
    - Drugs being out of stock (hence reserved for those already on therapy)
    - May be clinically too sick to start on ARV.

## 1.4 STARTED ON THERAPY

CLARIFY that “starting on therapy” means a patient has been initiated on the first line drug according to existing treatment guidelines at a time.

STATE that there are two possibilities at initiation on therapy:

- Initiation on an “appropriate 1<sup>st</sup> line regimen”
- Initiation on an “inappropriate 1<sup>st</sup> line regimen”

## 1.5 TREATMENT OUTPUTS

EXPLAIN to the participants that once a patient is started on therapy, at any given time thereafter; there are only two possibilities – which are mutually exclusive of each other.

Either

- On Therapy-on
  - Original first line
  - Alternative 1<sup>st</sup> line
  - Switched to 2<sup>nd</sup> line drugs
- Not on Therapy
  - Temporary stopped treatment (e.g. due to complications)
  - Exited from the programme due transfer out, lost to follow up or death

### 1.5.1 DRUG CHANGES WHILE ON THERAPY

INFORM the participants that once on therapy (in the absence of interruptions and termination) patient may be

- Continued on the Original First Line
- Substituted to Alternative First Line
  - GIVE an example of a patient started on AZT+3TC+NVP but later changed to AZT+3TC+EFV (probably due to anti-TB drugs), this patient when pregnant may be taken back to AZT+3TC+NVP therefore multiple substitution are possible
- Switch to Second Line (or higher drug).
  - GIVE an example: from d4T+3TC+NVP to AZT+3TC+LPV/r.

### 1.5.2 TREATMENT INTERRUPTIONS OR TERMINATION

EXPLAIN to the participants that patients may interrupt treatment under the following circumstances:

- Lost-to-follow-up
- Stopped or dropped from the programme.
- Termination from the programme refers to death while on therapy.

## 2. DATA MANAGEMENT PROCEDURES AND COLLECTION TOOLS FOR CARE AND TREATMENT

SHOW *Module 3 Unit 5 Slide 8*

INFORM THE participants that routine monitoring, Care and Treatment Programme has:

- Ten (10) selected indicators (besides the ones specific to HEI)
- Seventy-one (71) data elements; of which fifty-three (53) are directly collected while eighteen (18) are calculated
- The primary sources of data are the Pre-ART Register, the ART Monthly, the CCC card and the Care and Treatment Activity Register.

SHOW the participants the data elements on the facility reporting form explaining their numbering from (HV03-01 to -71].

ASK the participants to turn to the separate copies of the old and the new PreART & ART monthly registers, Monthly Summary Sheet and Cohort Summary sheet provided.

ASK them to say what changes they notice between the old and the new tools.

SHOW *Module 3 Unit 5 Slide 9-10*

HIGHLIGHT the changes that have taken place with the data collection tools for Care and Treatment.

READ from the slide

EMPHASISE that the Activity Sheet and Tally sheet are new tools.

## 2.1 COMPLETING THE CCC CARD

### 2.1.1 INSTRUCTIONS FOR COMPLETING THE CCC CARD

REQUEST participants to turn to page 25 of the procedures manual

Give them 15 minutes to read through the instructions for completing the CCC Card.

INVITE comments or clarifications from the participants.

### 2.1.2 GROUP EXERCISE - COMPLETING THE CCC CARD

ASK participants to turn to pages 35 of the participants' workbook and do **exercise 3-5-1**.

ALLOW them 30 minutes to do this exercise.

REQUEST for volunteers to the front to come and share their answers with the rest of the participants.

## 2.2 COMPLETING THE PRE-ART REGISTER

### 2.2.1 INSTRUCTIONS FOR COMPLETING THE PRE-ART REGISTER

REQUEST participants to turn to page 37 of the procedures manual

Give them 15 minutes to read through the instructions for completing the Pre-ART Register.

INVITE comments or clarifications from the participants.

### 2.2.2 GROUP EXERCISE - COMPLETING THE PRE-ART REGISTER

ASK participants to turn to pages 45 of the participants' workbook and do **exercise 3-5-2**.

ALLOW them 15 minutes to do this exercise.



REQUEST for volunteers to the front to come and share their answers with the rest of the participants.

## 2.3 COMPLETING THE ART MONTHLY REGISTER

### 2.3.1 INSTRUCTIONS FOR COMPLETING THE ART MONTHLY REGISTER

REQUEST participants to turn to page 41 of the procedure manual

GIVE them 20 minutes to read through the instructions for completing the ART Monthly Register.

INVITE comments or clarifications from the participants.

### 2.3.2 GROUP EXERCISE - COMPLETING THE ART MONTHLY REGISTER

ASK participants to turn to pages 48 of the participants' workbook and do **exercise 3-5-3**.

ALLOW them 15 minutes to do this exercise.

After 15 minutes, REQUEST for volunteers to the front to come and share their answers with the rest of the participants.

## 2.4 COMPLETING COLLATION, AGGREGATION AND REPORTING TOOLS

### 2.4.1 COLLATION AND AGGREGATION PROCEDURES

INFORM the participants that Care and Treatment (excluding the HEI component) has three data collation forms for summarizing thirty-three (33) of the fifty-three (53) data elements before they are transferred to the reporting form.

These tools are:

- Care and treatment activity register (primary),
- Care and treatment tally sheet (secondary)
- Cohort summary form (primary)

### 2.4.2 COMPLETING THE CARE AND TREATMENT ACTIVITY AND TALLY SHEETS

#### (a) INSTRUCTIONS FOR COMPLETING THE CARE AND TREATMENT ACTIVITY AND TALLY SHEETS

REQUEST participants to turn to pages 47 and 52 of the procedure manual

GIVE them 30 minutes to read through the instructions for completing the Care and Treatment Activity Register and the Tally Sheet.

At the end of 30 minutes, INVITE comments or clarifications from the participants on the contents of the instructions for the two forms.

ASK the meeting to state which registers and cards collect similar information as the ones just discussed in the instructions and why it is necessary to duplicate the collection.

#### (a) GROUP EXERCISE - COMPLETING THE CARE AND TREATMENT ACTIVITY AND TALLY SHEETS

ASK participants to turn to pages 53 of the participants' workbook and do **exercise 3-5-4**.

ALLOW them 30 minutes to do this exercise.

After 30 minutes, ASK for volunteers to the front to share their answers with the rest of the participants.

COMPARE the answers given with those of other groups and those in the facilitators work book and explain in case of any discrepancies.

### 2.4.3 COMPLETING THE COHORT SUMMARY SHEET

#### (a) INSTRUCTIONS FOR COMPLETING THE COHORT SUMMARY FORM

GUIDE the participants in reading the instructions for completing the CCC Cohort Summary Sheet (page 56 of the procedure manual) with focus on the following data elements:

- Started on ART in this clinic- original cohort
- Transfers in
- Transfers out
- Net current cohort
- On original 1st-line regimen
- On alternate 1st-line regimen (substituted)
- On 2nd-line regimen (switched)
- Stopped
- Died
- Lost to follow-up (DROP)
- Percent of cohort alive and on ART
- CD4 median or fraction  $\geq$  (threshold) [of those with available CD4] (optional)
- Number of persons who picked up ARVs each month for 6 months
- Number of persons who picked up ARVs each month for 12 months

ENSURE that all the participants understand each of the data elements listed.

EXPLAIN to them that this is an interval analysis form, for cohorts of patients that have completed 6 months, 12 months, and 24 months on therapy.

#### (a) GROUP EXERCISE – COMPLETING THE ART COHORT SUMMARY FORM

ASK participants to turn to page 59 of the Participant's Workbook

Allow them 15 minutes to do **exercise 3-5-5**. After 15 minutes, ASK them to return to the larger group.

REQUEST rapporteurs to share the group's experiences according to instruction # 3 on page 59 of the Participant's Workbook

LET them GO OVER the answers for questions 4 to 8

SUMMARISE the comments and allow participants to add anything they may have forgotten to mention.

ASK participants to use the space under each of the questions in their Workbooks to write down the interesting contributions from other member.

## 2.5 COMPLETING THE NUTRITION FOR HIV REGISTER

### 2.5.1 INSTRUCTIONS FOR COMPLETING THE NUTRITION REGISTER

REQUEST participants to turn to page 54 of the procedure manual

GIVE them 20 minutes to read through the instructions for completing Nutrition Register.

INVITE comments or clarifications from the participants.

#### 2.5.2 GROUP EXERCISE - COMPLETING THE NUTRITION REGISTER

ASK participants to turn to pages 67 of the participants' workbook to do **exercise 3-5-6**.

ALLOW them 15 minutes to do this exercise.

After 15 minutes, REQUEST for volunteers to the front to come and share their answers with the rest of the participants.

1. POSSIBLE EVENTS IN VMMC SERVICE PROVISION

SHOW *Module 3 Unit 6 Slide 1*

EXPLAIN the circumstances under which a client may present himself when seeking circumcision services

These are:

- May voluntarily present oneself or be referred from other services.
- May or may not be sick.
- May be HIV positive, negative or unknown status.

SHOW *Module 3 Unit 6 Slide 2*

EXPLAIN to the participants that on undertaking the procedure, the client may experience adverse effects:

- During or after the procedure.
- This may be moderate or severe.

2. DATA MANAGEMENT PROCEDURES FOR VMMC

SHOW *Module 4 Unit 6 Slide 3*

EXPLAIN that from the possible scenarios the indicators and the data elements that are used to monitor VMMC are generated.

GO over the indicators and the data elements

STATE that the data is obtained from minor theatre. Explain with the revision of indicators and data elements, no changes were made to the theatre register.

EMPHASISE that circumcision procedure shares the same register with other minor surgical procedures.

3. UNDERSTANDING DATA COLLECTION TOOLS FOR VMMC

3.1 INSTRUCTIONS FOR COMPLETING THE MINOR THEATRE REGISTER

REQUEST the participants to turn to page 59 of the procedure manual for completing the minor theatre register.

GO OVER the instructions and ensure that columns N, O, R and S are clearly understood by everyone.

3.2 GROUP EXERCISE

ASK participants to turn to page 69 of the Participant's Workbook  
GIVE them 10 minutes to do **exercise 3-6-1**.

REQUEST for volunteers to the front to come and share their answers with the rest of the participants.

CONFIRM the answers with the class

COMPARE the answers given to those in the facilitators work book

SUMMARISE the comments and allow participants to add anything they may have forgotten to mention.

1. POSSIBLE SCENARIOS FOR PEP SERVICE PROVISION

SHOW *Module 3 Unit 7 Slide 1*

EXPLAIN that HIV exposure can occur in different circumstances not only for health workers

SAY that this can either be occupational or non occupational

SAY that this has necessitated expansion of the PEP programme to cover other patients seeking PEP services

SHOW *Module 3 Unit 7 Slide 2*

GO over the possible scenarios of PEP services provision

SHOW *Module 3 Unit 7 Slide 3*

GIVE examples of possible client types:

- Occupational Exposure: Clients are believed to have been exposed to HIV in the course of duty.
  - Examples- include health workers (Medical, clinical, nursing, laundry, etc) and emergency service workers such as police
- Non-Occupation Exposure: Clients are believed to have been exposed to HIV under circumstances unrelated to formal work.
  - Examples Notable in this category is sexual assault, and injury (for example, accident victim on public transport)

SHOW *Module 3 Unit 7 Slide 4*

EXPLAIN that a client may present oneself to the facility within 72 hours of exposure or later than 72hrs.

STATE that only those client presenting themselves within 72 hours receive PEP services which are pegged on various factors-Examples

- Whether high or low risk (Low-risk exposures are evaluation on one-by-basis for PEP provision)
- Willingness to have a HIV test
- Outcome of the test

EXPLAIN that for those clients presenting themselves within 72hrs, the following outcomes are possible:

- The client may decline HIV test – and PEP is not provided
- The HIV test is negative – and PEP is provided with short term follow up.
- The HIV test is positive – client is referred to Pre-ART
- If the status cannot be immediately ascertained due to institutional-related problems – PEP may be offered.

EXPLAIN that those presenting after 72 are referred to HTC

## 2. DATA MANAGEMENT PROCEDURES FOR PEP

### SHOW *Module 3 Unit 7 Slide 5*

EXPLAIN that for routine monitoring of PEP services from the possible scenarios there is

- one (1) indicator
- 14 data elements
- The data is primarily summarized from the integrated PEP register.
- Bigger facilities may have several PEP sites with separate registers; in such as case, collation may therefore be necessary to enable data aggregation.

ASK the participants to compare the columns of the old and the new PEP register

EXPLAIN that no much change have been made with the PEP register. A column has been introduced to different the various client types- Occupational, Non- occupational and Others.

## 3. UNDERSTANDING DATA COLLECTION TOOLS FOR PEP

### 3.1 INSTRUCTIONS FOR COMPLETING THE PEP REGISTERS

REQUEST the participants to turn to page 61 of the procedures manual for instructions on completing the PEP register.

ASK them to read through the instructions

INVITE comments or clarifications from the participants.

### 3.2 GROUP EXERCISE

ASK participants to turn to page 73 of the Participant's Workbook

GIVE them 10 minutes to do **exercise 3-7-1**.

REQUEST for volunteers to the front to come and share their answers with the rest of the participants.

CONFIRM the answers with the class

COMPARE the answers given to those in the facilitators work book

SUMMARISE the comments and allow participants to add anything they may have forgotten to mention.

## MODULE 4: DATA COLLATION AND AGGREGATION

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### PURPOSE:

- To provide an overview of how data is collated and aggregated at different levels

### OBJECTIVE:

- At the end of this module participants will be able to understand process of collating and aggregating data for HIV services at different organisational levels

### METHOD:

- Presentations

### MATERIALS:

- The following materials are necessary to deliver this module:
  - LCD Projector/Slides
  - White board or flipchart with markers in case the facilitator may need to write

### PREPARATIONS:

- Ensure that all the materials: LCD projector is working and the white board or flipchart including the markers are available

### LEARNING ACTIVITIES

60 minutes

#### 1. INTRODUCTION

##### SHOW *Module 4 Slide1*

STATE the objective of the module

SAY that some points from the previous modules have been repeated in this module in order to clearly provide the link from data collection through to reporting.

#### 2. DATA REQUIREMENTS PYRAMID

##### SHOW *Module 4 Slide 2 -3*

EXPLAIN that this is a revisit of what has been previously covered in Module 2.

SAY that the amount of data required at each level reduces as moves up the pyramid from the community and service delivery points to national and international levels

EXPLAIN that it is therefore imperative to collate and aggregate the data as one moves up the pyramid so as to lose the essence of the data

#### 3. DATA AMOUNT REDUCTION THROUGH COLLECTION TOOLS

##### SHOW *Module 4 Slide 4-6*

REVIEW the functions of the various tools; cards, registers, collations and aggregation forms.

EXPLAIN that the design of each type of tool (card, register, etc) should contribute to the process of data reduction at the next level.

SAY that this reduction (as EXPLAINED earlier) is determined by management needs, role and functions at each specific level.

GIVE example:

- At the facility level, the facility manager may want to know “*source of patient into care by age*” so that staff such as counselors may be efficiently distributed within a facility.
- However, if similar information is given to a district manager (as individual facility data or aggregated), this manager will have very little to do with the data.
- The district may only be interested in knowing the *total number of patients enrolled in care* from each facility.

#### 4. DOCUMENT FLOW FOR SELECTED ROUTINE HIV/AIDS SERVICES

SHOW *Module 4 Slide 7*

ASK participants to turn to their notes and locate Module 4 slide 7, then explain the following with examples.

- Selected data from the mother's ANC card can be summarized in the ANC, Labour and Delivery register or Post natal register
- Some data from the child card and HEI card are included into the HIV Exposed Infant Register
- Data in the Client's CCC card feed on the Pre-ART or ART Monthly register

EXPLAIN further that:

- Individual patient lists (from registers) can be summarized through the monthly page summaries for some registers such as the ANC and maternity registers.

OR

- Can be collated through summary sheets

EXPLAIN that data from the summaries (register page summaries or collation sheets) are transferred to an aggregation form, which may be the same form used for reporting.

STATE that it is possible also that the aggregation form used by the facility is not the same as the one used by district.

PAUSE: ASK participants to explain why it is necessary to have a different reporting form at district and facility level.

PROCEED to give examples from the flow chart:

- HTC has 16 reportable data elements at the facility level **two** of which are calculated while at the district level, it has **three** reportable data elements **two** of which are calculated.
- PMTCT has **40** reportable data elements at the facility level **nine** of which are calculated while at the district level, it has **17** reportable data elements **eight** of which are calculated.

#### 5. UNDERSTANDING DATA COLLATION AND AGGREGATION

##### 5.1 GROUP EXERCISE

ASK participants to turn to page 77 of the Participant's Workbook

GIVE them 15 minutes to do **exercise 4-1-1**.



REQUEST for volunteers to the front to come and share their answers with the rest of the participants.

CONFIRM the answers with the class

COMPARE the answers given to those in the facilitators work book

SUMMARISE the comments and allow participants to add anything they may have forgotten to mention.

END the session by thanking the participants for their contributions

## MODULE 5: USING DATA FOR MANAGEMENT DECISIONS

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### 1. INTRODUCTION

SHOW *Module 5 Slides 1* then *2*

EXPLAIN to the participants the objectives of the module.

EMPHASISE that data collection and processing is not an end in itself.

STATE that since so much time and effort is used on data collection and processing, data should be used for making informed decisions at various levels. The decision made should be based on data.

REMIND the participants that a lot of emphasis through this training has been placed on ensuring that only data relevant to each level should be collected by that level.

STATE that data needs should be a function of roles and responsibilities at each level.

- IMPORTANT: Use of data should not be a past time exercise but rather enshrined into the roles and responsibilities of the managers at each level.
- INFORM the meeting that NASCOP will soon release a set of tracer indicators (from the broader list) on which each level will be expected to assessment their performance every quarter.

### 2. USES OF HEALTH DATA – WITH EXAMPLES

#### 2.1 FACILITY LEVEL

SHOW *Module 5 Slide 3*

EXPLAIN that at data collected at facility level cover the following broad uses:

- Managing each individual client or patient – as they seek services- data specific to the patient
- Management of programmes at the service delivery point itself- meant to provide information about a group of patient/clients and services in a given facility.

EXAMPLES:

- At individual level, service provider may be interested in collecting data to answer the following questions
  - Has the patient been progressing since starting ART?
  - Is the patient adhering to therapy?
  - Has the patient informed the partner about his/her HIV status?
- At facility level, the manager may be interested in collecting data to answer the following questions :
  - Out of the patients the facility started on ART six months ago, how many of them are still on treatment?
  - Why are so many patients been changed to alternative 1<sup>st</sup> line drug between 6 and 12 months?
  - Are we able to retain at least 90% of HEI until they are due for exiting the programme?

## 2.2 DISTRICT & PROVINCIAL LEVEL

### SHOW *Module 5 Slide 4*

EXPLAIN that the district data needed by the district level is usually linked to indicator.

STATE that since district provides services through health facilities, it relies on them to supply the data needed at this level.

SAY that not all data needed at the district is generated from facilities; other data is localized to that level,

GIVE examples

- Funds allocated/used for immunization during the quarter.
- Number of CCC sites in the district

## 2.3 NATIONAL LEVEL

### SHOW *Module 5 Slide 5*

EXPLAIN that data reaching this level may have implications on decision made at the policy and guideline levels.

GIVE examples from the slide

## 2.4 INTERNATIONAL LEVEL

### SHOW *Module 5 Slide 6*

EXPLAIN that the country is signatory to different international obligations and needs to give periodic reports at the international level.

STATE that the data/information at this level is important to benchmark the country's achievements against other countries.

EMPHASISE that the data also gives an indication of the areas in need of strengthening in terms of technical and financial support.

SUMMARIZE the presentation by saying that it is therefore important that as data is being collected the purpose for which it is being collected is identified to avoid collecting redundant data.

ADD that on the other hand the different levels will collect data that helps them make decision at different levels of service delivery.

## 3. ACTIVITY

- Use four separate flip chart and label them as “facility”, “district”, “province” and “national”
- ASK four volunteer to stand next to each flipchart
- ASK this question to the class: *“What are the key roles and functions of each level?”*
- The respondent from the class should state the level for which they are giving the answer so that the correct flip chart is used

NOTE: This module is just snapshot of what can be done with the data; separate documentation detailing the use of indicators exists elsewhere.