### Facilitation for Training

**HIV Care and ART Recording and Reporting System**

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## Tentative schedule for training and methods used

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<th>Duration</th>
<th>Session</th>
<th>Methods</th>
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<tr>
<td>1 h</td>
<td>Sub module 1: Overview of HIV care/ART information system</td>
<td>✦ Plenary presentation with discussion</td>
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</table>
| 3 h      | Sub module 2-3: Use of patient records and registers | ✦ Brainstorming (individual data to collect)  
✦ Plenary presentation on data to collect, with reference to the brainstorming  
✦ Exercise: case/register studies |
| 2 h      | Sub module 4: Use of drug dispensing and stock registers | ✦ Plenary presentation on drug dispensing and stock monitoring  
✦ Exercise: compilation of drug stock register and monthly drug statistics |
| 3 h      | Sub module 5: ART Monthly Report | ✦ Plenary presentation on indicators from the monthly report  
✦ Exercise: compilation of a monthly report from pre-ART and ART registers  
✦ Plenary presentation on analysis of report |
| 4 h 30   | Sub module 6: Cohort Analysis Report | ✦ Plenary presentation on how to use the cohort report  
✦ Exercise: compilation of a cohort report from ART register  
✦ Exercise: analysis and interpretation of a cohort report |

## Participants and materials

| Participants | Facility management team  
✦ Doctors  
✦ Nurses  
✦ Counsellors | Pharmacists and drug dispensing staff |
| Modules | Sub modules 1,2,3,5,6 | Sub modules 1 and 4 |
| Materials | ✦ Participant Manual  
✦ Exercise book  
✦ Answers to exercise  
✦ Copy of the Patient HIV Care/ART Record  
✦ Copy of the Pre-ART Register  
✦ Copy of the ART Register  
✦ Copy of the ART Monthly Report  
✦ Copy of the Cohort Analysis Report | ✦ Participant Manual  
✦ Exercise book  
✦ Answers to exercise  
✦ Copy of the ARV Drug Dispensing Register  
✦ Copy of the ARV Drug Stock Register  
✦ Copy of the ART Monthly Report |
Sub module 1: Overview of HIV care and ART recording and reporting system

Session objectives
At the end of the session participants will be able to:
✦ understand the importance of standard recording and reporting tools;
✦ list key information collected; and
✦ identify the different forms to be used in a paper based recording and reporting system.

Time to complete sub module
1 hour

Training materials
✦ PowerPoint slides
✦ Participant Manual.

Content
✦ Objectives of programme monitoring
✦ Indicators at national/international levels
✦ Indicators at the facility level
✦ List of records and reports at the facility
✦ Storage of records and reports
✦ Confidentiality and security.

Session instructions
1. Lecture and discussion with PowerPoint presentation (1 hour)
2. Distribution of the forms, 1 copy per participant:
   ✦ Patient HIV Care/ART Record
   ✦ Pre-ART Register
   ✦ ART Register
   ✦ ART Monthly Report
   ✦ Cohort Analysis Report
Session objectives

At the end of the session participants will be able to:
✦ understand how the Patient HIV Care/ART Record is used;
✦ how to correctly fill out the Patient HIV Care/ART Record;
✦ understand how the Pre-ART and ART Registers are used; and
✦ correctly fill out the Pre-ART and ART Registers.

Time to complete sub module

3 hours

Training materials

✦ 3 flipcharts
✦ Transparencies of the Patient HIV Care/ART Record, Pre-ART and ART Registers
✦ 1 overhead projector
✦ PowerPoint presentation
✦ Exercise 1 – Case studies.

Content

✦ What is the Patient HIV Care/ART Record?
✦ Who should complete the Patient HIV Care/ART Record?
✦ When should the Patient HIV Care/ART Record be started?
✦ What information should be recorded?
✦ Check list on when to record information
✦ Exercise
✦ What are the Pre-ART and ART Registers for?
✦ When should the registers be filled in?
✦ Initial entry in the registers
✦ Pre-ART Register
✦ ART Register
✦ Patients transferred in
✦ Identification of patients missing or lost to follow-up in the ART Register
✦ Examples.

Session instructions

1. Brainstorming (15 minutes)
✦ Ask the participants ‘What is the minimal information to be collected during HIV care and ART visits, to produce the indicators recommended at facility level?’
✦ List participants answers on 3 flipcharts under:
   i. At the first visit (enrollment in the clinic)
   ii. During follow-up visits
   iii. Whenever information becomes available.
2. Lecture and discussion with PowerPoint presentation (1 hour)
   - Use the following sequence for presentation: the Patient HIV Care/ART Record, then the Pre-ART Register, and then the ART Register (as it is in the presentation).
   - During the presentation on the flipcharts, underline in blue the variables given by the participants during the brainstorming and underline in red the variables that will be used for generating routine indicators (as it is in the presentation with the code IND).

3. Exercises 1 (1 hour)
   - 2 case studies: from the patient history, complete the Patient HIV Care/ART Record and the Pre-ART and ART Registers.
     - Ask the participant to open their exercise book, exercise 1.
     - Divide participants in groups of 5 persons with mixed participation of doctors, nurses, counsellors and others.
       - Ask each group to do 1 case study.
     - For the case study, give each group a transparency each of the Patient HIV Care/ART Record, Pre ART and ART Registers and ask the participants to write the patient history on these.

4. Checking of exercises (45 minutes)
   - Case study: by overhead projection of the Patient HIV Care/ART Record, Pre-ART and ART Registers completed while reading patient history.
Sub module 4: How to use the drug dispensing and stock registers

Session objectives
For pharmacist/drug dispensing staff.

At the end of the session participants will be able to:
✦ fill out the ARV Drug Dispensing Register and Drug Stock Register.

Time to complete sub module
2 hours

Training materials
✦ 1 flipchart
✦ PowerPoint presentation
✦ Exercise 2: drug dispensing and stock registers.

Content
✦ Objectives of monitoring drug dispensing and stock records
✦ What is the purpose of drug dispensing and stock registers
✦ ARV Drug Dispensing Register
✦ ARV Drug Stock Register.

Session instructions
1. Lecture and discussion with PowerPoint presentation (30 minutes)
2. Exercise 2 (1h30)
   a. Ask the participants to open their exercise book, exercise 3 that includes drug dispensing, drug stock registers and monthly report (part 11 and 12).
   b. Divide participants in groups of 5 persons with mixed participation of doctors, nurses, counsellors and others.
   c. Ask the participants to complete the exercise and to prepare a slide for part 11 and 12 of the monthly report.
   d. Checking of exercise:
      i. Check (by the trainer) by projection of results, asking each group their results and their difficulties in obtaining it.
      ii. Give to each participant a copy of the answer.
Session objectives

At the end of this session the participants will be able to:
✦ understand how the ART Monthly Report is used;
✦ fill out indicators in the monthly report by checking the Pre-ART and ART Registers; and
✦ analyse the indicators and trends over time.

Time to complete sub module

3 hours

Training materials
✦ 1 flipchart
✦ PowerPoint presentation
✦ Exercise 3: Monthly report.

Content
✦ What is the ART Monthly Report for?
✦ When and how will the ART Monthly Report be completed?
✦ How to calculate the indicators?
✦ How to analyse the ART Monthly Reports?

Session instructions

1. Lecture and discussion with PowerPoint presentation (30 minutes)
   ✦ Review indicators in the ART Monthly Report and the method to obtain them.

2. Exercise 3 (2 hours)
   Pre-ART and ART Registers containing patients' data for the 3 first months of activity in a clinic (October to December 2004): compile the December 2004 report.
   ✦ Ask the participants to open their exercise book, exercise 2, which materials are:
     i. 1 pre-ART Register
     ii. 1 ART Register
     iii. 1 December 2004 ART Monthly Report
     iv. 1 blank copy of the ART Monthly Report.
   ✦ Divide participants in groups of 5 persons with mixed participation of doctors, nurses, counsellors and others.
   ✦ Ask the participants to compile the report for January 2005 on a transparency of a monthly report.
   ✦ Checking of exercise:
     i. Check (by the trainer) by projection of results, asking each group their results and their difficulties in obtaining it.
     ii. Give to each participant a copy of the completed January 2005 ART Monthly Report.

3. Lecture and discussion with PowerPoint presentation (30 minutes)
   ✦ Trend analysis of the indicators in the ART Monthly Report.
   ✦ Use the previous exercise to compile and analyse monthly indicators.
Session objectives
At the end of the session participants will be able to:
✦ understand how the Cohort Analysis Report is used; and
✦ fill out the Cohort Analysis Report by obtaining information from the ART Register.

Time to complete sub module
4 h 30

Training materials
✦ 1 flipchart
✦ PowerPoint presentation
✦ Exercise 4: compilation of a cohort report
✦ Exercise 5: analysis of a cohort report - Laptop with xls and ppt.

Content
✦ What is the Cohort Analysis Report for?
✦ When will the Cohort Analysis Report be completed?
✦ How to calculate the indicators?
✦ How to analyse the indicators?

Session instructions
1. Lecture and discussion with PowerPoint presentation (30 minutes)
   ✦ Review indicators in the Cohort Analysis Report.
   ✦ General principles on how to compile the Cohort Analysis Report.
   ✦ Direct example for a Cohort Analysis Report at 6 months with active participation of the participants. In the slide presentation for this example, all slides follow the same pattern, to support an active participation:
     i. What information have I to look for?
     ii. Where is this information in the ART Register?
     iii. What are the results I have to report?

2. Exercise 4 (2h)
   ✦ Ask the participants to open their exercise book, exercise 4, which has 2 different questions. Each question contains a completed ART register, and the participants have to do the cohort report.
   ✦ Divide participants in groups of 5 persons with mixed participation of doctors, nurses, counsellors and others.
   ✦ Ask each group to do 1 question and to prepare a slide of the cohort report corresponding.
   ✦ Checking of exercise:
     i. Check (by the trainer) by projection of results, asking each group their results and their difficulties in obtaining it.
     ii. Give to each participant a copy of the answer.
3. Exercise 5 (2h)
   ✦ Ask the participants to open their exercise book, exercise 5, which has 2 different questions. Each question contains a complete cohort report and the participants have to analyse it, make graph and prepare a short presentation.
   ✦ Divide participants in groups of 5 persons with mixed participation of doctors, nurses, counsellors and others.
   ✦ Ask each group to do 1 question and to prepare graphs and a short presentation on power point.
   ✦ Checking of exercise:
      i. Check (by the trainer) by projection of results, asking each group their results and their difficulties in obtaining it.
      ii. Give to each participant a copy of the answer.
### Sub module 1
Introduction to HIV care and ART recording and reporting system

#### Content
- Objectives and overview of programme monitoring
- Core indicators
- List of records and reports at facility level
- Confidentiality & Storage of records

#### Objectives of programme monitoring

- **At facility level**
  - To support patient management
  - To support drug supply management
- **At all levels**
  - To document the progress in equitable access to care and ART
  - To identify successes and gaps, and revise the programme accordingly

#### Overview (1)

- Patient monitoring data:
  - Patient medical record
- Program monitoring data:
  - Aggregated from individual patient records
  - Indicators (international/national agreement)
- Computerized or manual system

#### Overview (2)

- No perfect model exists
- ART monitoring is not easy:
  - Longitudinal data collection and analysis (cohort analysis)
- ART monitoring system should be:
  - Simple
  - Standardized
  - Minimum indicators
  - Facilitate feedback into programme improvement

#### Overview (3)

- Information for action
- 3 questions:
  - What is the key information (indicators) to be generated?
  - Which method to use to produce indicators from individual data?
  - Which individual data to be collected?
Core international indicators (1)

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<th>National policy and guidelines</th>
<th>Program coverage</th>
<th>Care coverage</th>
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<tr>
<td>Process</td>
<td>Programme coverage</td>
<td></td>
<td></td>
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<tr>
<td>Drug supply</td>
<td>3. % of ARV storage and delivery points experiencing stock-outs in the preceding 6 months</td>
<td></td>
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<tr>
<td>Human resources</td>
<td>4. Number of health workers trained on ART delivery in accordance with national or international standards</td>
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Core indicators at facility level (1)

Monthly report (transversal)

1. Cumulative number of patients enrolled in HIV care
2. Number started on ART during a reporting period
3. Cumulative number ever started on ART
4. Cumulative number medically eligible for ART but have not been started on ART
   - By sex, age (adult/children)
5. Cumulative number on ART
6. Cumulative number on substituted 1st line
7. Cumulative number switched on 2nd line
8. Proportion with >95% adherence

Core indicators at facility level (2)

Cohort report (longitudinal)

9. Proportion alive and on treatment 6, 12, 24 months after initiating ART
10. Proportion of patients continuing initial 1st line regimen, substituting 1st line, switched to 2nd line at 6, 12, 24 months of ART
11. Change in CD4 after 6, 12, 24 months
12. Proportion with normal activity at 6, 12, 24 months after initiating
13. Proportion who picked up their drugs 6/6, 12/12 months

Recording and reporting tools

- Records
- Patient HIV care/ART record
  - patient booklet
- Pre-ART register
- ART register
- Drug dispensing register
- Drug stock register

- Reports
- Monthly report
- Cohort analysis report

Output

| Program coverage | 5. % of health facilities with systems and items to provide ART services |
| Care coverage   | 6. % of health facilities with ART services that also provide comprehensive care, including prevention services, for HIV+ clients |
| People on Rx    | 7. % of people with advanced HIV infection receiving ARV combination therapy |
| Continuation 1st line | 8. Continuation of 1st line regimens at 6, 12 and 24 months |
| Survival        | 9. Survival at 6, 12, 24, 36 etc. months after initiation of treatment |

Impact

Program coverage
- % of existing health facilities with systems and items to provide ART services
- % of health facilities with ART services that also provide comprehensive care, including prevention services, for HIV+ clients
- % of people with advanced HIV infection receiving ARV combination therapy
- Continuation of 1st line regimens at 6, 12 and 24 months
- Survival at 6, 12, 24, 36 etc. months after initiation of treatment

Care coverage
- 5. % of health facilities with systems and items to provide ART services
- 6. % of health facilities with ART services that also provide comprehensive care, including prevention services, for HIV+ clients
- 7. % of people with advanced HIV infection receiving ARV combination therapy
- 8. Continuation of 1st line regimens at 6, 12 and 24 months
- 9. Survival at 6, 12, 24, 36 etc. months after initiation of treatment

People on Rx
- 5. % of health facilities with systems and items to provide ART services
- 6. % of health facilities with ART services that also provide comprehensive care, including prevention services, for HIV+ clients
- 7. % of people with advanced HIV infection receiving ARV combination therapy
- 8. Continuation of 1st line regimens at 6, 12 and 24 months
- 9. Survival at 6, 12, 24, 36 etc. months after initiation of treatment
**Patient HIV care/ART standard medical record**

- **WHY?**
  - To ensure appropriate life-long follow-up
  - To obtain key & standard individual information
- **WHEN?**
  - At each patient visit starting from the 1st visit in the clinic
- **WHO?**
  - Health care providers: doctors, nurses, counsellors...

**Pre-ART register**

- **WHY?**
  - To record key information for all patient accessing HIV care services
  - To facilitate calculation of monthly indicators
- **WHEN?**
  - At the 1st visit in the clinic +
  - When patient becomes medically eligible +
  - When ART is started
- **WHO?**
  - Health care providers
  - Trained staff using patient record

**ART register**

- **WHY?**
  - To record key information during follow-up of patients under ART
  - To facilitate calculation of indicators
- **WHEN?**
  - At each visit once ART is started
- **WHO?**
  - Health care providers
  - Trained staff using patient record

**ARV Drug dispensing/Drug stock registers**

- **WHY?**
  - To record no. of tablets given to the patients
  - To monitor stock of drugs
- **WHEN?**
  - At each ARV dispensing visits
- **WHO?**
  - Drug dispensing officer (pharmacists, nurses...)

**Monthly and Cohort report**

- **WHY?**
  - To report and analyze indicators
- **WHEN?**
  - Every month for the monthly report
  - Every quarter for the cohort report
- **WHO?**
  - Manager of the clinic
  - Trained staff under supervision
Confidentiality

- High stigma and discrimination
- Lack of confidentiality = obstacle in access to care
- Professional code of conduct for health care providers and administrative staff
- Security of the medical records and of the REGISTERS
- Anticipate the risk of breaches in confidentiality due to monitoring

Patient registration number

- Unique and personal to avoid duplication
- Allocated once, at the 1st visit in the clinic
- As simple as possible, e.g.
  - Identification of the clinic using 2 digits
  - Identification of the patient by a chronologic number

Storage of medical records

- Ensure security by storage in a locked space
- Limited access to authorized staff
- Ensure records will be available during the patients visits
- Arranged serially, e.g.
  - By registration number or name
  - By date of next visit
- Make the record available in advance for the scheduled patient visits

Sub module 2

Use of standardized records and registers

Standardized patient information to be collected

- Brainstorming (10 minutes)
- What is the minimal information to collect during HIV care and ART visits, in order to generate the indicators recommended at facility level?
Patient HIV care and ART/record

At the 1st visit to the clinic...
- Registration number:
  - Unique
  - As simple as possible
  - E.g:
    - 2 letters for clinic code
    - Serial number (1 to XXXX) for patient code

Part 1: Patient identification data
- Identification of the clinic
- Identification of the patient
- Age, sex, address
- Treatment's supporter (if applicable)
- Date and place HIV+ testing
- Entry point

At the 1st visit to the clinic ...
- Entry points or referred from
  - VCT
  - TB
  - Outpatients
  - Inpatients
  - Paediatric
  - PMTCT
  - STI
  - Private
  - NGO
  - Self referred
  - IDU outreach services
  - Sex workers outreach services
  - Others

- Patient “transferred in” on ART
  - Started ART in another clinic from the NAP
  - Transferred to your clinic for ART continuation
  - Patient should be transferred with a copy of his (her) patient record
  - Registration number and ART history should remain similar (continuation)
At the 1st visit to the clinic ...

Part 2: Personal history:
- Possible mode of HIV transmission, education, employment, alcoholism

Part 3: Family History
- Marital status
- Family members and access to care

Part 4: Past history of ART

Part 5: Clinical and Lab investigations
- Date of 1st visit, WHO clinical stage, weight/height, performance scale
- TLC, CD4 if available

Performance scale
- A- Normal activity
- B- Bedridden <50% of the time during the last month
- C- Bedridden >50% of the time during the last month

At each follow-up encounter visit
- Fill one line per visit in part 9
- Dates of visit and next visit, weight, WHO stage, performance scale
- For women, pregnancy or family planning
- OI diagnosis and PROPHYLACTIC treatment
- For patients started ART
  - ART prescribed (molecules and doses)
  - Adherence to ART
  - Side effects to ART
- Lab results when available
- Distribution of condoms
- Referral to specialist or hospitalization

Adherence to ART
- Based on pill count AND self report of pills missed by the patient
- Since last visit
- Eg. For 3-drug fixed dose combination (2 pills/day) and 30 days visit
  - 60 pills to be taken between 2 visits
  - < 3 pills missed: >95% adherence
  - 3 to 12 pills missed: 80-95% adherence
  - > 12 pills missed: <80% adherence

When the patient becomes medical eligibility for ART
- Medical eligibility refers exclusively to the medical criteria regardless of patient’s personal or social readiness for ART
- Part 5:
  - Date, WHO stage, weight (+ height for children), performance scale,
  - TLC and CD4 count if available
<table>
<thead>
<tr>
<th>At start of ART and 6, 12, 24 months follow-up after starting</th>
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<tbody>
<tr>
<td>✦ Part 5:</td>
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<tr>
<td>◦ Date, WHO stage, weight (+ height for children), performance scale,</td>
</tr>
<tr>
<td>◦ TLC and CD4 count if available</td>
</tr>
<tr>
<td>✦ Part 6:</td>
</tr>
<tr>
<td>◦ Treatment started</td>
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<table>
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<tr>
<th>At any change in ART regimen</th>
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<tbody>
<tr>
<td>✦ Part 6: substitution, switch, stop</td>
</tr>
<tr>
<td>✦ Substitution = change within 1st line drugs</td>
</tr>
<tr>
<td>◦ Mainly related to intolerance, OI (TB)....</td>
</tr>
<tr>
<td>✦ Switch= change to 2nd line drugs</td>
</tr>
<tr>
<td>◦ Mainly related to treatment failure</td>
</tr>
<tr>
<td>✦ Stop= interruption by a doctor</td>
</tr>
<tr>
<td>◦ Date, reason, date of restart and new regimen</td>
</tr>
</tbody>
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<table>
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<tr>
<th>At occurrence of TB</th>
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</thead>
<tbody>
<tr>
<td>✦ Part 7</td>
</tr>
<tr>
<td>◦ Disease classification</td>
</tr>
<tr>
<td>◦ TB regimen and date of start</td>
</tr>
<tr>
<td>◦ TB registration</td>
</tr>
<tr>
<td>◦ Outcome</td>
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</tbody>
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<table>
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<tr>
<th>At end of follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>✦ Part 8</td>
</tr>
<tr>
<td>◦ Date of death</td>
</tr>
<tr>
<td>◦ Date of last visit if patient lost to follow-up for more than 3 months</td>
</tr>
<tr>
<td>◦ Date and place of transferred out</td>
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Sub module 3

Pre-ART and ART registers
### Purpose of registers

- Key individual information for:
  - Facilitating patient management by the identification of patients missing or lost to follow-up (ART register)
  - Routine monitoring (compilation of standard indicators)
  - More in depth analysis without need to check the various medical records.

### Registration of patients

- By date of 1st visit in the pre-ART register
- By date of starting ART in the ART register
- Separation of months:
  - 1 line or 1 new page in the pre-ART register
  - 1 new page in the ART register
- Page = monthly ‘cohort’ of patients enrolled or starting ART

### Patient data in the pre-ART register

- At the 1st visit in the clinic
  - Registration number
  - Date of 1st visit
  - Name and address
  - Age, sex
  - Date and place of HIV+ testing
  - Entry point
  - Risk factor for HIV transmission,
  - Social information: literate, employment

### Pre-ART register

- At start of Cotrimoxazole preventive therapy (CPT)
  - Date
- At TB treatment during HIV/ART care
  - Disease class
  - Regimen
  - Date TB Rx start

### Pre-ART register

- At medical eligibility for ART
  - Date and criteria
- At start of ART
  - Date
- At end of follow-up before ART was started
  - Date of death
  - Date of last visit if lost to follow-up >3 months
  - Date of transferred out
Patient data in the ART register

**At start of ART**
- Date of start of ART
- Patient registration number and name
- Age, sex
- Patient address and contact
- Treatment supporter's address and contact
- Past history of ART (yes/no)
- WHO clinical stage

**At start of ART +6,12,24 months follow-up**
- Performance scale
- Weight
- CD4 count
- Regimen started

**At TB treatment during ART**
- Disease classification
- Regimen
- Date of start

**At any ART substitution/switch**
- Date
- Reason
- New regimen

**At each monthly visit**
- 1st row: write patient outcome
- On treatment, if picked up drugs
- Stopped, if the treatment was stopped by a doctor at this visit or during a previous visit
- Missing, if the patient missed an appointed visit
- Lost to follow-up, if the patient is missing for 3 months or more
- Restart, if the treatment was restarted at this visit
- Transferred out, if the patient was transferred out on ART to another clinic from the NAP
- Dead
- Not appointed, if the patient was not appointed for a visit during this month
ART register = all patients register on 1 page have the same duration of follow-up on ART and should have the same no. of monthly visits

At each monthly visit

✦ 2nd row in the table
✦ For the patient on treatment
✦ Write adherence
  ◦ >95% adherence
  ◦ 80-95% adherence
  ◦ <80% adherence

At end of follow-up

✦ Date of death
✦ Date of lost to follow-up (last visit)
  ■ Patients missing for 3 months or more
✦ Date of transferred out

Exercises

✦ Group of 5 persons with doctors, nurses and counselors
✦ Case study: read the patient history and complete the patient record, pre-ART and ART register
✦ Register study: read the ART register and summarize the patient ART history

Group work: exercise 1

✦ Group of 5 persons
✦ Each group: 1 case study
✦ 1 hour
✦ From the given patient history, complete the patient record and the pre-ART and ART register
Sub module 4
Drug Dispensing and Stock Management

Objectives
✦ To document the regimen prescribed to the patients and the number of tablets given
✦ To ensure an uninterrupted supply of drugs by maintaining adequate drug stocks

Forms
✦ ARV drug dispensing register
✦ ARV drug stock register
✦ Monthly reporting form/ Part B

ARV drug dispensing register (1)
✦ 1 page each day
✦ Adapt the list of drugs according to those available in the program
✦ For all patients coming to the pharmacy for ARV dispensation
  › Registration number and name
  › Number of tablets given for each drug in the regimen prescribed
  › Patient’s signature

ARV drug dispensing register (2)
✦ At the end of the day, add up the number of tablets given for each drug
✦ Report this daily consumption in the ARV drug stock register

ARV drug stock register (1)
✦ 1Row corresponds to one day’s consumption
✦ 1 page corresponds to 1 month’s consumption
✦ Divide the register in several sections, each section dedicated to 1 drug
**ARV drug stock register (2)**

- Maintain the register each day for each drug
  - A-Opening stock
  - B-Stock received (the day it was received)
  - C-Stock dispensed day after day
  - D-Stock expired if any
  - Balance stock per day = (A+B) – (C+D)
- At the end of the month, complete the monthly summary

**Group work: Exercise 2**

- 5 persons / 1h

You will have to complete the drug dispensing, drug stock and monthly report (part 11-12) for clinic A, according to
  - The starting stock of drugs
  - The daily dispensing

**Form**

**Monthly report**

**Sub module 5**

**Part 6: Enrolment in HIV care**

- Cumulative number ever enrolled at the beginning of the month
- New patients enrolled during the month
- Cumulative number ever enrolled at the end of the month
- Previous report (cumulative number ever enrolled at the end of the month)
- Pre-ART register:
  - date of 1st visit
  - ‘monthly cohort’
  - SEX and AGE
- Sum of previous indicators
Part 7: Medical eligibility for ART

- Number of patients eligible for ART but have not started ART at the end of the month
- Pre-ART register:
  - date of medical eligibility
  - date ART started
  - SEX and AGE
  - Count those whose date of eligibility is informed and date of ART started is empty
  - Check all pages of the register

Part 8: Enrollment on ART

- Cumulative number ever started on ART at the beginning of the month
- New patients started on ART during the month
- + patients transferred in
- Cumulative number ever started on ART at the end of the month
- Previous report (cumulative number ever started on ART at the end of the month)
- ART register:
  - date ART start
  - monthly cohort
  - SEX and AGE
  - ART register (all pages)
  - Sum of previous indicators

Part 9: Outcomes on ART

- Cumulative number of deaths reported at the end of the month
- Cumulative number of patients transferred out under ARV at the end of the month
- Number of patients missing or lost to follow-up at the end of the month
- Number of patients stopping ART at the end of the month
- Number of patients on ART at the end of the month

Example: Checking the outcomes in 1 page of the ART register

Eg. Checking the outcomes in 1 page of the ART register
Eg. Checking the outcomes in 1 page of the ART register

Number of patients on ART at the end of the month

✦ By counting the ART register (on treatment + restart)
✦ Verification:
  Cumulative on ART = cumulative ever started ART -(death, transferred out + missing/LFU + stopped)

Number of patients whose treatment was substituted or switched

✦ Among patients on treatment,
✦ Check the entire ART register to
✦ Review the information in the columns "switch" and "substitute" to count how many changed regimen
✦ The remaining are on original 1st line

Part 10: Treatment adherence

✦ In the ART register, review the columns monthly visit
✦ Check the adherence status in the 2nd row in the last monthly visit

Drug dispensing and stock monitoring

✦ Part 11: regimen at the end of the month
✦ Part 12: drug stocks
Drug dispensing and stock monitoring

- 2 indicators:
  - Regimen at the end of the month
    - Document the frequency of the different regimens prescribed
    - Identify the 2nd line regimen prescribed
  - Drug stock
    - Describe the drug consumption and balance
  - Used for drug planning, request and budget

Regimen at the end of the month

- ARV drug dispensing register
  - Check all pages corresponding to the month
  - Count the number of the different regimens prescribed for the total patients receiving ARV drugs during the month
  - For a patient receiving twice in the month, report only the regimen received at the last visit

Group work: Exercise 3
5 persons / 1h30

- The clinic CL opened in Oct 2004 for HIV care and ART
- We are at the end of January 2005, and you are preparing the monthly report
- Materials
  - the pre-ART and ART registers,
  - Dec 2004 report

Answer to exercise – January 2005 report

<table>
<thead>
<tr>
<th>Enrollment in HIV care (PLWHA seeking care at the Treatment Center)</th>
<th>adult male</th>
<th>adult female</th>
<th>child &lt;14 yo</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 Cumulative no. of patients ever enrolled in HIV care at beginning of this month</td>
<td>37</td>
<td>23</td>
<td>4</td>
<td>64</td>
</tr>
<tr>
<td>6.2 New patients enrolled in HIV care during this month</td>
<td>13</td>
<td>8</td>
<td>2</td>
<td>23</td>
</tr>
<tr>
<td>6.3 Cumulative no. of patients ever enrolled in HIV care at the end of this month</td>
<td>50</td>
<td>21</td>
<td>6</td>
<td>77</td>
</tr>
<tr>
<td>7. Medical eligibility for ART*</td>
<td>adult male</td>
<td>adult female</td>
<td>child &lt;14 yo</td>
<td>total</td>
</tr>
<tr>
<td>-----------------------------------------------------------------</td>
<td>-----------</td>
<td>--------------</td>
<td>-------------</td>
<td>-------</td>
</tr>
<tr>
<td>7.1 No. of patients moderately eligible for ART but have not been started on ART at the end of this month</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>

Answer to exercise

<table>
<thead>
<tr>
<th>Enrollment on ART</th>
<th>adult male</th>
<th>adult female</th>
<th>child &lt;14 yo</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1 Cumulative no. of patients ever started on ART at the beginning of this month</td>
<td>13</td>
<td>7</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>8.2 New patients started on ART during this month</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>8.3. No. of patients on ART transferred in this month</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>8.4 Cumulative no. of patients ever started on ART at the end of this month</td>
<td>18</td>
<td>11</td>
<td>1</td>
<td>30</td>
</tr>
</tbody>
</table>
To calculate 2 cores indicators:

- Proportion who did not start ART among patients medical eligible
- Proportion on treatment among patients who started

To present each month (table and figure) the trends in performance:

- Enrolment, eligibility and start of ART
- Outcomes on ART

<table>
<thead>
<tr>
<th>Regimen</th>
<th>No. of patients on ART</th>
<th>Is stock enough for existing patients for 6 months? Y/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>D4T30/3TCNVP</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>D4T40/3TCNVP</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>ZDV3TCNVP</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ZDV3TCEFV</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>D4T30/3TCEFV</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>D4T40/3TCEFV</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>+ D4T3TCEWP junior 12 mg</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Total= cumulative no. of patients on ART at the end of this month (11.6)
Limitations of monthly report analysis

✦ Cross-sectional information
✦ Enrollment and outcomes at one time point in the facility program
✦ No information on the duration of follow-up on ART
  ◦ Cohort analysis is required

Sub module 6

Cohort report

At 6, 12, 24 months and yearly after the start of ART

✦ Proportion of people alive and on treatment
✦ Proportion of people on original 1st line, substituted 1st line, switched 2nd line regimen
✦ Proportion of people whose performance scale is normal activity
✦ Proportion of people with >200 CD4 (or median change from starting ART)
✦ No. who picked up their drugs 6/6 months, 12/12 months.....

2. Principles

✦ Patients registered according to the date (month) of starting ART
  ◦ monthly cohort starting ART
✦ Record of their outcomes after 6 months then yearly
✦ Compilation form at 6, 12, 24 months for the different monthly cohorts

Time period

✦ The group of patients starting this month
  ◦ Outcomes in 6 months from now
  ◦ Outcomes yearly from now
✦ Example, For January 2005 monthly cohort
  ◦ 6-month outcomes in July 2005
  ◦ 12-month outcomes in January 2006
  ◦ 24-month outcome in January 2007
Example: outcomes at 6 months for May 2004 cohort

Report compiled in December 2004
Group work: Exercise 4
5 persons / 1h30

✦ 2 questions, each group doing 1 question:
✦ From the ART register of the clinic, you have to complete the cohort report

Group work: Exercise 5
5 persons / 1h30

✦ 2 questions, each group doing 1 question:
✦ From the cohort report of the clinic, you have to analyse and comment the indicators and prepare a short presentation with graphics