Module 10: Adolescent HIV Services

Session 1: Pediatric HIV Service Delivery Organization

Total Session Time: 30 minutes

Learning Objectives
By the end of session, participants will be able to:
- Describe general layout of CTC
- Explain the child-care specific requirements for a CTC
- Explain entry points for children into HIV care and treatment services
- Identify roles and responsibilities of staff in the pediatric ward, RCH or CTC
- Describe CTC operational procedures and facility specific operational manual
- Describe coordination of pediatric HIV care and adult care

Introduction: General layout of CTC

Dedicated CTC space should include:
- Reception desk and triage unit
- Examination room
- Counseling room

Space outside CTC in the main hospital:
- VCT room
- Secure pharmacy storage space and private dispensing window (e.g. with booth)
- HIV services in lab: blood sample storage and space for processing specimens

All these may not be available and that should not be a reason for not having a well functional CTC. The minimum available infrastructure can still be useful with good arrangement.

The child-care specific requirements for a CTC

Staff:
- All clinical staff have to be trained in recognition and enrollment of HIV exposed and infected children

Equipment/tools:
- Weighing/height measuring equipment, measuring tape
- Growth charts, child health cards
- Pediatric dosing charts
- Appropriate registration, intake, follow up, referral forms and CTC cards
- Appropriate furniture and décor, toys
- Normogram (especially for district and higher levels)
- Job aids for health workers e.g. national guidelines, SOPs etc.
- Low literacy materials in appropriate language

The few trained staff should orient those who have not been trained so that the CTC can run effectively. The minimum equipments and working tools are however necessary to take the measurements and look for the standards.
Job aids are important for quick reference while attending patients, so they should be available at the clinic. Though desirable, absence of any of the above should not delay HIV service delivery for children.

**Paediatric HIV and AIDS Care Services**

- For optimal pediatric care outcomes, HIV and AIDS services should be available across departments. This requires involvement and training of a team of clinicians/nurses in the:
  - Pediatric ward
  - RCH clinics
  - Pediatric outpatients and special clinics (TB, malnutrition, VCT, PITC, TB/HIV and STI)

The team is trained to actively identify, facilitate diagnosis, and initiate basic HIV care before referral to the CTC. This team is closely linked to the CTC.

HIV testing (PITC) is needed at all entry points to identify those who are HIV infected. This includes Routine HIV testing in admission ward and testing at other entry points on clinical care. Therefore all staff in those areas have to be trained or oriented in performing PITC at their departments and provide basic care to those who are found to be infected before referring them to CTC.

**Entry points for children into HIV care and treatment services**

**Entry Points for Paediatric HIV Care/ART**

- Multiple entry points for care exist, including:
  - RCH/PMCT
  - Pediatric OPD, IPD
  - CHBC
  - Primary Health Facilities
  - Community Agencies
  - Adult HIV Services

REFER to Handout 10.1.1 Entry Points into Paediatric HIV Care/ART Services on page 407 for more information

**Patient Flow for HIV Exposed and Infected Children**

[Diagram of patient flow]

1. Caregiver goes to registration desk to register/pick up file
2. Directed to triage nurse/reception of CTC/PMTCT
3. Exposed child not confirmed HIV+
   - Refer to clinician to determine next steps: Rapid test, DBS/Follow up
4. New child confirmed HIV+
   - Refer to clinician for evaluation and ART initiation
5. Returning child on ART
   - Refer to appropriate adherence/clinician Service/HBC
HIV Care and Treatment Team

- Nurses
- Counselors/Psychologists
- Clinicians
- Nutritionists
- Laboratory Personnel (Trained)
- Pharmacy Staff (Trained)
- Administrators
- Facility/Community home based care providers and home support givers
- Social Workers
- Physiotherapists
- Records clerk

Roles and responsibilities for staff in the pediatric ward, RCH or CTC

Clerk
- Reception at the CTC desk

Nurse:
- Triaging incoming patients, anthropometry, charting growth, assessing needs of accompanying adult

Nurse/clinician
- Clinical evaluation

Clinician
- Prescription of drugs

Nurse counselor:
- Treatment preparedness assessment and follow up adherence counseling, nutrition counseling if no nutritionist

Nurse/clinician:
- Referral to local PLHA support or HBC group or clinic for continuous ART supply and support counseling

Data clerk/manager
- M&E / HMIS data entry

HIV infected children/caretakers experience a number of difficulties or obstacles. Although each member of the team may have specific responsibility, it is important that all staff members be trained to anticipate, recognize, and work as a team on special issues so that patients can develop confidence to the team. M&E stands for “Monitoring and Evaluation”; and HMIS stands for “Health Managements Information System”

CTC operational procedures and facility specific operational manual AND coordination of pediatric HIV care and adult care

CTC Operational Procedures

- Monthly multi-disciplinary team meetings (RCH/inpatients/CTC)
- Child friendly setting (child centered family clinic)
• Facility specific *Operational Manual*
• Continuing Medical Education (CME)
• Supportive supervision and mentoring
• Exchange programs to centers of excellence

*CTC Operations manual* provides guidance on planning and delivering HIV prevention, care, and treatment services at all health facilities in the country. It provides an operational framework to ensure that HIV services can be provided in an integrated, efficient and quality-assured manner in all health facilities.

**Facility Specific Operational Manual**
- The facility specific *Operational Manual* defines the day to day operations of the CTC in the local context of the facility, including:
- How new and old patients flow through the CTC and how their appointments are tracked
- Linkages and flow to other treatment supporting services e.g., laboratory testing (on- or off-site as appropriate)
- How to follow up patients that do not return to their appointments

Standard Operations Manual is based on the recommended Best Practices at a health facility to ensure efficiency. It gives instructions on what to be done by whom on each of the working days. These are facility specific and each CT team can develop operational manual for their CTC.

**Coordination of Paediatric with Adult HIV Care**
- Family members of children enrolled in care often are sick and need care themselves
- The survival of HIV infected children is directly influenced by the health and survival of their mothers
- Paediatric HIV service delivery has to take into account the needs of the rest of the family
- If multiple members of the family are attending for services, same day appointments facilitates adherence to care, saves family time and resources

**Key Points**
- Child specific requirements at CTC include dedicated staff, supplies, equipment and conducive environment
- Entry points for children into pediatric HIV care include RCH/PMCT, pediatric OPD and IPD, and adult health services
- Each team member has a specific task when providing services to children
- Paediatric care should be coordinated with adult care to save families resources and time
Handout 10.1.1: Entry Points into Paediatric HIV Care/ART Services

- **RCH / PMTCT**
- **Paediatric OPD & Special Clinics (TB, Skin, Malnutrition)**
- **Paediatric CTC**
- **Primary health facilities**
- **Community: OVC Support Services, Support Groups & PLHA Associations, CBOs/NGOs/FBOs, Women groups**
- **Adult HIV Services (CTC, VCT)**
- **Paediatric IPD**
Session 2: Referral Mechanisms for HIV exposed and infected Children

**Total Session Time:** 30 minutes

**Learning Objectives**
By the end of session, participants will be able to:

- Explain appropriate referral of children within the health facility
- Explain appropriate referral of children to higher level health facilities
- Describe appropriate referral of children to community support groups

**Appropriate referral of children within the health facility, to higher level health facilities and to community support groups**

**Referrals Within Health Facility to and From CTC**
Needs to be developed and agreed upon within each facility. Referrals within the facility could be from:

- General registration through OPD and OPD special clinics (e.g. TB) to CTC
- From Paediatric IPD, MCH, VCT unit, to CTC
- From CTC to laboratory; TB-DOTS; specialist; IPD; RCH; pharmacy

**Referrals from Outside Health Facility to CTC**
- From HBC, private clinics, other public hospitals, health centers, dispensaries, PLHIV support, NGOs, community OVC support services, orphanages
- Self referral
- To make referral effective and efficient referral notes with response slips can be used

**Referrals From CTC**
For follow up treatment or care or support at various levels:

- Within community: nearby clinic or hospital, home Based Care programme, PLHIV support group, welfare NGO etc
- To any specialized service: referral hospital, legal support, social welfare, food aid, OVC program etc
- Peer group supporters, etc

CTC personnel should build personal relationships with agencies or NGOs etc. that may provide support to HIV infected patients or provide referrals, and may also invite staff of community agencies to visit the clinic, or hold open meetings to discuss special issues. Referring staffs must know what services the NGOs or support groups provide and which patients it serves, as well as those it cannot serve.
Paediatric HIV Services and Referrals

Referral systems should be established between District hospitals/Sub-district hospitals and health centers in their catchment area. This would allow patient management at the most appropriate level without compromising care. District hospital (DH), health centers should also liaise with community based services to ensure adequate patient support and follow up. Accreditation of sites as Comprehensive Care Centers will require that sites have elements of these linkages in place. Referral links with Primary Health Facilities (PHF) and Teaching hospitals should be established for review of patients with complicated problems, management of the less common OIs and malignancies (e.g. Cytomeglovirus (CMV), Kaposis Sarcoma (KS), etc.)

Small Group Activity

- Develop a scenario/plan on how to guarantee at their facility that all children are enrolled into CTC, no matter through which entry point they come from
- Develop a plan for how best to link HIV Care and Treatment services for children to other services for children in the health facility or community

Key Points

Appropriate referral systems for pediatric services should be established:
Within the health facility
To higher level health facilities, and
To community groups
Session 3: Prescription Handling

Total Session Time: 30 minutes

Learning Objectives
By the end of session, participants will be able to:
- Define prescription
- Outline important information required in a prescription
- Describe the steps in handling prescriptions

Introduction
Prescription:
Prescription is a written order given by an authorized medical practitioner to the pharmacist/dispenser for the patient in order to dispense required medicaments & medicines

NOTE: Antiretroviral drugs are prescription-only medicines

The dispenser should ensure that the prescription is appropriately written and signed by an authorized prescriber before issuing the drugs

Important Information Required in a Prescription
The prescription for ARVs should clearly indicate the following:
- Date
- Patient Identification Number (PID No)
- Age, Sex, Weight
- Medicines (generic name) and dosage
- Name and signature of the prescriber

The generic name of the ARV should be written on the prescription as opposed to Brand name or code, for example;
- Zidovudine 300mg /Lamivudine 150 mg with Efavirenz 600mg instead of COMBIVIR + EFV or 1B
- Zidovudine 300mg /Lamivudine 150 mg /Nevirapine 200mg instead of DUOVIR - N or 1C
- Tenofovir 300mg/Lamivudine 300mg/Efavirenz 600mg instead of ATRIPLA 2/TLE OR 1G

Steps in Prescription Handling
- Receiving and reading the prescription
- Validating the prescription
- Filling the prescription
- Labeling medications
- Dispensing the treatment
- Recording the information
- Receiving and reading the prescription
  - One the prescription has been received the dispenser must read it carefully
- Validation of prescription
o Check whether
  o PID No. on the prescription is the same as on CTC 1 card
  o Prescriber is authorized to prescribe ARVs
  o Regimen follows standard ART guidelines

- Use Patient CTC 1 card to countercheck
  o Whether the regimens and doses prescribed are correct
  o Whether patient is not collecting ARVs earlier or later than expected

- For children, check if doses are correct for the current weight
- Alert prescriber of any discrepancies before dispensing the prescription
- Filling Out the Prescription
  o Fill the prescription and endorse with the quantities issued for each drug
- Labeling Dispensed Medicines
  o Labels should include:
    - Name of the patient
    - Name & strength of the medicine
    - Instructions on how to use the medicine (Dose & time and duration)
    - Dispenser’s name/signature and Date. Pharmacists does more than simply dispense the prescriptions.

- Recording the information
  o Good records, though sometimes neglected, are an essential part of dispensing; they facilitate good inventory management and monitoring of services provided
  o Enter all medicines issued to client in ARV dispensing register (paper based tool/Pharmacy database) and Patient Identification card (CTC1)

REFER to Worksheet 10.3.1: Case Studies on page 413 in the Participant Handbook.

Key Points
- Proper prescription handling practices ensures correct medicine is delivered to the right patient, in the correct dosage and quantity with clear instructions
- Knowledge, skills & good dispensing practices of the standardized ARVs & OI medicines as per guidelines should be in dispenser’s finger tips
Worksheet 10.3.1: Case Studies

Instructions:
- In small groups, read the case study below and answer the questions.
- Be prepared to share and discuss your responses in plenary.

Case Study 1:
- A patient presents a prescription for treatment written: TLE 1 tab bd 1/12
- The patient is visiting your pharmacy for the first time:

QUESTIONS:
1) What important questions should the patient be asked?
2) What is wrong with this prescription?
3) What steps are you going to take to make sure that the patient gets the right drug and the correct dose?

ANSWERS:
1) Find out whether the client is taking other medications
2) The pharmacist should also find out if the patient is ready to take lifelong medication, where he lives (how accessible medication will be), has he disclosed his status to his family, how he will store his medication, how he will remember to take his medication.
3) The prescription is incorrect– dosing are incorrect. The dose is once per day preferably evening due to CNS side effects of EFV in the beginning; the pharmaceutical staff has to clarify and settle the matter with the prescribing clinician, in harmonious manner.
Session 4: Overview of Health Logistics Systems

**Total Session Time: 30 minutes**

**Learning Objectives**
By the end of session, participants will be able to:
- Describe the purpose of a health logistics system.
- Describe the components of the logistics cycle
- Define key logistics terms
- Describe the flow of information and commodities from one level to another
- Describe components of inventory management system

**Introduction**

**The Purpose of a Logistics System**
The purpose of a logistics system is to get the:
- RIGHT QUANTITIES of the
- RIGHT GOODS to the
- RIGHT PLACES at the
- RIGHT TIME in the
- RIGHT CONDITION at the
- RIGHT COST

**The Logistics Cycle**

The components of logistics cycles describes the interrelationship among themselves as they relate to logistics cycle. The components includes,
- Product selection,
- Quantification & procurement,
- Inventory Management and
- Serving Customer
**Product selection**: in any logistic system product must be selected. In Health logistic system, product selection may be the responsibility of the government through the MOH.

**Quantification and procurement (Forecasting & procurement)**: After product selection, the quantity of each product must be determined and procured.

**Inventory Management**: is concerned with maintaining stock at sufficient levels to satisfy demand and keep cost reasonable.

**Serving customers**: is the primary function of the logistic cycle. This is done by selecting, procuring, storing or distributing products to meet customer needs.

**Quality monitoring**: The quality of procurement decision should be monitored because it plays an important role in forecasting and procuring the right product based on the product selection.

**Policy**: Logistic manager should monitor current policies and follow them as specified by the government.

**Adaptability**: is the logistic system’s ability to obtain the resource that are necessary to address changes in demand.

Policy and Adaptability have strong influence on the logistic system.

**THE LMIS** acts as a drive engine for logistic components. The information the LMIS gathers allows managers to make decisions. Every function in the logistics cycle needs accurate information in order to work. Without a properly functioning LMIS, the distribution system cannot work properly. We will go into LMIS further later in session 5.

**Flow of HIV Commodities & Information**
MSD stands for Medical Store Department

REFER to Handout 10.4.1 Flow of HIV Commodities & Information on page 419 of their Participant Handbook for more elaborative chart.

**Inventory Management**
The process of efficiently overseeing the constant flow of commodities in and out of existing inventory. Three essential logistics data items are
- Stock on Hand
- Losses and adjustment
- Consumption data

REFER to Handout 10.4.2: Definition of Key Logistic Terms on page 421 of their Participant Handbook for more information on the definitions of logistic terms.

**Components of Inventory Management**

**Ordering and Reordering**
There are two primary questions to answer in logistics system design.
- Who will make the ordering decision?
- What is the information on which those decisions can be based?
The ordering decision must answer two questions:
- How much should be ordered?
- When should it be ordered?
Reorder point
- Refers to ordering a specific fixed amount of a commodity whenever inventory falls below a certain level
- Example: The decision rule might be, “Whenever there are fewer than 5000 tablets of Lamivudine, order 10,000 more.”
Receiving Goods/Commodities
Involves inspecting, confirming and accepting a shipment of commodities from a supplier (MSD). Effective receiving procedure ensures that goods received are exactly as what were ordered. Receipt inventory tools includes:
- MSD sales Invoice & delivery notes
- Form 6: Good Received Notes (GRN)
- Form 7: Verification & Claims form

Steps Involved in Receiving
- Countercheck goods received versus request and invoice delivery note
- Check for discrepancies
- Inspect packaging, integrity of containers, completeness and legibility of labels, expiry date
- Note discrepancies, variations and damages if any on verification & Claims form

Issuing
- Issuing is supplying medicine to an individual client for use as a continuation of a treatment course
- All issued commodities must be documented

Key Points
- Effective and efficiency logistics system ensure availability of right goods at right quantity in the right place at the right time at all levels
- Accurate Logistics information's is needed for every logistics components to work effectively & efficiently
- Proper Inventory management is important in health logistics system
- Avoid unnecessary stock-outs or overstocking
Handout 10.4.2: Definition of Key Logistic Terms

Definitions:

- **Lead-time**: The time when the new stock is ordered to when is received and available for use.

- **Pull system**: is the distribution system in which a personnel who receives the supplies determines the quantities to be issued.

- **Consumption data/Dispensed-to-user**: Information about the quantity of goods actually put in the hands of the clients.

- **Issue data**: is the information on quantity of goods shifted from one level of a system to another.

- **Shelf life**: the length of time a product may be stored without affecting its usability, safety, purity or potency.

- **Physical inventory**: is the process of counting by hand the total number of usable units of each commodity in a store or health facility at any given time.
Session 5: HIV and AIDS Commodities Logistics Management Tools

**Total Session Time:** 90 minutes

**Learning Objectives**
By the end of session, participants will be able to:

- Explain the role of logistics management tools in the ART programme
- Describe how to keep track and manage HIV and AIDS commodities inventory
- Demonstrate use of logistics tools related to HIV and AIDS care and treatment

**Introduction**

**Management Tools Used in HIV & AIDS Commodities Logistics Systems**
The tools are used for recording information about supplies in storage; reporting & requesting (R & R) commodities, issuing and receiving commodities. These includes:

1. Store Ledger and Bin cards
2. Form A1: ARV Daily Dispensing register
4. Reporting and Requesting (R & R) forms: Form A3 (Monthly) and Form A2 (Quarterly)
5. Form A6. Monthly reporting form for HIV test Kits
6. Requisition and issue voucher
7. Form 4: MSD sales invoice
8. Form 6: Goods Received Note
9. Form 7: Claim and Verification form
10. Redistribution form

**Bin cards:** used also at Bulk stores to keep information of a single lot transaction for a single product. And usually is kept on shelves on a specified item/good, and completed whenever there is any transactions made i.e. Issues, receipts, entre result of physical inventory or when product damaged/expired etc.

SOP’s is the standard guidance on how to complete the tools (This will be trained more comprehensively on Logistics training). At the first page each of the logistics tool there are steps on how to complete Logistics management tool.

Form A4 & A5 are no longer used; has been phased out. Form A4 has been replaced with **NATIONAL LOG BOOK** and A5 with **MONTHLY & QUARTERLY ORDERING & REPORTING FORMS FOR LAB COMMODITIES AND RELATED SUPPLIES.**

Monthly & Quarterly Ordering & reporting forms for Lab commodities and related supplies to MSD is used by Facilities (Mostly referrals & hospitals) that has been allocated to order Lab commodities from MSD through Lab system.

Form A6 was used to report and order HIV rapid test kits from DMO’s office however with the current system of reporting & requesting HIV rapid test kits direct from MSD A6 is no longer used. HOWEVER facilities are encouraged to continue using this form to compile the Monthly consumption report of their respective facility that will help them during reporting &
ordering required amount according to their needs of HIV rapid test kits from MSD. Final version of the form is under review.

Computerized version of HIV and AIDS Logistics management- paper based tools (Pharmacy Module database) is currently available and can be linked with CTC2 Database for patients records. The electronic system facilitate capturing data electronically and thus facilitate the availability of comprehensive quality logistics data in timely manner for decision making and planning.

**Verification & Claim form:** Used by facility to document and report to MSD any substitution of commodities received e.g items with short expiry dates<3Months, damaged, received but not ordered etc. Distribute Handout 11. Form 7. Verification & claims form to participant for their review.

**Redistribution Form:** used to redistribute surplus/ nearly to expire commodities from one facility to another. Distribute Handout 12. Redistribution form to participant for their review.

**Good received notes:** Used to acknowledge the receipts of commodities within the facility for accountability & reference.

**Stores Ledger**

The stores ledger is used to record receipts and issues of products, changes in stock levels, to track supplies moved through non-routine methods, to track losses/adjustments and when recording the results of physical inventory/stock

- Common to all systems
- Same as the ledger book 4 from the MTUHA with minor changes
- Book 4 is a good substitute for this form

The stores ledger is used to manage ARVs as it is also used for all other medicines and medical supplies. The use of the “initials” column is especially important to ensure that only authorized Persons are issuing ARVs. The Task of stores ledger is completed when:

- Date of transaction is indicated
- The transaction is recorded in the To/From column
- The quantity of the transaction is recorded in the Quantity Received, Quantity Issued, or Loss/Adjustment column
- The balance on the ledger page is brought up to date
- The transactions have been explained in the remarks column if there is loss/Adjustment
- The person filling in the ledger book has put his/her initials

**NOTE:**

- There should be a separate page in the stores Ledger in case they will have same medicine but with different strength and formulation e.g Efavirenz 50mg, Efavirenz 200mg and Efavirenz 600mg Tablets
- The Stores Ledger should be kept in the stores with the supplies
- The Stores Ledger should be updated anytime there is a change in the quantity of supplies, and during a physical inventory
- The Stores Ledger is a source of important information in calculating orders, as they will see in the next session.
Form A1: ARV Dispensing Register –

- Standard register used at Pharmacy/dispensing area
- Important tool used to track information on ARVs and other OI’s medicines dispensed to patients at every visit and by regimen
- Quantity dispensed can be used to determine ARV’s & OI’s medicines requirements
- One register can record data for many patients

This is the most important tool in regards to logistical issues of ARVs and other drugs dispensed to clients. This form is a way to track which medicines are given to each client by actually tracking the quantities dispensed to each patient. It’s used to provide the actual ARVs and OIs medicines ( Cotrimoxazole/Fluconazole) dispensed to patients. The form is used by the person who dispenses ARVs directly to patients. The dispenser must fill out this form when dispensing ARV or OI medicines to a patient. Patients or appointed adherence assistant should have CTC 1 card to present to dispenser whenever collecting their medicines:

Form A1 should be signed by both patient and dispenser when medicines are dispensed

Task of form A1 is completed when The date, ID, regimen (tick mark), and actual quantity of drugs dispensed and provider and patient initials are filled. Page totals are summed, at the end of each page and Cumulative total filled. It is necessary to Register consumption and usage on a daily basis

National HIV Log Book

Used to track information about consumption/usage and quality assurance of HIV Rapid tests and DBS kits used at every testing point within facility for proper reporting and ordering of the same kits. Provide information on quantity kits usage at for each client, other usage like training, QA/QC

This is the most important tool used to track consumption/usage and quality assurance of HIV rapid test & DBS kits used at every testing point within a facility for proper reporting & requesting of enough quantity of the same kits from MSD according to demand in place. Log book is used:

- Each time when client is screened and tested for HIV
- Each time when strips are used for other usage like training, QA/QC etc

The completed original copies should be submitted to Lab/assigned individual who will compile consumption report of the facility at the end of each Month. Log Book task is completed when:

- The date, ID, Purpose of testing (cycle), and results of every strips used, ending results and provider initials are filled.
- Page totals are summed and summary page of the strips used are filled properly filled
- It is necessary to Register consumption and usage of HIV rapid test & DBS kits on a daily basis
Form A2: ARV Quarterly Report and Request Form

Combined logistic report and order form for ARV drugs. Reports information on three essential logistics data items types of data for medicines management including:

- Stock on hand
- Consumption by clients
- Losses and adjustments

Data sources include:
- Ledger Books (Stock on Hand/Physical Inventory, losses and adjustments).
- ARV Daily Dispensing register (consumption data)
- From Triage Nurse (Estimates for new clients)
- Form A3: Monthly consumption report from refilling sites (For Mother facilities with refilling sites)

This form is an inventory form. It tracks what medicines were on-hand at the beginning of a given period, what drugs were received during that period and what drugs were on-hand at the end of the period. This allows the pharmacist/ordering officer to know what quantities to reorder. This form is completed quarterly by the stores officer working with Dispensers of ARVs in the facility.

Form A2 reports information about clients’ consumption:
- Data used to determine quantity to order and to project needs
- Also useful in tracking use of ARVs

Re-supply depends on essential data from ARV Quarterly Report and Request form

Form A2 task is completed when:
- The facility name, code, reporting period is filled in
- The beginning balances, quantities received, quantities consumed, and ending balances are filled in for each product
- The losses or adjustments are correctly calculated and filled in
- The drugs estimates required for new clients are calculated and filled
- The total estimated consumption, maximum stock quantities and quantities to order are correctly calculated and filled in
- The Quarterly Report & Request form is approved and signed

This is reporting and ordering form that are used in the ARVs logistics system. This is not merely an order form, but also the means by which consumption and stock levels can be monitored. Therefore, it is crucial that this form be filled out and submitted every quarter electronically through eLMIS at the specified time, not just when a facility needs supplies.

NOTE:
- The R&R form is used for reporting the movement of these commodities through the facility, and requesting quantities of stock needed to replenish supplies
- The R&Rs provide MOHSW with data and information on product usage, stock levels, number of patients by regimen, and number of patients waiting to begin ARV therapy.
- Facilities must submit their ARVs R&Rs every quarter
Ordering haphazardly makes it difficult for MSD to have the goods sent to the facilities on time and also the district to distribute on time, thus risking stock-outs.

It is important to make sure that all the calculations are correct to avoid under stocking or over stocking.

Order accuracy highly depends on correctly filled and updated ledger books and dispensing registers.

Stress that it is important to include data from all “dispensing/usage” sites that depend on your facility stock, failure to do that may lead to stock outs i.e. refilling sites would send a report to the mother site where the information will be included in the quantities to order in their R&R’s.

**Form A3: ARV Monthly Consumption Form-refilling sites**
The tool will be used by non ordering facilities that keep stock of ARV drugs for patients that will come to refill their prescriptions. This sites will not order directly from MSD, instead will get stocks from Mother sites. Information is reported on Monthly basis .Data sources include:

- Ledger Books (Stock on Hand, Losses/Adjustments, physical inventory).
- ARV Daily Dispensing Register (Form A1(Dispensed to user data/ consumption data)
- From Triage Nurse (Estimates for new patients)

This form is an inventory form. It tracks what medicines were on-hand at the beginning of a given period, what drugs were received during that period and what drugs were on-hand at the end of the period. This allows the pharmacist/ordering officer to know what quantities to reorder. This form is completed Monthly by the stores officer working with Dispensers of ARVs in the facility.

**Form A3 reports information about clients’ consumption:**
Data used to determine quantity to order and to project needs
Also useful in tracking use of ARVs
Re-supply depends on essential data from ARV Monthly Report and Request form

**Form A3 task is completed when:**

- The facility name, code, reporting period is filled in
- The beginning balances, quantities received, quantities consumed, and ending balances are filled in for each product
- The losses or adjustments are correctly calculated and filled in
- The drugs estimates required for new clients are calculated and filled
- The total estimated consumption, maximum stock quantities and quantities to order are correctly calculated and filled in
- The Monthly Report & Request form is approved and signed

In this system not all the facilities will be able to initiate ART. Some health facilities will be used to stock drugs for patients to come and refill their prescriptions. Tell the participants that these sites will be getting their stock from the nearest site and will not order directly from MSD but they will be getting their supplies from the nearest “mother site” which is the one that will order directly to MSD.
Form A3 have been edited to give mandate refilling sites to request through their mother sites and they will be re-supplied based on what have been requested. It is important these sites fill their reports correctly because that is what is going to be used for refill, if they don’t stand a chance to run into stock outs.

**Ensure Adequate Stock of Commodities at Facility**
Health Facilities should ensure always there is adequate stock to meet the needs of customers. Stock levels established to ensure facilities have adequate stock to meet demands. Health Facilities (Ordering sites):

- Min. stock level: 3 Months
- Max. stock level: 6 Months
- Emergency Order Point: 1.5 Months

**HIV and AIDS Commodities Ordering System**
HIV and AIDS commodities and related supplies should be ordered on quarterly basis using Elmis. Electronic reports and orders should be submitted to MSD electronically after being approved by Hospital In charge and DMO’s. Health Facilities with CTC and PMTCT services:

- PMTCT will collect ARVs from CTC
- PMTCT will submit Monthly ARV consumption report (completed form A3) to CTC for refilling ARVs

Stand-alone PMTCT sites will follow ILS to order PMTCT commodities along with essential medicines MSD. Ordering of other products (contraceptives, RTK’s, Lab supplies etc.) will follow the same system (ILS), MSD will review orders, processing and deliver the medicines and related supplies direct (DD) to the facility

**Key Points**

- It’s important to ensure that all validated Logistics tools are available at facilities and properly completed
- Monthly & Quarterly R & R’s should be prepared and submitted accordingly in a timely manner
- LMIS collect, organize and report data for decision making & planning
Session 6: Patient Monitoring Systems

Total Session Time: 90 minutes

Learning Objectives
By the end of session, participants will be able to:
- Define monitoring
- Explain the purpose and importance of program and patient monitoring systems in HIV/AIDS care and treatment services
- Outline the characteristics of good monitoring system
- Describe the necessary tools for patient encounters
- Demonstrate how to complete the data collection and reporting tools for HIV/AIDS Care and Treatment services
- Describe the roles and responsibilities of care and treatment team

Introduction
Definition of Monitoring

Is the routine process of data collection and measurement of progress toward program objectives. Is the routine reporting of data on program implementation and performance. It involves both counting and looking at the quality of services

Concept of Monitoring

Purpose and importance of program Monitoring and Evaluation

- To make informed decisions regarding operations management and service delivery
- To ensure the most effective and efficient use of resources
- To determine whether the program is on track and make needed correction
- To determine whether the program is having the desired impact

![Diagram of Opportunity for Improvement](image-url)
Importance of Patient Monitoring

- Patient-monitoring Enables consistent and effective clinical management of patients:
  - Multiple consultations per patient
  - Effective and timely follow-up and tracking of:
    - Associated opportunistic pathologies
    - Complex therapy
    - Adherence issues
  - data is used for programme monitoring and management

Monitoring allows for consistent and complete care throughout the health-care process, which occurs over a long period of time. Because the process is complex, it is important to track each part of it.

- Routine tracking of priority information about a programme and its intended outcomes

Aggregate data from programmes and health facilities at district and regional levels is needed to evaluate outcomes and impact at a national/regional level. The information collected is vital to good patient care. The information not only keeps all members of the care and team informed about the patient’s health status but also helps to provide a picture about the successes and challenges a health facility faces. Without that information, it is difficult to know where resources are needed or what improvements need to be made. Health-facility successes can be used as examples for teaching others. When information is gathered from a variety of health-care centres, it provides a picture of a community’s health, and so on up the levels of health care, which can eventually inform policy makers as they make decisions about health care.

Questions we Ask ourselves in Monitoring and Evaluation

- Are we doing activities on large scale as needed?
- Are we doing the right things?
- Are we doing them right?

Characteristics of Good Monitoring Systems

- Clear definition of indicators
- Standard tools, data sources and collection methods
- Clear roles and responsibilities
- Clear guidelines and protocols

Some of the problems of not having good monitoring system are totally due to health care providers reluctance in keeping good data. Other causes of poor monitoring system may include:

- Lack of clearly defined indicators
- Lack of standard tools, data sources and poor collection methods
- Lack of clear roles and responsibilities as well as clear instructions to all members of CTC
- Lack of clear guidelines and protocols.
Data Use

CTC Staff:

- Individual patient follow-up
- Assesses progress

DMO, council, Health Management Team:

- Evaluates programme, outcomes of clinical care, and quality of clinical care
- Reports to National AIDS Control Programme (NACP)

Funding recipient, policymakers:

- Evaluates programme, outcomes of clinical care, and quality of clinical care
  - Report to donors, e.g. PEPFAR, Global Fund

Data Collection

REFER to Handout 10.6.1: Overview of Data Flow from CTC to Registers to Reports for more detailed information page 443.

The reporting forms and process, following a patient through, step by step. This graphic represents the steps an HIV positive patient takes as she or he travels through the healthcare system. She or he is initially enrolled and a patient record referred to as the CTC 2 form is created (see CTC2: Patient Monitoring Form). This document contains the information needed to provide care to the patient.

Upon enrollment, the patient is given a CTC 1 which is the patient’s personal patient card which he or she brings to each clinic visit (see CTC1: Kadi ya Utambulisho). Briefly review the components of the CTC 1 form. Emphasize the importance of patients understanding why they need to bring this card with them at each visit. From the CTC 2 forms, data from all of the new patients are entered into the pre-ART register. This register serves as a compiled list of all the patients who enroll in HIV care (see National Care and Treatment Programme Pre-ART Register).

If the patient becomes eligible for ART and decides to start on ART, then his or her patient information is recorded in the ART register (see National Care and Treatment Programme Register). Both the pre-ART and ART registers contain data that is used for monthly or quarterly HIV-care and ART reporting. The monthly and quarterly report takes data from both registers and provides a general picture of HIV care based upon information gathered from the registers, which is based on individual patient records.
Data Flow and Timeline

This chart shows the flow of information from level to level, starting with each health-care facility. Information gathered at each health-care facility then travels to the district level, then to the regional level, eventually being summarized at the national level, where information is aggregated from all regions.

Facility Level: Collect and summarize/analyse data.

- Use information for:
  - Improving service provision
  - Programme management.

Send the required information to the district by 7th of the following month.

**DISTRICT LEVEL:** Summarize/aggregate information from all facilities in the districts. Use and send the required indicators to the region by 14th of the following month.

**REGIONAL LEVEL:** Summarize/aggregate information from all districts in the region. Use and send the required indicators to the national level by 28th of the following month.

**NATIONAL LEVEL:** Aggregate information from all regions. Use and send feedback to lower levels. Disseminate to stakeholders and feed to National M&E system. NACP also delivers information to the international system e.g. WHO/UNAIDS/UNGASS/PEPFAR, etc.

The information informs key stakeholders and decision makers. The decisions and policies created at the national level then trickle back down through the levels to affect health-care implementation, monitoring, and evaluation procedures.

**Necessary tools for patient encounters in C&T**

- CTC 1 Card
- CTC 2 Card
- Pre-ART register
- ART register
- Cohort analysis register
- Appointment book
- CBHS register
• Forms
  o Request form
  o Referral form
  o Continuation form

• Reports
  o Cross-sectional reports
  o Quarterly
  o Cohort analysis report form

CTC1 – Patient ID Card

Patient ID card contains:

• The unique CTC ID number
• Contact information
• A history of patient’s medications (including any changes in medication/dosing).
• The status of the immune system (CD4)
• The patient’s ART starting date

REFER to Handout 10.6.2: CTC1 – Patient ID Card but emphasize them to pay attention on the slide for detailed elaboration on page 445

CTC2 – Patient Record Card

The card is: An A3 card, opened at the first visit at the same time as the CTC 1 for an HIV+ person attending the CTC. Demographic information completed by the same person who initiated the CTC 1. Issued by the facility registration unit of the CTC by or on the order of the attending clinician. Is the foundation for the patient monitoring system Contains all key data relevant to patient management and information for each visit, including:

• Test results
• CD4 levels
• Counselling that has occurred
• Next appointment date

Identified by the patients’ unique CTC ID number, copied from the patient identification card (CTC 1). Kept in a file and retained in the facility registration unit or dedicated care and treatment cabinet. Retrieved at each visit using patients’ unique CTC ID number. Completed by the clinician and returned to the reception area so that information can be transferred to the registers soon after or at the end of the day.

REFER to the Handout 10.6.3: CTC2- Patient Record Form on page 447.

Fill out the basic information on the Handout 10.6.3: CTC2 - Patient Record Form using the information in Worksheet 10.6.1: Record Keeping Practice Scenario on page 451.
Module 10: Setting Up Comprehensive HIV Services for Children  Participants Handbook
Session 6: Patient Monitoring Systems

CTC2 Card: Front

CTC2: Front, Header Section
- Complete along with CTC1 at enrollment
- Confirm contact information at every visit

CTC2: Front, Encounter Section
- Clinical information
- Codes found on the back of CTC2
Pre-ART Register

Lists ALL patients in HIV care in a facility:

- Patients transferred in without a record are registered
- Patients transferred in with records and who have previously received care are recorded

Monitors patients receiving care and tracks their progress as they become eligible for ART. When patients start ART they are transferred to the ART register and are no longer tracked in pre-ART

The information collected on the CTC2: Patient Record Form is entered into the Pre-ART form so that there is one central place to track a group of patients. This form is filled out for each patient who enrolls in HIV care, before she or he starts on ART.

- One patient listed on each row
- Collects information on a group of patients
- Lists all patients who enrol in HIV care

Pre-ART Register
ART Register

Each row is one patient
Collects information on a group of patients
Lists all patients who enrol in HIV care

For patients on ART

Each patient is recorded in a row as he/she becomes eligible for ART. Patients are grouped in cohorts according to when they started taking ARVs, by month and year. Transfer patients with records who are already taking ARVs are recorded in this register, including the cohort when they started taking ARVs. Register allows tracking of important variables at 6 months, 12 months, and yearly thereafter. Track patients’ progress for the rest of their lives. The different parts of the ART register to participants. Patients move from the pre-ART register to the ART register once they are started on ARV therapy.
Concept of Cohort and ART Initiation

A cohort of ART patients is a group of patients who started ART in the same month/quarter of the same year. Hence there is a cohort of:

- January, February, March (Jan-Mach)
- April, May, June (April-June)
- July, August, September (July-Sept)
- October, November, December (Oct-Dec)

Month 0 is the month when a patient started ART

ART Register page 1
Module 10: Setting Up Comprehensive HIV Services for Children  Participants Handbook
Session 6: Patient Monitoring Systems

ART Register page 2

<table>
<thead>
<tr>
<th>Registration and Personal Info.</th>
<th>Status at start ART</th>
<th>1st Line Regimen</th>
<th>Substitutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Start ART</td>
<td>Unique CTC ID Number</td>
<td>Why Eligible</td>
<td>Functional Status</td>
</tr>
<tr>
<td>12.1.13 1213001 1</td>
<td>Pregnant</td>
<td>W</td>
<td>52</td>
</tr>
<tr>
<td>13.1.13 1213001 1</td>
<td>Pregnant</td>
<td>A</td>
<td>52</td>
</tr>
<tr>
<td>14.1.13 1213000 7</td>
<td>Pregnant</td>
<td>B</td>
<td>50</td>
</tr>
<tr>
<td>19.1.13 1213001 0</td>
<td>Pregnant</td>
<td>B</td>
<td>52</td>
</tr>
<tr>
<td>22.1.13 1213000 3</td>
<td>Pregnant</td>
<td>B</td>
<td>46</td>
</tr>
<tr>
<td>10.1.12 11120034</td>
<td>Pregnant</td>
<td>A</td>
<td>40</td>
</tr>
</tbody>
</table>
Year 2013 To the upper cell write ARV regimen code or ART treatment interruption.

<table>
<thead>
<tr>
<th>Month 0</th>
<th>Month 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 1g-A (30)</td>
<td>1g-A (30)</td>
<td>1g-A (30)</td>
<td>1g-A (30)</td>
<td>1g-A (30)</td>
<td>1g-A (30)</td>
</tr>
<tr>
<td>Feb 1g-A (30)</td>
<td>1g-A (30)</td>
<td>1g-A (30)</td>
<td>1g-A (30)</td>
<td>MISSAPP</td>
<td>1g-A (30)</td>
</tr>
<tr>
<td>1g-A (30)</td>
<td>1g-A (30)</td>
<td>1g-A (30)</td>
<td>STOP/141</td>
<td>1a-A (30)</td>
<td>1a-A (30)</td>
</tr>
<tr>
<td>1g-A (30)</td>
<td>1g-A (30)</td>
<td>1g-A (30)</td>
<td></td>
<td>1g-A</td>
<td>1g-A</td>
</tr>
</tbody>
</table>

Appointment Register/Book

Kept by a member of the Care and Treatment Team at the registration unit. Filled after the patient has received the date for the next visit. Contain the patient’s name, date, unique CTC ID number, the reason for visit and a column for the patient’s show up.

CBHS Register

Client who do not show up at the day of their appointments are recorded in the CBHS Register. It is important to track missing appointments so as to facilitate Home Based Care Providers in tracking patients/clients who miss their appointments.

Request/Investigation Form

All investigations requested are filled in the request/investigation form. Contains demographic data of the patient. In case of multiple investigations, more than one form can be filled.

Patient Referral Form

This form is intended to transfer the client to another section or facility. It is important that the patient carries treatment relevant information whenever she/he sees a new clinician. The same initial identification number will be retained to avoid loss of follow up and double recording of the patient.

Cross-Sectional Report

Cross-sectional report consist of three main tables

- Table 1 care
- Table 2 ART (sub-set HIV care)
- Table 3 (ART follow up)

Reports

- Cross-sectional reports
  - Quarterly
- Cohort analysis report form
- The reports are filled in using information from the registers (pre-ART and ART)
The cross-sectional (monthly and quarterly) reporting form is designed as a summary of: patients newly enrolled in the current reporting period; the cumulative total at the end of the current reporting period; the total of those currently enrolled at the end of the previous reporting period. This is a cross-sectional report form that provides information about patients at one period in time (the reporting period), which is one month or one quarter. The monthly report form contains data gathered from the pre-ART and ART registers. It shows how many people in the past month have enrolled in HIV care and whether they are on ART.

**REFER** to Handouts 10.6.4: Quarterly Report Form for examples of the monthly and quarterly report forms on page 449.

### Roles and Responsibilities of CT Team

- It is critical for the CT team to understand the importance of keeping quality records, and how it relates to program monitoring/performance monitoring
- It is important to assign responsibility to members for specific records
- It is important for other service providers to know the meaning of patient-held cards
  - e.g. is the person at IPD familiar with the CTC 1 card?
- It is important for the team to be aware of their collective achievements
  - e.g. A monthly meeting can to review CTC achievements led by the person responsible for quarterly reporting
- Triage Nurse:
  - Register patient in Daily Attendance Register
  - Measures vital signs and weight, if patient does not have serious signs or symptoms
  - Fills in CTC2 form
  - Retrieves patient results
  - Refers patients for clinical assessment by MO/AMO/CO and then ART counselling by nurse counsellor
- Nurse Counsellor at the first visit to CTC:
  - Review socio-demographic data on CTC 1 and 2 cards
  - Provide HIV education
  - Discuss disclosure of HIV status
  - Counsel on positive living and positive prevention
  - Adherence counselling
  - Transfer information to Pre-ART Register Book
- Nurse Counsellor at the second visit to CTC:
  - Discusses socio-demographic data in CTC 1 and 2
  - Discusses disclosure of HIV status
  - Counselling on positive living and prevention
  - Provides adherence counselling
  - Assesses if the patient is ready to begin ART?
- If yes, schedule follow-up CTC visit in 1 week
  - If no, score immediate/poor on adherence checklist and follow-up with adherence counselling sessions
- Triage Nurse at the third visit to CTC:
  - Day of ART initiation
  - Registers patient in Daily Attendance Register
  - If patient does not have serious signs or symptoms, measures vital signs and weight, fills in CTC2 form, and retrieves patient results
  - Reviews patient’s symptoms and history and conduct physical exam as needed
  - Refer for clinical assessment by MO/AMO/CO to assess ART eligibility
• Start ART

• ART Nurse Responsibilities at ART initiation:
  • Discusses each ARV including dose, frequency, food restrictions
  • Stresses the importance of 100% adherence
  • Discusses possible side effects and how to manage
  • Discusses ongoing prevention strategies
  • Schedules next adherence session for 48-72 hours
  • Directs patient to pharmacy for education on ARVs and to collect drugs
  • Documents in CTC-2 on ART adherence counselling section
  • Completes Pre-ART register and initiate ART register book

• ART Nurse Responsibilities after ART initiation:
  • Assesses the patient for adverse medicine effects
  • Assesses the patient’s ART adherence
    ▪ Discusses with the patient’s on experience and identify any difficulties
    ▪ Reviews the amount of medications remaining
  • Refer patient to clinician if major side effects or adherence problems are identified
  • Provides counselling on ongoing prevention
  • Documents in CTC-1 and 2, ART adherence checklist and Adverse Drug Reaction Form and ART Register book

The next appointment should be on the same day as the patient’s appointment with the MO/AMO if there are no adherence concerns. During these appointments, if it is determined that the patient: is not adhering but wants to continue treatment, schedule a visit within next 48 hours for intensive follow-up.is adhering and can be contacted by telephone, the ART Nurse will call the patient in 5 to 7 days to check on the patient’s status and reinforce medication adherence. On proper recording on the CTC-1 and 2, ART register book and Adverse Drug reaction Form.

• Triage Nurse at follow-up visits:
  • Schedules patients for clinical care and monitoring of response to therapy by MO/AMO/CO, including management of toxicity:
    ▪ 2 weeks after ART initiation
    ▪ 4 weeks after ART initiation
    ▪ Monthly thereafter

For patients on NVP, after 2 weeks check for adverse events, order LFT investigations, and increase NVP dose to every 12 hours, if there are contraindications. At each visit, direct patient to the MO/AMO/CO for assessment and to order lab monitoring, as needed. Refer to ART nurse counsellor for adherence assessment and referrals as needed and pharmacist for refill of medications.

**Key Points**

• Effective patient monitoring leads to provision of quality health care and improved patient clinical outcomes
• Monitoring and Evaluation of HIV/AIDS Care and Treatment services ensure the most effective use of resources, and evaluation of outcomes and impact at a national level
• Teamwork approach for the Care and Treatment Team plays an important role in the initiation and follow-up of patients on ART
• Appropriately completed data collection and reporting tools for HIV/AIDS Care and Treatment services are essential to facilitate informed decision-making and planning about operations management and health service delivery
Handout 10.6.1: Overview of Data Flow from CTC to Registers to Reports

- HIV patient enrolls in HIV care and
  - HIV care and treatment patient record form (CTC 2)
  - New patients entered into Pre-ART register
  - When ART starts, transfer to ART register
  - Pre-ART register

- Summary information
  - At first visit and updated from
  - Encounter information
    - Updated with each outpatient visit for patients in CTC
  - Patient-held ID card (CTC 1)

- Cross-sectional (monthly and quarterly) report
  - New and cumulative on ART
  - Manual analysis by facility
    - then district or district only
  - Aggregated ART cohort analysis report:
    - at 6, 12, 24, 36 months, etc.
Handout 10.6.2: CTC1 – Patient ID Card

JAMHURI YA MUUNGANO WA TANZANIA
WIZARA YA AFYA NA USTAWI WA JAMII

CTC 1: KADI YA UTAMBULISHO
(ONYESHASHA KADI HII KATIKA KILA HUDHERIO)

Namba ya faili ya kituo _______ JINA LA KITUO __________ Simu ya kituo ________
Namba ya faili ya kituo _______ JINA LA KITUO __________ Simu ya kituo ________
Namba ya faili ya kituo _______ JINA LA KITUO __________ Simu ya kituo ________
Namba ya faili ya kituo _______ JINA LA KITUO __________ Simu ya kituo ________

Namba ya utambilisho / UNIQUE CTC ID NUMBER

<table>
<thead>
<tr>
<th>Wilaya</th>
<th>Tafadhali</th>
<th>Kata</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tarehe ya kuzaliwa _______/_______ siku mwezi mwaka

<table>
<thead>
<tr>
<th>Mtaa/kijiji</th>
<th>Mwenyekiti wa Mtaa /Kijiji/Kitongoji</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mjumbe / Balodzi</td>
</tr>
<tr>
<td></td>
<td>Mkuu wa kaya</td>
</tr>
</tbody>
</table>

Jinsia [ ] Me [ ] Ke

<table>
<thead>
<tr>
<th>Jina la msaidizi wa karibu</th>
<th>Simu</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Matibabu ya ARV tangu _______/_____/ siku mwezi mwaka

Anuani ya Msaidizi wa karibu

Simu ya mgongwa ________

HUYAWANYU / HBC No. _______

Idadi ya kadi alizokwapaata ________

<table>
<thead>
<tr>
<th>MAHUDHURIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tarehe</td>
</tr>
<tr>
<td>------------</td>
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<td></td>
</tr>
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<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Taarifa muhumu ya mteja (ijazwe na mganga)

<table>
<thead>
<tr>
<th>1/1/1</th>
<th>1/1/1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/1</td>
<td>1/1/1</td>
</tr>
<tr>
<td>1/1/1</td>
<td>1/1/1</td>
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<tr>
<td>1/1/1</td>
<td>1/1/1</td>
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<tr>
<td>1/1/1</td>
<td>1/1/1</td>
</tr>
<tr>
<td>1/1/1</td>
<td>1/1/1</td>
</tr>
</tbody>
</table>
Handout 10.6.3: CTC2 - Patient Record Form.
Module 10: Setting Up Comprehensive HIV Services for Children  Participants Handbook
Session 6: Patient Monitoring Systems
### Handout 10.6.4: Quarterly Report Form

**National Care and Treatment Programme**  
Quarterly facility-based HIV care/ART reporting form

<table>
<thead>
<tr>
<th>Reporting period:</th>
<th>Date of completion of form (dd/mm/yyyy):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility name:</td>
<td>( ) Public ( ) Private ( ) FBO ( ) Other (specify)</td>
</tr>
<tr>
<td>District:</td>
<td>Region:</td>
</tr>
</tbody>
</table>

Name of person reporting:  
Name of the person checking the report:  
Date:

#### 3. Current on ART at the end of the quarter

**On 1st-line ARV regimen**

1. Males (>14 years)  
2. Females (>14 years)  
3. Males (0-14 years)  
4. Females (0-14 years)  

Total adults and children on 1st-line regimen:

**On 2nd-line ARV regimen**

1. Males (>14 years)  
2. Females (>14 years)  
3. Males (0-14 years)  
4. Females (0-14 years)  

Total adults and children on 2nd-line regimen:

Total adults and children on 1st and 2nd-line regimens:

Total unspecified age or sex:

Current on ART at the end of the quarter:

#### 4. Patients who received HIV care during the reporting period (and subset of those who received Diflucan)

<table>
<thead>
<tr>
<th>Non-ART patients who received care during the reporting period</th>
<th>Patients current in ART at the end of the reporting period</th>
<th>Total patients who received care (non-ART)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Males (&gt;14 years)</td>
<td>a.</td>
<td>g. (3a + 3f)</td>
</tr>
<tr>
<td>2. Females (&gt;14 years)</td>
<td>b.</td>
<td>h. (3b + 3g)</td>
</tr>
<tr>
<td>3. Males (0-14 years)</td>
<td>c.</td>
<td>i. (3c + 3h)</td>
</tr>
<tr>
<td>4. Females (0-14 years)</td>
<td>d.</td>
<td>j. (3d + 3i)</td>
</tr>
<tr>
<td>Total</td>
<td>e.</td>
<td>k. (3e + 3j)</td>
</tr>
</tbody>
</table>

Subset of total:

5. Number on Diflucan during the last quarter:

f.  

Module 10: Setting Up Comprehensive HIV Services for Children    Participants Handbook
Session 6: Patient Monitoring Systems

Page 449
Worksheet 10.6.1: Record Keeping Practice Scenario

Use the following information to complete the CTC 2 form. For required facility information, use the information for your work place.

- Patient Name: Nala George
- Address: 123 Africa Street, Your Village, Your District
- Female
- Age 29
- Born 14 February 1979
- Height: 160 cm
- Weight: 40 kg
- Married
- Tested HIV-positive on 2 March 2007; enrolled in care 6 April 2007
- Was tested at the VCT centre and then referred to CTC
- Clinic visit is today’s date
- Nala is in WHO Stage 4
- Been on 1st line regimen since 16 April 2008. This was her first time on ARVs, she became medically eligible for ARVs in January 2008 when her CD4 count was 150. She was very sick at the time she started but is now able to do most daily tasks, but is not working.
- Her treatment supporter is her husband Abraham who lives at her same address.
- Complains of being tired and having diarrhoea
- She has good adherence with only 1 missed day
Session 7: Overview of Quality Improvement in Paediatric ART Services

Total Session Time: 45 minutes

Learning Objectives
By the end of session, participants will be able to:
- Define the key terms used in Quality improvement.
- Explain the dimensions and principles of quality improvement.
- Describe the quality improvement model and utilize Plan-Do-Study-Act cycles (PDSA)
- Identify the tools/methods for monitoring quality of Pediatric ART services
- Describe the roles and responsibilities of Health Care providers on monitoring quality of Pediatric ART Services

Introduction
Definition: Quality is an ability of a product or service to satisfy needs of a specific customer. Achieved by complying to established requirements and standards. The degree of adherence to standards and specifications is consistent with current professional knowledge. Quality has different meanings for different stakeholders, for example, governments, service providers and parents or guardian who provide care to children on ART. Some are more concerned about the performance of the system, some about the quality of the care delivered and some about the quality of care received.

Quality in health care
Quality means doing the right things the right way, otherwise there is no quality. Doing “right things” means applying correct interventions to meet client/patient needs. Doing “right way” means applying correct processes, efficiently and on time (using set standards).

Quality Grid as Applied in ARV Provision
Definition: Quality Improvement in Pediatric ART Service

<table>
<thead>
<tr>
<th>Right things right</th>
<th>Right things wrong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identified HIV exposed child correctly, provided ARV prophylaxis. Right dose within 72 hrs and continued for 6 weeks, checked PCR 1, initiated CTX at 4-6 wks and continued till HIV status made</td>
<td>Complete filing of CTC form incorrectly</td>
</tr>
<tr>
<td>Providing correct medicine to the child but under dose</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wrong things right</th>
<th>Wrong things wrong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gave wrong dose of ARV prophylaxis within 72 hours to the right child</td>
<td>Gave wrong dose of ARV prophylaxis at wrong timing to the wrong child gave wrong follow up instructions and wrong date</td>
</tr>
</tbody>
</table>

Right things Right: Identified HIV exposed child given the right dose within the right time
Right things Wrong: The CTC form filled completely but the information in the form is mixed up or missed (weight vs Height), HB on CD4 column
Wrong thing Right: Small or large dose of ARV prophylaxis given to the HIV exposed child within 72 hours.
Wrong things Wrong: wrong dose of ARV given to wrong child at a wrong time

Definition: Quality Improvement in Pediatric ART Service
A systematic process of assessing performance of a pediatric ART services, in order to meet set requirements and standards by:

- Identifying gaps,
- Causes and
- Introducing measures to improve quality.

It should be a continuous process of Pediatric service assessment, evaluation and improvement with interdependent responsibilities at each level of the health system. QI is

- Systematic and continuous actions that lead to measurable improvement in health care services and the health status of targeted patient groups
- A systematic participatory effort to improve the quality of health services (Pediatric ART service), including all methods of performance assessment and readjustment according to all available resources, thereby serving the health and welfare of the community.
- Is an approach to the study and improvement of the processes of providing Pediatric ART services that respond to client (Child, parent or guardian) needs.
- An integral part of the Quality Assurance cycle and is an approach to the study and improvement of the processes of providing health-care services that respond to client needs.
- Modern QI methods seek to improve processes of care for optimum compliance with evidence-based standards, which is the ultimate goal for QI of both clinical and preventive care.

Dimensions and principles of quality improvement

Dimensions

The following are dimension of quality improvement:

Technical Performance:
- skills, capability of HCP

Effectiveness of care:
- Degree to which desired results are achieved.

Efficiency:
- To provide optimal service rather maximum

Safety:
- Minimizing the risks of injury and infection

Interpersonal Relationship:
- Trust, respect, confidentiality and effective communication

Continuity:
- Availability of human and material resources

Access to services:
- Available in all health facilities and community in rural and urban Health settings

Physical Infrastructure:
- Physical appearance of the facility, cleanliness, comfort, privacy

Choices of services:
- Decide which facility to attend
1. **Technical performance** refers to the skills, capability, and actual performance of health providers, managers and support staff. e.g.; Adhering to general principles of chronic care to Pediatric ART services

2. **Effectiveness of care**
   - The degree to which desired results (outcomes) of care are achieved through appropriate Paediatric ART services e.g.; All HIV positive children are retain to ART services

3. **Efficiency**
   - Efficient services refers to provide optimal rather maximum Pediatric ART services to client (child, parent or guardian, community
   - *e.g.*: Providing Pediatric ART services and facilitate disclosure for children infected with HIV

4. **Safety**
   - Refers to the degree to which the risks of injury, infection and other harmful side effects are minimized.
   - *e.g.*: Infection prevention practices and use standard precautions

5. **Access to services**
   - The degree to which healthcare services are unrestricted by geographic, economic, social, organizational or linguistic barriers
   - *e.g.*; The Pediatric ART services are available in all health facilities and community in rural and urban settings

6. **Interpersonal Relationship**
   - This refers to trust, respect, confidentiality, courtesy, responsiveness, empathy, effective listening, and communication between providers and clients eg; Treating a child, parent or guardian with respect

7. **Continuity**
   - Ensure uninterrupted and consistent services are provided to the general and key population/community, e.g.; availability of commodities

8. **Physical infrastructure / comfort & amenities**
   - Refers to the physical appearance of the facility, cleanliness, comfort, privacy and other aspects important to clients, ie; availability of clean toilets

9. **Choice of Services**
   - The client (parent or guardian) can decide which facility to attend, time to seek health care and treatment plan
Principles of quality improvement

There are five principles of QI:

- Focuses on client’s needs and expectations
- Focuses on communication and feedback
- Teamwork
- Focuses on measurements (data)
- Focuses on systems and processes

Focuses on client’s needs and expectations
- **External clients needs** quick recovery, clean health care facilities, friendly attitude of staff towards them and reliable services
- **Internal clients** clean and well organized working place, better remuneration, benefits and training, good team work, clear job description

Focus on Process and system:
- Various types of systems and processes exist, including those that are used to make clinical decisions, manage treatment, and manage supplies.

Focuses on communication and feedback
- Sharing knowledge and experiences, and giving constructive feedback of what worked well and what could be improved

Teamwork:
- Working together towards achieving a common goal.
- Work Improvement Team (WIT) should be established.
- Whether the work is inline with Facility Quality Improvement Team (QIT)

Focuses on measurements (data)
- Measuring the current status versus the set standards using data collected
- Raise awareness in the process of Pediatric ART services delivered among health workers
- One of the main goals for quality improvement is to meet the needs and expectations of both internal and external clients.
- **External clients** are generally the population served, including patients, parents, guardians, families, and communities.
- **Internal clients** are health workers who may need a service from a colleague to perform a job function. clean and well organized working place, better remuneration, benefits and training, good team work, clear job description

**Communication** is necessary to share knowledge and experiences, motivate, inform, teach persuade, inspire and give or receive directions. In communication a relationship of trust, understanding and empathy with the client is established. For communication to be effective the following principles should be observed:
- Listen attentively
- Two way communication
- Affirm and acknowledge results

Feedback is one of the components of communication. Feedback is important for completeness of the communication process. Feedback combines both what worked well during training and what could be improved. Using teamwork is one of the principles of quality improvement. When people work in teams, they are able to combine their talents and accomplish things that individually they would not be able to do. Indicators are quantitative measures used to monitor and evaluate the quality of important governance, management, clinical, and support functions that affect patient outcomes and sometimes health care process or outcome. Within the healthcare profession, various types of systems and processes exist,
including those that are used to make clinical decisions, manage treatment, and manage supplies.

The quality improvement model and utilize Plan-Do-Study-Act cycles (PDSA)

Quality Improvement Model is a simple way to identify gaps, analyze, develop and implement improvement plan useful for:

- Testing great ideas,
- Trying things that have worked for others,
- Implementing ripe ideas or actions

Quality improvement in health settings is the use of a planned and defined improvement process, such as Plan-Do-Check-Act, which is focused on activities that are responsive to community needs and improving population health.

**Step 1: Identify** - “What are we trying to accomplish?

**Step 2: Analyze** – “How will we know that a change is an improvement?

**Step 3: Develop** – “What change can we make that will result in improvement?”

**Step 4: Implement**

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**Step 1:** This step is to determine what to improve... What are we trying to accomplish? working together as a team / system towards a common aim. This may involve a problem that needs a solution, an opportunity for improvement or a process or system that needs to be improved.

**Step 2:** How will we know that a change is an improvement? Use of data to understand what is normal variation in a system as opposed to what is a change (for better or worse) Analysis is to gain a deeper understanding of the opportunity for improvement before considering changes.

**Step 3:** What changes can we make that will result in improvement? This step uses information gathered from the previous steps to explore and propose changes which might improve the existing performance problem.

**Step 4:** Testing hypothesis by implementation of PDSA Cycle. Steps 1, 2 and 3 must be completed before the PDSA cycle. Disseminating positive improvements throughout organization.
Tools/ methods for monitoring quality of Pediatric ART services

Methods:
- Data audit & analysis
- Giving feedback
- Supportive supervision and mentoring
- Exit interviews

Tools:
- Tracking Service statistics
  - District/regional summary indicators
  - CTC1, CTC2, facility registers and National HIV logbook
- Suggestion boxes
- Checklist for Supportive supervision

The roles and responsibilities of Health Care providers on monitoring quality of Pediatric ART Services

The following are the roles and responsibilities of HCPs on monitoring quality of Pediatric ART Services

- Monitoring own performance
- Adhering to Standard Operating Procedures and National guidelines
- Maintaining accurate recording and reporting of ART records
- Participating actively in supportive supervision
- Tracing lost to follow-up
- Respecting a client’s right to confidentiality and dignity
- Practicing according to professional and ethical standards.
- Participating in regular quality improvement team meetings.
- Ensuring adequate stocks of all needed resources.
- Ensuring that interventions are in place to prevent stress and burnout of staff.
- Completing and analyzing quarterly ART statistics.
- Monitoring and analyzing agreed quality indicators.
- Identifying, analyzing and developing solutions for problems related to quality.
- Giving feedback to the community, service users and other facility staff
- Improving the quality of both the work environment and services using 5 ‘S’ Through;
  - Sorting: Remove unused elements from your venue of work and reduce clutter
  - Setting: Organize everything needed in proper order for easy operation
  - Shine: Maintain high standard of cleanliness
  - Standardize: Set up the above three ‘S’s as norms in every section of your place
  - Sustain: Train and maintain discipline of the personnel engaged

A well-organized work environment can be achieved from small day-to-day efforts. Overall, 5S will lead to workload reduction and job satisfaction.
Key Points

- Everyone is responsible for quality improvement in Paediatric ART services
- Quality Pediatric ART services is considered as accessible when meet the needs of clients/patients and providers;
- In an equitable manner,
- Availability of resources in line with national guidelines
- Continuous monitoring of the quality of services helps to improve performance
- There are several tools and methods used to monitor the quality of Pediatric ART service.
Module 11: Paediatric HIV Care/ART Practicum

Session 1: Structured Paediatric HIV Care/ART Practicum at Designated Facilities

Total Session Time: 15 minutes

Learning Objectives
By the end of session, participants will be able to:

- Describe the organization of paediatric HIV comprehensive care/ART service delivery
- Explain the CTC client flow and procedures for new children presenting at the CTC
- Describe ART preparation/adherence counseling for children and their families
- Explain linkages to selected services (lab, pharmacy, IPD, MCH/PMTCT, etc.)

Introduction

Practicum Orientation

Practicum SOPs
During practicum orientation you will be met by a site Preceptor/Facilitator who will:

- Conduct briefing on CTC
- Review participant expectations
- Reinforce practicum norms, for example:
  - Respect for patient confidentiality
  - Minimal disruption to service delivery
- Introduce you to CTC staff
- With other CTC staff: Identify, seek consent, and pair you with families for the purpose of your sitting-in on their consultations

Practicum Activities
- Four activities are suggested.
  - All participants are required to complete Activity 1
  - It is desirable for participants to complete at least one other activity, which may be activity 2, 3 or 4.
- Participants are required to make brief notes of their visit, and presentations back to their colleagues.

Activity 1:
Walk With a New Patient
- Pair up with an identified new child/family (preferably before registration)
- Follow this child/family throughout the CTC care process
• Note the following:
  o Where the child was referred from – is there a referral form, verbal or self referral?
  o Estimate time spent at each station, including waiting times.
• Note the following (continued):
  o For each station, note the designation of provider, the service provided and the hand-over/referral process to the next provider
  o Make a summary of this case study (excluding name), for presentation for your colleagues

**Activity 2:**
Adherence Counseling
• Pair up with the CTC team member providing adherence counseling for an entire session with one patient
• Note the following:
  o What staff member is providing adherence counselling?
  o Make a note if the patient is not yet on ART, continuing ART, stopped ART.
  o What other medications is the child on?
  o What key messages is the counselor giving?
• Note the following:
  o What issues did the child/family raise?
  o What tools the counselor have to support patient adherence?
  o Make a note of your overall impression of adherence in this child: good, fair, poor.
  o Make a concise summary, ready for report back to your colleagues.

**Activity 3: Pharmacy**
• Go to the pharmacy with a child who is on ART
• Note the following:
  o Time spent waiting to be attended
  o Time spent with the dispenser
  o Are there charges for drugs – if yes, cost?
  o Dispensing window characteristics – is it private?
• Note the following (continued):
  o Drugs & volume dispensed (name and whether tablets, liquid). Describe labelling?
  o Key messages to child/family
  o Issues, questions from the family?
  o Does he/she given enough amount of drugs to meet next appointment

**Activity 4: CTC Team Member**
• Talk to a CTC team member when they have no patient:
  o What is the average number of patients seen on a daily basis?
  o Where are most of the children referred from?
  o What are the main challenges faced by staff?
  o What are the main challenges reported by patients?
  o Where and how is care organized for adult family members?
- General Observations
- During your activities, observe if this equipment exists at the CTC to facilitate paediatric care:
  - Weighing scale, height measure/stadiometer, growth charts
  - Paediatric drug dosing charts, Normogram
  - Appropriate furniture and décor, toys
  - Water and food (e.g. porridge) while waiting
  - Job aids for health workers e.g. national guidelines, SOPs for PEP, etc.
  - Low literacy materials in appropriate language

REFER to page 465 and 469 in participant handbook on handout 11.1-11.2 Application of Learning Guide for Pediatric HIV Care/ART Practicum at Designated Facilities
Handout 11.1: Pediatric HIV Care /ART Practicum Checklist

1.1 Organization of paediatric HIV care/ART service delivery
   Describe the organization of the CTC with reference to Paediatric service delivery:
   - Number of health care providers available for paediatric care services and their designation
   - Service provided available for children and adolescents
   - Referral mechanism.

1.2 CTC client flow and procedures for new children presenting at the CTC
   - Identified new child/family (preferably before registration)
   - Introduce yourself to the patient and caregiver
   - Review child’s medical record, including:
     - Age, sex, date of enrolment.
     - WHO Stage and CD4 trends.
     - Note if the patient on ART or not. If on ART for how long.
     - What issues/problems were identified at last visit for follow-up today?
     - Who is the caregiver with this child?
     - Where was the child referred from – is there a referral form, verbal or self referral?
   - Follow this child/family throughout the CTC care process and note the following:
     - Estimate time spent at each station, including waiting times.

1.2.1 Registration station
   - Identify the client’s point of entry to HIV care and treatment
   - Availability of necessary registers
   - Patient guide to the next station

1.2.2 Triage station: Note if the following are being done
   - Assessment for urgency or priority problems.
   - Anthropometric measurements – weight, height/length, MUAC, OFC, oedema.
   - Determination and documentation of WH z-score and make nutrition

1.2.3 Counselling station
   - Group teaching at waiting room area
   - Assessing readiness for ART Initiation: Assess if the client/caretaker is well informed
     - Are you ready to start ART medications?
     - How long will your child need to take ARVs?
     - Who will be giving the ARVs? Has that person completed adherence sessions?
     - What are some possible side-effects of the medications? What will you do if any of those side-effects occur in your child?
     - What will you do if your child vomits after taking the medications?
     - What will you do if you forgot to give your child their medication?
     - Why is it important not to miss any doses of medicine?
   - Disclosure status
     - Performance of age-appropriate disclosure and document this

1.2.4 Clinician station: Assess the following
   - Looking for new problems/complaints (e.g. fever, cough, vomiting, diarrhea, rash, etc.)
   - TB screening (use of TB scoring chart)
   - Focused physical exam, if relevant (particularly if first visit or acute complaints)
   - Review most recent laboratory data including CD4 and ability to interpret individual test results.
WHO Clinical Stage, ART status, and adherence.
Eligibility for CPT.
Eligibility for ART if not on ART.
Ordering of appropriate laboratory investigations.
Prescribe appropriate ART using weight-banded dosing.
Problem-based assessment and plan for each additional issue

1.2.5 Pharmacy Station
- Demonstrate effective communication skills when working with patients and co-workers.
- Explain the pharmacy ledgers and demonstrate correct documentation.
- Explain ART prescriptions, why they are different from regular medications.
- Demonstrate medicine quantification.
- Label, document, and dispense prescriptions.
- Differentiate the needs of adult patients with HIV and AIDS from paediatric patients.
- Paediatric dose calculation and monitoring
  - Perform a patient-pharmacist encounter
    - Confirm the identity of the patient
    - Clarify misunderstandings of patient instructions and knowledge of medication schedule
    - Explain importance of adherence
    - Dispense appropriate and accurate amount of medications
- Stock Management Competencies
  - Explain the management supply cycle and management of pharmacy inventory
  - Order relevant CTC supplies
  - Store medications appropriately
  - Ensure that quality assurance standards are met
  - How to handle overstocks or expired drugs

1.2.6 Laboratory Station
- Collects information relevant to the patient’s laboratory test, pertinent past medical history, and health status.
- Records pertinent information, as necessary, in a legible, organized manner.
- Follows correct laboratory testing procedures for preparing and completing test.
- Uses correct technique in systematically labelling and documenting laboratory procedures.
- Stores laboratory supplies appropriately and shows understanding of organization and structure of laboratory.
- Provides clear explanation of laboratory procedure, using effective communication skills.
- Demonstrates laboratory safety and universal precautions.
- Behaves in professional and ethical manner.
- Manages time appropriately.

1.3 ART preparation/adherence counseling for children and their families
1.3.1 ART preparation: Assess
- Who is responsible to prepare the child for ART?
- Who is the caregiver of child?
- What key messages is the counselor giving to prepare the child for ART?
- How many sessions are offered before starting ART?
- How is the caregiver/patient being assessed for readiness to ART?

1.3.2 Assessing adherence
- Make a note if the patient is not yet on ART, continuing ART, stopped ART.
- What staff member is providing adherence counselling?
- What key messages is the counselor giving?
- What tools the counselors have to support patient adherence?
• Is the child on any other medications apart from ARVs? If yes, what are those?
• Who is responsible for giving ARVs to the child?
• What time are the ARVs given? Is the responsible caregiver at home during that time?
• Does the patient have a treatment supporter?
• What form of reminders does the patient/caregiver use?
• How many doses has the patient missed in the last month? Last 4 days?
• Is the patient taking the right dose? Ask caregiver to demonstrate dosing of ARV.
• What issues did the child/family raise which might interfere with adherence?
• Give instructions on food and fluid intake/restrictions.
• What is the adherence rate (<95% or >95%)?

1.4 Linkages to selected services (lab, pharmacy, IPD, RCH/PMTCT etc.)
• Provide comprehensive services along the continuum of care through effective networks and referral system with the health facility and community.
• Determine if patient has received required services.
• Identify the need for referral with the patient.
• Determine the need for networking in home-based care
• Identify situations/conditions requiring referral for further management and support
• Facilitate all procedures through the use of national referral form and HBC providers inventory.
• Establish a mechanism for organizing counselling services and other support elements for caregivers

2. Final Practicum Debrief: Small and large group discussion
• Purpose: To share experiences and lessons learned during the practicum. This consists of 2 parts:
  o Part 1: Small Group Discussion
  o Part 2: Large Group Discussion
• Small Group Discussion
  Discuss the following questions in your small groups and write down your responses:
  o What was your overall experience during the practicum?
  o What skills did you find the most difficult to perform?
  o What skills did you find the least difficult?
  o In which areas would you like more mentoring in the future?
  o What did you learn during the practicum that you did not expect to learn?
  o What was your most memorable experience during the practicum?
• Large Group Discussion
  o Brief report back from small group discussions
  o Discuss areas where more mentoring is needed
  o Discuss how we can continue to support each other after the training.
Objective:

To practice the acquired knowledge and skills in pediatric HIV care/ART

Participants:

- Doing clinical assessment and identify clinical cases that fall into at least some of the following categories:
  1) A new patient (coming for the first time to a CTC). This case will enable the participants:
     i) To know how to assess a patient for ART eligibility.
     ii) To know how to exclude active OIs before initiating ART.
  2) A patient with an OI (excluding tuberculosis TB). This will enable the participants to appreciate the diagnostic approaches for different OIs. Look for the following conditions:
     i) Respiratory
     ii) Gastro-intestinal
     iii) Neurological
     iv) Dermatological manifestation.
  3) A patient on ART with good adherence and good clinical response with no complications and immunological response (good CD4 progression).
  4) A patient on ART with poor adherence presenting with treatment failure on the first-line treatment.
  5) A patient with short-term side effects to ART e.g. hypersensitivity reaction (skin rash), jaundice etc.
  6) A patient with long-term side effects to ART e.g. lipodystrophy or lipid abnormalities

Practicum Activities:

- The following activities are suggested:
  o All participants are required to complete activity 1
  o Participant to complete at least one other activity which may be 2,3, or 4
  o Participants are to make brief notes of the visit and presentations
  o Make a presentation to colleagues

- Activity 1: Walk with a new patient
  o Pair up with an identified new child/family (before registration)
  o Follow up the child/family throughout the CTC care process
Module 11: Paediatric HIV Care/ART Practicum

Participants Handbook

Session 1: Structured Paediatric HIV Care/ART Practicum at Designated Facilities

Note the following:

- Where the child was referred from? Is there a referral form, verbal or self-referral?
- Estimate time spent at each station, including waiting times
- For each station note the designation of the provider, the service provided and hand-over/referral process to the next provider
- Make a summary of this case study (exclude name) and make presentation for your colleagues

**Activity 2: Adherence Counselling**

- Pair up with the CTC team member providing counselling for an entire session with one patient
- Note the following:
  - What staff member is providing counselling?
  - Make a note if the patient is not yet on ART, continuing ART, stopped ART
  - What other medications is the child on?
  - What key messages is the counsellor giving?
  - What issues did the child/family raise?
  - What tools the counselor have to support patient adherence?
  - Make a note of your overall impression of adherence in this: good, fair, poor
  - Make a concise summary, ready for report back to your colleagues

**Activity 3: Pharmacy**

- Go to the pharmacy with a child who is on ART and
- Note the following:
  - Time spent waiting to be attended
  - Time spent with the dispenser
  - Are there changes for drugs, if yes, cost?
  - Dispensing window characteristics- is it private?
  - Drugs & volume dispensed (name and whether tablets or liquid) Describe labelling?
  - Key message to the child/family
  - Issues questions from the family?
  - Does he/she given enough amount of drugs to meet next appointment

**Activity 4: CTC Team Member**

- Talk to CTC team member when they have no patient on the following:
  - What is the average number of patients seen on a day basis?
  - Where are most of the children referred from?
  - What are the main challenges faced by staff?
  - What are the main challenges reported by the patients?
  - Where and how is care organized for adult family members?

**General Observations:**

- During your activities observe if this equipment exists at the CTC to facilitate paediatric care:
  - Weighing scale, height measure/ stadiometer, growth charts
  - Paediatric drug dosing charts, normogram
  - Appropriate furniture and décor, toys
  - Water and food (e.g porridge) while waiting
  - Job aids for health workers e.g national guidelines, SOPs for PEP, etc
  - Low literacy materials in appropriate language