

## 1. INTRODUCTION

Public health interventions using preventive chemotherapy (PCT) to control neglected tropical diseases (NTDs) depend on people in endemic areas receiving the medicines they need in the places where they live, at appropriate regular intervals. The first and fundamental step in the process consists ensuring a high effective and efficient supply chain (SC) that the NTD medicines are of high quality and available for distribution during a Mass Administration of Medicines (MAM) <sup>1</sup>. However it is observed that in most part of the country, the supply chain for Neglected Tropical Diseases Medicines are non-uniform, fragmented and characterized by inappropriate storage practices, poor inventory management practices, late reporting and weak reverse logistics system. A weak human resource capacity for supply chain management and absence of standard operating procedures to guide and clarify roles and responsibilities further create operational challenges.

NTD stakeholders have expressed the need for a Standard Operating Procedure manual for NTDS supply chain management to provide guidance to health workers and program managers. The SOP will also serve as a reference guide for training, monitoring and support supervision.

### 1.1 Purpose of this Manual

In view of the strategic role of supply chain in the achievement of NTD Program targets, a Standard Operating Procedures (SOP) manual provides guidance to ensure product availability, safety and accountability in addition to maintaining uniform standards in the performance of specific tasks and subsequently to the achievement of the set objectives.

This manual contains a set of SOP for the management of NTD Medicines and associated commodities from the upstream supply chain (Federal Medical Stores) down to the last mile (communities and schools) where the medicines are required and used.

### 1.2 Users of the Manual

This manual is intended for use by personnel that conduct logistics and programmatic functions relating to NTD Programs - from the Federal Central Medical Stores down to the service delivery points (communities and schools). The following categories of personnel will find this manual extremely useful:

- All personnel and program management staff with logistics and inventory management responsibilities at Federal, State, LGA, Front Line Health Facilities, Community levels.
- NTD Program Managers and Zonal Coordinators
- State NTD Coordinators
- Local Government Area (LGA) NTD Coordinators and Focal Persons
- Logistics and Store Officers

- Pharmacists
- Community Implementers of Mass Administration of Medicines(MAM)
- Teachers

## **2. OVERVIEW OF THE NEGLECTED TROPICAL DISEASES (NTDs)**

### **2.1 Background**

Neglected Tropical Diseases (NTDs) are diseases that affect rural poor dwellers of low-income communities where safe water supply, sanitation and hygiene are poor or even totally lacking. Although safe and cost-effective interventions for prevention and control are available, these diseases have continued to cause immense sufferings and often life-long disabilities for the affected.

About one billion people worldwide are affected by one or more of these diseases, which are common in areas with poor housing, water supply and sanitation. Nigeria contributes significantly to this global burden. NTDs contribute to and are perpetuated by poverty, and have gradually disappeared from areas where there is significant improvement in quality of life. In Nigeria where the social indices for health are still not optimal, these diseases continue to thrive.

Priority NTDs for Nigeria include the Preventive Chemotherapy NTDs (PCTNTDs); Onchocerciasis (River blindness), Lymphatic Filariasis (LF Elephantiasis), Schistosomiasis (SCH), Soil Transmitted Helminthiasis (STH) and Trachoma. Others include Human African Trypanosomiasis (HAT), Buruli Ulcer (BU), and Leprosy (LEP). There are also the Zoonotic NTDs in Nigeria such as Rabies.

Medicines used for all PCTNTDs chemotherapy are donated by partners, with over 255 million persons that need to swallow these Medicines annually nationwide. The NTDs Programme get these donated Medicines to the end users in the communities and implement other interventions in order to achieve the global target of elimination of the NTDs by 2020

### **2.2 Programme implementation structure**

The programme implementation is organized along the 3 tiers of government with the units of operation being the health facilities at the local government area (LGA). At the Federal level, there is a Central unit headed by the National Coordinator who is the Programme Manager. The National Coordinator is assisted in her work by professionals in charge of different aspects of the program implementation.

The National Coordinator is thus the head of technical crew at the Federal level. A similar structure exists at the State and LGA levels with State NTDs Coordinator and the LGA NTDs Coordinator respectively.

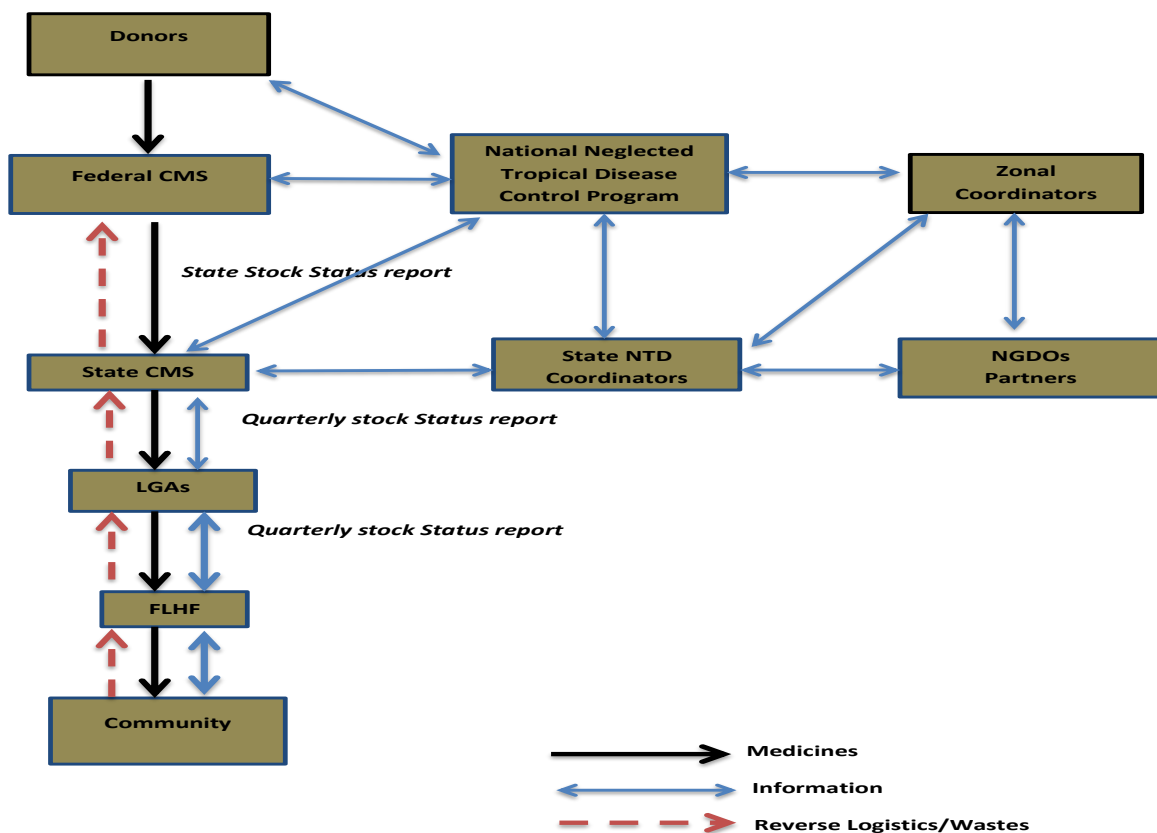
The line of technical supervision goes from the National Coordinator through the State NTDs Coordinator and to the LGA NTDs Coordinator. The line of administrative authority is as laid down by the different tiers of government.

### 2.3 Logistics system for Medicines

The success of the NTDS program rest mainly in the provision of essential Medicines, recording and reporting materials such as vouchers, ledgers etc. on a regular basis. A reliable system of logistics support is therefore a sine qua non to effective program implementation.

This section describes the flow of Medicines and information from Federal Central Medical Stores (FCMS) to State, LGA and facility stores as shown in Figure 1 below. Medicines come into the country from donors/manufacturers through the seaports or airports and are moved to be stored at the Federal Central Medical Stores. The in-country pipeline has five supply levels namely: FCMS, State Stores, LGA stores, the health facilities and the community. The pipeline is designed to be visible from any point in the NTDs medicines supply chain system.

**NTDs MEDICINES & INFORMATION FLOW**



In the forward logistics, the distribution of Medicines from one level to the other are captured and documented using a transaction record to ensure accountability, transparency and visibility at each level. At the end of the Mass Drug Administration, a system of reverse logistics is implemented in which the balance of medicines (usable and unusable) are returned upwards from the lower level to the higher level of the supply chain..

The medicines used in the NTDsprogramme for PC NTDs include:

- i. Ivermectin (IVM)
- ii. Albendazole (ALB)
- iii. Praziquantel (PZQ)
- iv. Mebendazole (MBD)
- v. Azithromycin (AZT)(Tabs/POS)
- vi. Tetracycline eye ointment (TEO)

Medicines used for the other NTDs are listed in appendix 1. These medicines are either procured by WHO or by Federal Ministry of Health as required.

### **3. DRUG FORECAST AND REQUISITION PROCESS**

This section describes the process of determining the quantities of medicinesrequired; the requisition process and eventual delivery of the medicines into the country designated medical storage.

#### **3.1 Drug Forecast and Quantification Process**

Quantification is the process of estimating the quantities and costs of the products required for a specific health program (or service), and determining when the products should be delivered to ensure an uninterrupted supply for the program.

The Preventive chemotherapy (PCT) of NTDsprogramme uses five different medicines for mass drug administration: Ivermectin, Albendazole, Praziquantel, Mebendazole and Zithromax®.

- Ivermectin for Onchocerciasis
- Ivermectin and Albendazole for Lymphatic Filariasis
- Praziquantel for Schistosomiasis
- Albendazole or Mebendazole for Soil Transmitted Helminthiasis
- Zithromax® (tablet& Syrup) and Tetracycline Eye Ointment (TEO) for Trachoma

#### **Forecasting and Quantification Process:**

- Medicines for the PCTNTDs are quantified based on the target population in the endemic LGAs while the number of cases is considered in drug quantification for Innovative drug management (IDM)NTDs

- Medicines for Oncho, LF, SCH and STH (Ivermectin, Albendazole, Praziquantel, Mebendazole) are applied for jointly by the procurement and supply management unit (PSM) using The Integrated tool for Planning and Costing (TIPAC). Joint re-application is forwarded by 15<sup>th</sup> August of every year.
- There is a separate template for Zithromax requisition which is completed and forwarded before the end of February, every year.
- Joint Request for Selected PCTMedicines (JRSM) (Ivermectin, Albendazole, Praziquantel and Mebendazole) is generated using the TIPAC software.
- The Multiplier (average per person) used to generate the total quantity needed for each PCTNTDs is as below:
  - Ivermectin – 2.8 tablets x 80% of total population of LGA for LF
  - Ivermectin- 2.8 tablets x total population of Oncho-endemic communities for Oncho
  - Albendazole – 1 tablet x 80% of total population of LGA for LF
  - Albendazole- 1 tablet x 100% of target population for STH(28% of total population)
  - Mebendazole -1 tablet x 100% of target population for STH (28% of total population)
  - Praziquantel – School Age Children -- 2.5 tablets x target population (28% of total population) plus additional 10% of the total Praziquantel tablets requested built in and may be used to treat adult at risk as well as to take care of wastages.
  - Zithromax (tablet)– 3 tablets x 80% of total population
  - Zithromax (POS) – 0.333 bottle x 18% of total population
  - Tetracycline Eye Ointment – 2 tubes x 2% of total population
- The multipliers above are multiplied by target population for each intervention to arrive at the total quantity required for each medicine for the MAM cycle

The multipliers are applied when requests for medicines are made for various populations. Where LF overlaps with Oncho the higher figure is taken and the multiplier applied for Ivermectin. Where LF overlaps with STH and the request for Albendazole is for LF applying the appropriate multiplier (note that the request covers treatment for STH). Where an additional treatment for STH is required, the population needing Mebendazole is multiplied with the appropriate formula as shown above.

### 3.2 Medicines Requisition Process.

The process for requesting for NTDSs is stated below:

- At the end of the treatment cycle the Stock on Hand (SOH) for each medicine and the Joint Request for Selected PCTMedicines (JRSM) are sent to the donors through WHO Country office, Nigeria.
- Joint Request for Selected PCTMedicines is reviewed by different donors and partners

- The SOH of each drug at the end of the treatment cycle is deducted from the quantity required.
- Consideration is given to available capacity to conduct MAMs by countries and partners among other things and approval is given and communicated by donors for each PCTmedicines for all eligible States through the FMOH
- UNICEF, WHO and other partners assist in clearing NTDSMedicines through the clearing agents on arrival at the Port.
- Clearing documents including duty waiver are processed and obtained by the consignee (WHO and UNICEF) from Nigeria Customs Service and Federal Ministry of Finance.
- Before shipment, shipping documents are sent to WHO and UNICEF as the case may be while relevant Programmes are copied.
- PCTMedicines are shipped by the donors after production
- Prior to arrival of PCTMedicines at the Port, the Clearing agent is required to submit the following documents to the Federal Central Medical Stores (FCMS) prior to delivery:
  - Notification with a letter of intent 72 hours before delivery
  - Certificate of analysis from the donor/Clearing Agent
  - Packing list
  - Way bill
  - Proforma invoice
- PCTNTDSMedicines on arrival at the Port are cleared by the clearing agents.
- Subsequently, all consignments of Ivermectin, Albendazole, Praziquantel, Mebendazole and Azithromycin for the NTD Programme are supplied and effectively managed at the Federal Central Medical Stores (FCMS), Oshodi-Lagos.
- Approved Distribution Plan showing in details the allocations in terms of quantity to the benefiting States is sent by NTD Division, FMOH to the FCMS prior to distribution.
- Allocation Letter is sent by NTDDivision, FMOH advising States to collect the Medicines from the Central warehouse.
- State designated pharmacist receives the Medicines on behalf of the state from Federal CMS.
- The LGAs collect their PCTNTDSMedicines from the State CMS while the Front Line Health Facilities and Education Secretaries collect from the LGAs Stores / Health Department and issue to the various communities and schools under them.

### 3.3 Custom clearance and documentation

This section describes the process for the clearance of consignment through customs and ensuring necessary documentation required for accountability and compliance.

#### **Aim:**

- The SOP explains the policies and defines the activities and responsible staff in carrying out the custom clearance of a consignment.
- Ensure that agreed customs clearance policies and procedures are implemented as laid down.
- Activities are performed in an orderly efficient and repetitive manner.
- Minimize errors during the execution of this activity.
- Serve as training guide for new staff as well as refresher guide for existing staff.
- Serves as a reference guide to carry out an activity in case of doubt or difference of opinion.

#### **Objective:**

- Ensure that the custom clearance activities are done accurately and consistently so as to eliminate loss.
- Expediting consignment clearance.
- To carry out the custom clearance operations efficiently in accordance with set out guidelines in order to ensure adequate safety of all stocks.
- Custom clearance operations are done in line with the security management policy and procedures to ensure safety of stock, personnel, and equipment.
- To facilitate processing of orders / deliveries efficiently in line with the set inventory management, receipt, dispatch and distribution policy guidelines.

#### **Procedure and Scope:**

This SOP relates to operations at the port of entry into Nigeria for onward delivery of the consignment to the FCMS. The outlined procedures should be implemented within the framework of the several laws /guidelines governing importation.

#### **Key management issues:**

Importation and customs clearance is a specialized area of work. A specialized clearing and forwarding agent shall be contracted. Time periods allowed for each activity must be adhered to. Penalties for poor performance must be instituted. A strict control on subletting of services to other agents other than the one contracted must also be in place.

## **TheProcess**

The major activities in this process are:

- Notifying stake holders of the expected consignments.
- Tracking the shipment at all stages.
- Obtaining all necessary documents relating to the consignment on time.
- Timely clearing of the consignment.
- Delivery of the consignment to the FCMS.

## **Proforma Invoice and Certificate of Quality**

Follow up to ensure that:

- The shipper (PharmaCompany and its agents) sends a proforma invoice to consignee on time.
- The proforma invoice should indicate the product items and their values.
- That the certificate of Quality Analysis comes along with the product.

## **Clearing Agent**

Follow up the activities of the clearing agent to ensure that they collect all relevant documents on time, and pay the relevant handling fees.

## **NAFDAC:**

### **GUIDELINES FOR CLEARANCE OF IMPORTED MEDICINE(S) (HUMAN AND VETERINARY) AND RELATED PRODUCT(S) IN NIGERIA NAFDAC/PID/001/00**

#### **APPLICATION**

1 The application should be by the company that registered the product(s) with NAFDAC or company granted “Letter of Authorization” by the party that registered the products. It should be noted that such importations are restricted to only registered source(s) as stated on the Product Registration Certificate(s).

2 The applicant should make available to Ports Inspections Directorate, NAFDAC the following pre-shipment information before any medicine consignment arrives Nigeria from any part of the world.-

- a. Name of the medicine product(s)
- b. Manufacturer’s Name and Address
- c. Quantity being imported
- d. Various pack sizes, strength of the medicine(s) (s) and the dosage form
- e. Batch number(s), Manufacture and Expiry dates.

The following shipping documents should be submitted for obtaining “First Stamp”:

- i. Single Goods Declaration (SGD) Form,
- ii. Commercial Invoice



- iii. Risk Assessment Report
- iv. Form M
- v. Bill of Lading/Airway Bill
- vi. Packing List
- vii. Certificate of Analysis (Original) issued by the manufacturer

**TARRIFF (Not applicable to donated medicines for which waiver has been obtained)**

- 1. Inspection fee per consignment of an ethical medicine (prescription) is Twenty thousand naira(N20, 000.00) plus 5% VAT,
- 2. Laboratory Analysis fee per product of an ethical medicine (prescription) is Fifty thousand naira (N50, 000.00) plus 5% VAT,
- 3. A consignment is defined as packaged goods in not more than 20ft container

**PRESENTATION OF DOCUMENTS FOR PRE-RELEASE FIRST STAMP**

1 In addition to the earlier listed documents, the following are required before a pre-release first stamp is endorsed on the original SGD Form.

- i. A letter of undertaking stating that the product(s) will be forfeited if found unsatisfactory
- ii. The address of warehouse where product will be stored.
- iii. Evidence of payment for the imported consignment (where applicable)

**PHYSICAL EXAMINATION**

- 1. Physical examination of the consignment shall be conducted by NAFDAC with other relevant Government Agencies at the Port of Entry.
- 2. Samples of the imported product(s) should be drawn during physical examination by NAFDAC and forwarded to the relevant NAFDAC laboratory for analysis and radiation test (where applicable) within 24 hours of drawing such samples
- 3. One-third (1/3) of the sample drawn should be given to the superintendent pharmacist of the company as retention sample.

**RELEASE OF CONSIGNMENT FROM THE PORT OF ENTRY**

- 1. The medicines should be released to the importer's warehouse pending satisfactory Laboratory analysis which is within a period of ten work days from the date of sample collection.
- 2. The medicine (s) can only be released after satisfactory Laboratory analysis by NAFDAC.

It is the responsibility of shipper to alert the NAFDAC inspectors of the arrival of the consignments for their timely clearance of the medicines. NAFDAC collects samples for analyses. NAFDAC releases analysis results and releases the goods promptly.

## Delivery / Handover to Federal CMS

- Clearing Agents organize all necessary documentation for proper hand over of consignment at Federal CMS. Ensure proper reconciliation of items as shown on the packing list before hand over and subsequent signing.
- Open cartons for verification if in doubt.

## Required Documents

Document	Source
Proforma Invoice	Shipper + Drug manufacturer
Certificate of Quality Analysis	Supplier
Form 'M'	Opened by consignee's bank (optional)
CRI	Inspection agent at country of origin
Bill of entry	Prepared by consignee's clearing agent
Airway bill	Handling company
Clearance Certificate	NAFDAC
Packing List	Supplier-with details of each package
Handover consignment	Clearing Agents
Delivery note	Clearing Agents

## 4 STORAGE AND DISTRIBUTION

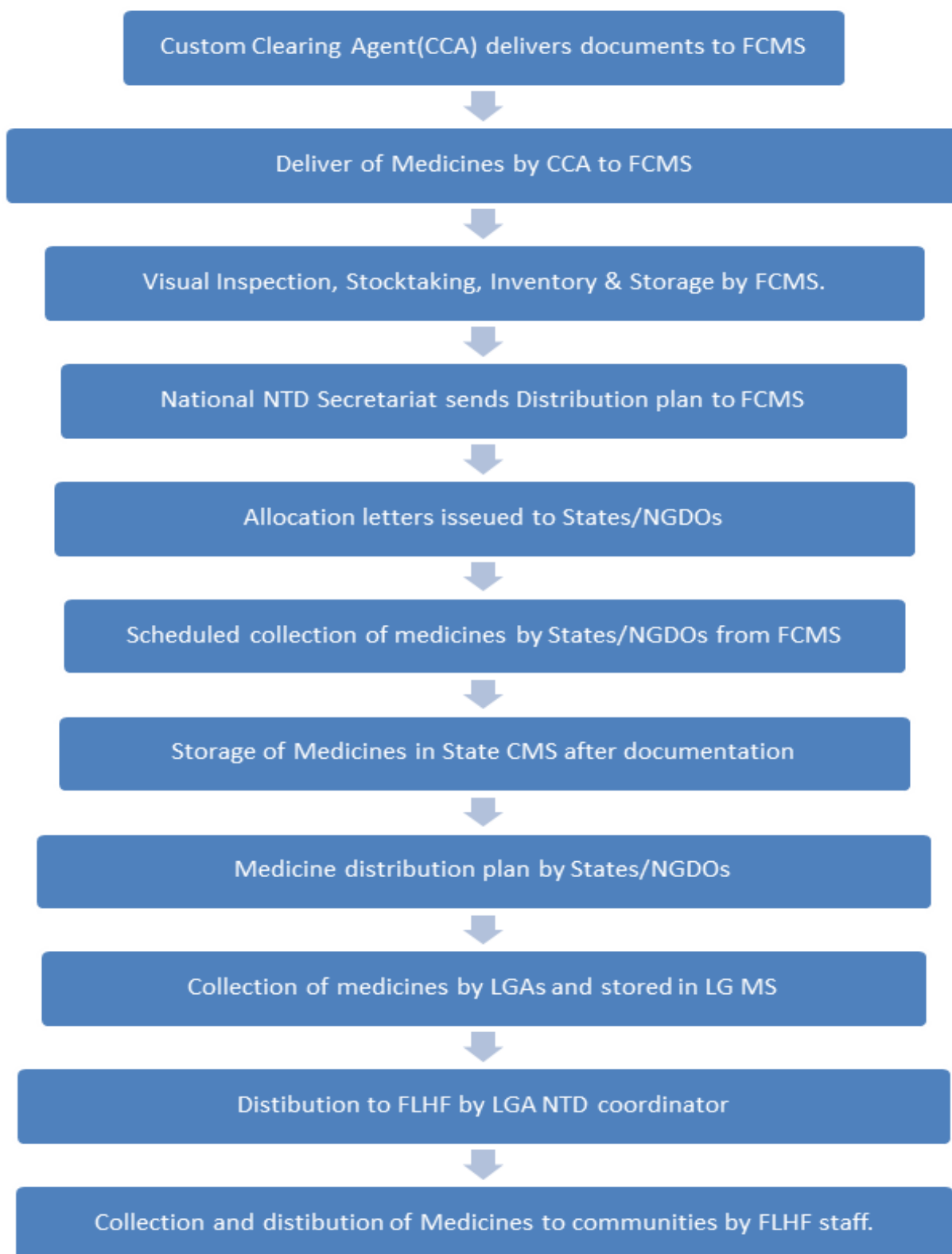
This section describes the process for receiving and storage of Medicines at the Central Medical Stores of the Federal Ministry of Health. The NTD Program has adopted the **integrated warehousing model** where all commodities are warehoused in government storage facilities that store all health commodities. This is with a view to strengthen the existing storage infrastructure, avoid parallel storage thus improving product visibility and accountability. It is also expected that ownership and accountability will be improved using the integrated warehousing approach.

The process includes the following steps:

- i. National NTD Secretariat/FMOH informs the Federal Central Medical Store (FCMS) about the NTD Medicines to create space for incoming medicines
- ii. Delivery of documents related to medicines (certificate of quality analysis, way bills, invoice etc)

- iii. Visual inspection by FCMS staff
- iv. Physical count of medicines and commodities
  - v. Storage of medicines
- vi. National NTD Secretariat sends distribution plan to FCMS
- vii. Allocation letters are issued to States by National NTDs Secretariat by the Supply Chain Management focal person
- viii. Scheduled collection of Medicines by States
  - ix. State Central Medical Stores (CMS) receives and stores medicines collected from FCMS
  - x. Medicines distribution plan is developed by the State NTD team and partners (where applicable) for each LGA, FLHF and community.
  - xi. LGAs schedule collection of medicines from State CMS or direct delivery by State CMS to each LGA
  - xii. LGAs keep the medicines collected from State CMS in designated Local Government stores
  - xiii. Medicines distributed to Front Line Health Facilities (FLHFs) based on distribution plan developed by the State NTD team
  - xiv. FLHF staffs distribute medicines to the communities based on distribution plan developed by the State NTD Team.
  - xv. Copies of delivery notes (Allocation, Issue and Receipts Vouchers) are maintained at State CMS, LGA Stores and FLHF stores.

## NTDs Storage and Distribution Flow Chart



#### 4.1 **Visual Inspection**

The Medicines provided by the various donors to combat neglected tropical diseases must meet quality standards. The quality of the Medicines must be maintained throughout the supply pipeline. Visual inspection at all levels is essential.

Upon arrival of shipment at the Central medical store, a thorough inspection must be carried out. This includes

##### *I. How to do a visual inspection*

Each level in the supply pipeline must do the following when Medicines are received, handled or counted:

1. **Look for visual damage.**
2. **Check if the Medicines are clearly labeled.**
3. **See if any Medicines are expired.**
4. **Separate (or “quarantine”) unusable damaged or expired Medicines.**
5. **You must separate expired Medicines from usable Medicines.**

#### 4.2 **Guidelines for storage of Medicines**

The primary purpose of storage is to ensure the maintenance of quality of products and packaging throughout the shelf life. Proper store organization is equally important, it helps to conserve storage space and manage the time spent on the following store operations namely: receiving, issuing, physical Inventory and visual inspection. Poor storage conditions usually affect the quality of products stored.

Such poor storage conditions include high temperature, high humidity or wet environments. If Medicines are not properly stored, there is the likelihood that they may lose potency even before their stated shelf lives. A well-organized storeroom also allows proper arrangement of products for easy access and retrieval.

In summary, good storage practices saves time, storage space and prevent patients from getting expired or damaged products that could be harmful.

#### 4.3 **General Storage Guidelines**

Medicines should be protected from sun, heat, light and water. Manufacturer’s recommendations / instructions for storage of commodities must be followed. These are usually printed on the product carton and boxes.

**The following are good storage guidelines:**

- Keep the store room regularly cleaned and tidy (sweep floors, dust the shelves).
- Develop a cleaning schedule for the cleaner.
- Ensure there is constant availability of power supply.
- Make sure your store is dry, well-lit and well-ventilated.
- Stock cartons on pallets at least 10 cm (4 inches) off the floor, 30 cm (1 foot) away from the walls and other stacks, and no more than 2.5 meters (8 feet) high.
- Arrange cartons on shelves so that arrows point up and in such a way that labels showing product name, expiry dates and batch numbers are clearly visible.
- Store products in a manner that facilitates “First Expiry, First Out” (FEFO).
- Keep medicines secure at all times.
- Separate damaged or expired medicines without delay and quarantine for disposal according to laid down procedures.
- Inspect the physical structure of the store regularly.
- Control the temperature in the store by using the air conditioners effectively.
- Use room thermometer and hygrometer to monitor store temperature and humidity maintain record charts.
- Do not store commodities in direct sunlight.
- Control the light in the store– if light enters through the windows; block direct light by painting the windows white or using curtains.
- Control humidity and prevent water from reaching stored medicines.
- Ensure good drainage channels exist around the store, and no water leakage through the walls, roof or floor.
- Repair leakages as soon as they occur to reduce moisture and water infiltration.
- Containers for some powder, tablet or capsule medicines may be packed in sachets of desiccant. Keep these sachets inside the containers and keep the container closed except when withdrawing the contents for issuing.
- Keep Medicines away from insecticides, hazardous materials, old files, office supplies and equipment.
- Spilled items attract pests. Clean up spills and remove broken containers immediately.
- Disinfect storeroom regularly and use pesticides to get rid of pests.

## Good Storage Tasks

### a. Daily and weekly:

- Monitor storage conditions and record the temperature 2 times a day to reflect the hottest and the coolest temperatures.
- Store the medicines off the floor.
- Arrange pallets and racks to allow for easy handling and cleaning.
- Monitor store security and safety by proper locking and key management to prevent theft.
- Ensure adequate ventilation and cooling.
- Update stock records and maintain files.
- If cycle counting, conduct physical inventory and update stock keeping records
- Check the generator to ensure it's functional.

### b. Monthly:

- Conduct physical inventory or cycle count, and update stock keeping records.
- Check for signs of rodents, insects, or roof leaks and take corrective action.
- Inspect the infrastructure for damage, including the walls, floors, roof, windows, and doors

## 4.4 Handling Expired/Damaged Medicines

- a) Separate and move all expired or damaged Medicines to the space reserved for them and record on the stock card
- b) Make entries into the form for returning/transferring Medicines.
- c) Send the expired/damaged Medicines to the next higher level using the returning/transfer form at the end of the quarter or at the point of taking delivery of stock (whichever is applicable)
- d) Superior levels will receive and document all expired/damaged Medicines and forward same to higher level if applicable
- e) The National NTDS program will ensure the collection of all expired/damaged Medicines in the pipeline at an appropriate time and arrange for their destruction following due process.

## 4.5 Conducting a physical Inventory

- a. All officers having direct custody of NTDSs shall conduct periodic physical stock counts of Medicines in their store.
- b. Stock counts at the health facilities and the various stores should be undertaken during issuing and receiving.

- c. Expired or damaged stocks are removed following the standard procedure (see standard procedures for handling expired/damaged Medicines).
- d. Usable stock should be counted according to units of issue.
- e. Update stock Ledger by writing date of physical inventory and the words “physical Inventory” in the column for remark.
- f. Using a different color ink (red), write the quantity of the product that you counted during physical count.
- g. Discrepancies observed after the physical count should be captured and documented as losses and adjustment in the stock Ledger.

#### **4.7 Temperature Control**

Temperature control is a mandatory exercise at all levels of storage and distribution to ensure that the integrity of NTDS Medicines is protected. The temperature of most NTDS Medicines at all levels is fixed at a maximum of +24C to ensure proper storage. However, for vaccines, *cold chain* is maintained at all levels.

#### **4.8 Guidelines for transportation of Medicines**

This procedure is required for the movement of NTDS and materials from one level to the other, in order to make it available to the end users, in good condition.

The transport and distribution process borders on the availability of PCTNTDS and materials, and the process involved in their distribution from the federal, to the state, to the LGA, to the FLHF down to the community levels.

The specifications for the vehicle to be used for distribution of NTDS Medicines at all levels are as follows:

- i. Containerized and enclosed vehicle/van
- ii. Current driver’s license
- iii. Current and complete vehicle documents
- iv. *Goods in transit* insurance
- v. *Vehicle Certification of road worthiness*

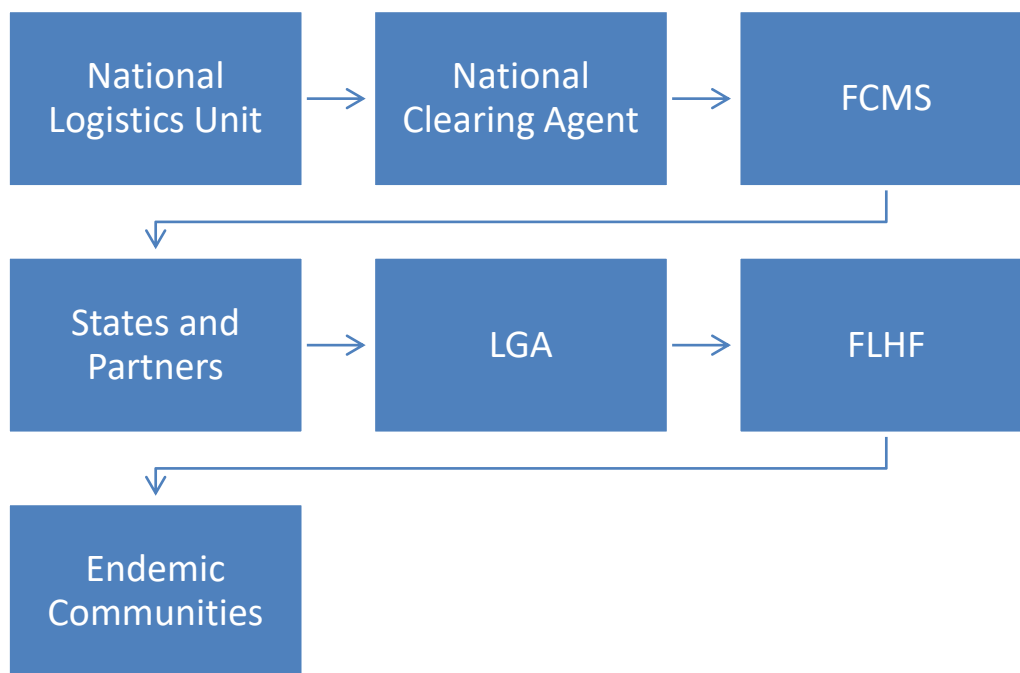
#### **The procedure for the transportation of NTDS Medicines is as follows:**

1. The National NTDS Logistics Unit communicates details on NTDS Medicines to be cleared and delivered to FCMS by the clearing agent. The unit will then communicate to the FCMS on the details of the NTDS Medicines expected. Before arrival of the Medicines, an email is received by the FCMS on the Certificate of analysis of the NTDS Medicines.
2. The clearing agent communicates to FCMS, the exact date of delivery of the medicines, 72 hours prior to delivery.



3. On arrival of the Medicines, the pharmacists inspect the condition of the Medicines and take physical inventory, document and warehouse the Medicines.
4. The National Logistic unit then sends distribution plan to FCMS for issuance to the states and partners. There are other guidelines to be met before Medicines are released to the state level. These include;
  - i. Officers coming to receive must bring an authorization letter and mode of identification or letter of introduction from their states.
  - ii. The NTDS State Coordinator and State Pharmacist must be present.
5. On meeting all standards, Medicines are released to the transporter for onward delivery to the States, which cascade down to the end users through the relevant levels.

**Flow Chart of Transport and Distribution Process**



**Roles and Responsibilities (Storage):**

<b>Federal Central Medical Stores</b>	
Head of Central Medical Store	<ul style="list-style-type: none"> <li>➤ Receives and store Medicines</li> <li>➤ Gives directives to raise Stock Allocation and Issue Voucher (SAIV)</li> <li>➤ Approval of SAIV</li> </ul>

	<ul style="list-style-type: none"> <li>➤ Prepare quarterly stock report and submit to NTDS Program</li> </ul>
Pharmacist/Store Officer	<ul style="list-style-type: none"> <li>➤ Populate the store ledger</li> <li>➤ Keep accurate records of stock cards</li> <li>➤ Issue the Medicines in line with distribution plan.</li> </ul>
Store Keeper	<ul style="list-style-type: none"> <li>➤ Populates the stock card</li> </ul>
Zonal Coordinators	<ul style="list-style-type: none"> <li>➤ Coordinates all the States under the zone with respect to NTDS activities</li> <li>➤ Monitor and supervise all NTDS projects from all the States i.e, drug distribution and other aspect of NTDS administration</li> <li>➤ Provide FMOH with accurate data and information needed about each state in the zone.</li> <li>➤ Conduct NTDS zonal review meetings where progress and prospect of all the States across the zone are discussed, identify problems affecting each state project and proffer possible solutions.</li> </ul>
<b>STATE CMS</b>	
Head of States Central Medical Store	<ul style="list-style-type: none"> <li>➤ Receives Medicines on behalf of the state.</li> <li>➤ Gives directives to raise Stock Allocation and Issue Voucher (SAIV)</li> <li>➤ Approval of SAIV</li> <li>➤ Coordinates preparation quarterly stock report and submit to NTDS Program.</li> </ul>
Pharmacist/Store Officer	<ul style="list-style-type: none"> <li>➤ Receives and stores the Medicines from the federal central medical stores</li> <li>➤ Populate the store ledger</li> <li>➤ Keep accurate records of Stock Ledger as specified in the SOP</li> <li>➤ Issue Medicines to LGA stores using</li> </ul>

	<p>the appropriate distribution plan</p> <ul style="list-style-type: none"> <li>➤ Monitor stock level of each commodity at the State CMS</li> <li>➤ Participate in monitoring and supportive supervision activities during MDA.</li> <li>➤ Quarterly stock report on NTDS Medicines</li> </ul>
Store Keeper	<ul style="list-style-type: none"> <li>➤ Populates the Stock Ledger.</li> </ul>
<b>LGA STORES</b>	
LGA Store Keeper	<ul style="list-style-type: none"> <li>➤ Receive and store Medicines</li> <li>➤ Populates the stock card</li> <li>➤ Quarterly stock status report on NTDS Medicines</li> </ul>
<b>FLHF STORES</b>	
Store Keeper	<ul style="list-style-type: none"> <li>➤ Receive and store Medicines</li> <li>➤ Populates the stock card</li> <li>➤ Quarterly stock report on NTDS Medicines</li> <li>➤</li> </ul>
<b>Community Level</b>	
Community Implementers	<ul style="list-style-type: none"> <li>➤ Conduct census update</li> <li>➤ Dispense Medicines to end users</li> <li>➤ Submission of medicines consumption records to FLHF</li> <li>➤ Collect and return unused Medicines to FLHF</li> </ul>

**Roles and Responsibilities (Transport and Distribution):**

Human resources required for the transport and distribution process includes the following persons with the following roles and responsibilities:

	Level	Personnel	Roles
	Federal	NTDs National Logistic	<ul style="list-style-type: none"> <li>• Communicate details on</li> </ul>

		Officer	<p>NTDMedicines to be delivered to the FCMS</p> <ul style="list-style-type: none"> <li>• Communicate distribution plan on NTDMedicines to be delivered to the States CMS</li> </ul>
		Clearing Agent	<ul style="list-style-type: none"> <li>• Clear the Medicines</li> <li>• Deliver Medicines to the FCMS</li> </ul>
		FCMS Pharmacist	<ul style="list-style-type: none"> <li>• Receive, warehouse, document and issue NTDMedicines to States</li> <li>• Vehicle inspection before receipt and issuance of NTDSMedicines</li> </ul>
		FCMS Store Officer	<ul style="list-style-type: none"> <li>• Receive, warehouse, document and issue NTDSMedicines to States</li> <li>• Conduct routine physical inventory of NTDSMedicines</li> <li>• Ensure good warehouse practices are adhered to in accordance with the guidelines</li> <li>• Issuance of NTDSMedicines</li> </ul>
		Driver	<ul style="list-style-type: none"> <li>• Transportation of the NTDSMedicines and materials from point of origin to the destination.</li> <li>• Ensures the security of NTDSMedicines while in his custody.</li> </ul>
	State	NTDS State Coordinator and Team	<ul style="list-style-type: none"> <li>• Coordinate the receipt of NTDSMedicines from FCMS, and its distribution to the endemic LGAs in the state.</li> </ul>
		Pharmacist	<ul style="list-style-type: none"> <li>• Work with the NTDS Coordinator to ensure the receipt of NTDSMedicines from FCMS, and its issuance to the endemic LGAs in the state.</li> <li>• Vehicle inspection before transportation of NTDSMedicines</li> </ul>
		Store Officer	<ul style="list-style-type: none"> <li>• Receive, store, document, and issue NTDSMedicines to LGAs in the states.</li> </ul>

			<ul style="list-style-type: none"> <li>• Conduct routine physical inventory of NTDDs.</li> <li>• Ensure good warehouse practices are adhered to in accordance with the guidelines</li> <li>• Issuance of NTDMedicines</li> </ul>
		Driver	<ul style="list-style-type: none"> <li>• Transportation of the NTDSMedicines and materials from the SCMS to the LGA Medical store.</li> <li>• Ensures the security of NTDSMedicines while in his custody</li> </ul>
	LGA	NTDS LGA Coordinator and Team	<ul style="list-style-type: none"> <li>• Coordinate the receipt of NTDSMedicines from State, and its distribution to the endemic FLHF in the LGA.</li> </ul>
		LGA Pharmacist/ Technician	<ul style="list-style-type: none"> <li>• Work with the NTDS Coordinator to ensure the receipt of NTDSMedicines from the state, and its issuance to the endemic FLHF in the LGA.</li> <li>• Vehicle inspection before receipt and issuance of NTDSMedicines</li> </ul>
		LGA Store Officer	<ul style="list-style-type: none"> <li>• Receive, store, document, and issue NTDSMedicines to FLHF in the LGA.</li> <li>• Ensure good warehouse practices are adhered to in accordance with the guidelines</li> <li>• Issuance of NTDSMedicines</li> </ul>
		Driver	<ul style="list-style-type: none"> <li>• Transportation of the NTDSMedicines and materials from the LGA Store to the FLHF.</li> <li>• Ensures the security of NTDSMedicines while in his custody</li> </ul>
	FLHF	Store officer.	<ul style="list-style-type: none"> <li>• Receipt, documentation, issuance and distribution to the CIs and teachers of endemic communities</li> </ul>
	Community	Community Leaders	<ul style="list-style-type: none"> <li>• Witnesses the receipt and</li> </ul>

			distribution of the NTDsMedicines to eligible persons at the community level
		Teachers	<ul style="list-style-type: none"> <li>• Receipt and distribution of the NTDsMedicines to the eligible end users (pupils)</li> <li>• Registration and record keeping of Medicines utilized</li> <li>• Collect and return the unused Medicines back to the LGA Stores.</li> </ul>
		CIIs	<ul style="list-style-type: none"> <li>• Receipt and distribution of the NTDSMedicines to the eligible end users</li> <li>• Registration and record keeping of Medicines utilized</li> <li>• Return the unused Medicines back to the FLHF Stores.</li> </ul>

#### 4.9 Guidelines on drug handling at community level

The following medicines handling procedures should be followed:

- i. Hand washing and general cleanliness should be observed by the Community Implementers and Teachers.
- ii. Tablets should not be handled or dispensed by bare hands rather dispensing spoons should be used.
- iii. Narrow spoons should be used to remove tablets from the container to prevent wastage or contamination of the Medicines.
- iv. Tablets should be dispensed into dispensing envelopes from the main container and labeled with name of the medicines, batch number and expiry date.
- v. The remaining tablets should not be combined with those of different batches during the return process.
- vi. Each container should be finished before opening another container.

#### Equipment/Tools required for good practices in Medicines handling:

1. Dispensing envelopes – small and big size (labeled with space for name of drug, expiry date, batch number)
2. Counting trays and spoons
3. Hand Gloves

## **5. INVENTORY MANAGEMENT**

Medicines Inventory Management System is designed to ensure effective management and monitoring of requisition, allocation, distribution, receipt and consumption in health facilities across the supply chain process. In addition it provides comprehensive reports on medicines consumption patterns and regular updates on expired/ out of stock Medicines. This system allows key stakeholders to manage medicines requisitions and allocation. Poor inventory management often leads to understocking or overstocking which leads to stock out or wastages of medicines (resulting in expiration) and financial resources, and decline in the quality of programme.

Inventory control system refers to the measures employed to manage the supply chain system in order to ensure commodity security. In the management of Medicines for the NTDs programme, it is most important to avoid these two undesirable occurrences: Stock outs and drug expiration. The purpose of an inventory control system is to inform the manager when to order, issue, and how to maintain appropriate stock level to avoid shortages and oversupply.

### **5.1 Logistics Management Information System**

Information is the engine that drives the logistics cycle; without information, the logistics system would not run smoothly. The collection of data for managing a logistics system is a separate activity from the collection of data for other information systems, including health management information systems (HMIS).

Logistics is defined, “as the science and art of getting the right amounts of the right things to the right places at the right time” (Foster 1990). The program managers and storekeepers may have some logistics skills but not many health personnel involved in NTDS adequately equipped to handle logistics. It is against this background that a sound knowledge and skills in store management and control is essential for all persons involved in the operations of the health logistics.

A logistics management information system (LMIS) is the system of records and reports that you use to collect, organize, and present logistics data gathered across all levels of the system. Most importantly, an LMIS tool enables logisticians to collect the data needed to make informed decisions that will ultimately improve customer service.

### **5.2 Purpose of LMIS**

Ultimately, the goal of every public health logistics system is to help ensure that every customer has commodity security. Commodity security exists when every person is able to obtain and use quality essential health supplies whenever he or she needs them.

Information is the engine that drives the entire logistics cycle. We collect information to make decisions; the better information we have, the better decisions we can make. The purpose of LMIS is to collect, organize and report data that will be used to make decisions. However, every

system is open to an endless flow of information. Thus, only those data items that will be needed for decision making will be collected and processed. To make logistics decisions, a logistics manager needs three essential data items:

a) Stock on hand data (b) consumption data (c) losses and adjustments.

### **5.3 The Six Rights of LMIS data**

The purpose of an efficient and effective reporting system is to provide:

- the **right** (relevant) **information**
- in the **right quantity** (complete) and
- **right quality** (accurate); to
- the **right place** (the next reporting level or decision makers)
- at the **right time**(timely)
- For the **right cost** (cost effective).

### **5.4 Essential features of NTDs LMIS**

#### **Enhanced Visibility**

The programme has put in place a mechanism for mapping facilities and personnel to ensure that facility-based logistics data/analyses are communicated to all stakeholders at the state, zone and central levels. The reports are used for routine performance appraisal, planning, stock replenishment, feedback and provision of support which will enhance performance.

#### **Enhanced intelligence**

Capacity to see where issues (unwanted outcomes and situations) and strengths (desirable situations and outcomes) arise from. This is done by analyzing data in such a way as to gain insight into operations at other work areas.

#### **Enhanced Accountability & transparency**

Facilities are expected to document and report all transactions that affect the quantities of stock on order, received, in storage, dispensed or lost which would ensure enhanced accountability and transparency across the supply chain.

#### **Enhanced awareness of self-performance profile**

The system provides opportunity for self-appraisal using agreed performance indices (timely stock status reporting, rate of stock out, quantity of product expired, losses etc).

#### **Enhanced Institutional memory**

Records and reports are preserved for easy referencing and future planning which ensures data consistency.



## 5.5 Logistics Records

There are only three things that can be done to any health commodity that is received. It can be stored, moved or consumed. Therefore three types of records are kept to track these activities. The records are:-

- **Stock Keeping Records:** They keep information about products in storage. The primary purpose of stock keeping records is to document information about items in storage. They must contain quantity of stock on hand and the quantity of losses and adjustments.
- **Transaction Records:** They keep information about products being moved. The primary purpose of transaction records is to document information about the movement of stock from one storage facility to another.
- **Consumption record:** They keep information about products used up. The primary purpose of consumption record is to document information on the quantity of each item dispensed to a patient.

### Rationale for Record Keeping

- i. Records are instruments of transparency—such that claims can be verified
- ii. Records **MUST** be true to facts on the ground so as not to mislead.
- iii. Records must be preserved for a minimum of 5 years

## 5.6 Logistics Reports

Records are data generated and retained at the facility while reports are data processed into information and sent to a higher level for decision making. The primary purpose of a summary report is to capture data items for a specific storage facility and for a specific period of time (usually monthly or quarterly).

Summary reports must contain the three essential data items-stock on hand, consumption and losses and adjustments. Other data items captured include opening balance, quantity received, and quantity issued/dispensed.

- i. Opening balance: Stock on hand at the beginning of the reporting period.
- ii. Quantity Received: Amount of stock received within the reporting period.
- iii. Quantity Issued: Amount of stock issued within the reporting period.
- iv. Losses and Adjustments: Losses are quantity of stock removed from the pipeline for any other reason other than consumption by clients/patients (e.g. due to theft, expiration and damage, breakage etc). Adjustments are made when quantities are issued to or received from other facilities at the same level.
- v. Closing balance: Stock on hand at the end of the reporting period.

## 5.7 Logistics Management Information Tools (LMIS)

The Logistics Management Information System for NTDs Medicines consists of three records and one report.

The NTDS LMIS tools include: (i) Stock Allocation, Issue and Receipts Voucher, (ii) Stock ledger, (iii) Stock returns and transfer form, (iv) Stock status report and Expiry date tracker.

1. **Stock Allocation, Issue and Receipts Voucher:** This is used to track consignment of Medicines that are moved from one level to another. It usually accompanies the consignment. It tracks the quantities that are moved and actual deliveries.
2. **Stock Ledger:** The stock ledger is a stock keeping record that keeps information about the movement and quantity of a product in the facility's store.
3. **Stock returns and transfer form:** This is a transaction record used to track reversed movement (from lower level to higher level storage facilities or transfer of Medicines) or transfer of medicines between facilities at the same level.
4. **Stock status report and Expiry date tracker:** This is a combined report showing the quantity issued, quantity received, losses and adjustment and stock on hand within the particular reporting period.

## 5.8. Job Aids for Logistics Management Information Tools

A job aid provides step-by-step instructions for completing an activity or a task such as filling a form. The job aids included in this manual are primarily designed to guide health commodity managers to perform a task or complete a form in the logistics system. Typical job aids are characterized by seven features, namely:

- The task to be performed
- The person who is supposed to complete the task
- The purpose of the task
- The timeline to complete the task
- Any materials needed to complete the task
- The step-by-step instructions, which include what to do and how to do it
- A checklist to verify that the task has been completed.

The purpose of a job aid is to improve performance efficiency and effectiveness as well as to standardize practices. If all commodity managers follow the job aids correctly, then the tasks will be done correctly and in the same manner, regardless of who completes the task.

Contained in these manual are the job-aids for performing the following tasks:

- Completing the stock allocation/ Issue and Receipt Vouchers
- Completing the Stock ledger
- Completing the Medicines Returns/ Transfer form
- Completing the Quarterly Stock Status report
- Completing the Stock Expiry Date Tracker

### **5.9 Completing the Stock Allocation Issue and Received Voucher**

This job aid will guide you through the process of completing the form for NTDs stock allocation/issue and receipt voucher. The record is used when a higher level facility is issuing NTDsmedicines to a lower level facility. This is a transaction record which is in quadruplicate (4 copies). On completion of the above activity, the copies are distributed as follows:

- White copy: Receiving facility
- Yellow copy: Issuing facility (Proof Of Delivery)
- Green copy: The transporter
- Blue copy: This remains at the issuing facility (tickler copy).

**Task:** Allocating/issuing and receiving of NTDSmedicines

**Completed by:**

Store manager/Pharmacist in charge at the issuing store who approves issue of NTDSmedicines;

Store officer at the issuing store.

Store officer at the receiving store.

The transporter.

Person witnessing the receipt of the NTDSmedicines.

**Purpose:** To account for the movement of NTDSmedicines from a higher to a lower level and also to serve as a proof of delivery (POD).

**When to perform:** Every time NTDSmedicines are allocated/ issued, moved and received at each level of the NTDS supply chain. This is done when NTDSmedicines are moved from a higher to a lower level.

**Materials needed:** Approved distribution plan /allocation letter, Pen, blank Stock Allocation, Issue and Receipt Voucher, calculator.

**Note:** *The persons filling out the form should apply a little pressure to ensure that all the carbonated copies are legible*

Step	Action	Notes/Example
<b>Issuing Facility (FCMS, CMS, LG Store or FLHF)</b>		
1.	<b>State:</b> Write the name of the state.	Zamfara
2.	<b>LGA:</b> Write the name of the LGA that is returning the medicines.	Bungudu
3.	<b>Issuing facility:</b> Write the name of the facility that is issuing the medicines	CMS, LGA medical store or FLHF
4.	<b>Receiving facility:</b> Write the name of the facility that would receive the medicines	Furfuri PHC
5.	<b>Date:</b> Write Date of Issuing medicines	7/11/2014
6.	<b>Item Description, Strength &amp; Dosage form:</b> Write the description, strength and dosage form of the NTDsmedicines.	Zithromax tablet 250mg
7.	<b>Unit:</b> Write the smallest unit of measure for the NTDsmedicines	Unit of NTDsmedicines is the smallest unit of measure that can be dispensed to a patient. Tablet, Cap, Bottle, Tube.
8.	<b>Quantity Allocated:</b> Write the quantity of the drug(s) allocated to the facility	600
9.	<b>Batch No:</b> Write the batch number of the drug(s) to be issued.	EPA22221
10.	<b>Expiry Date:</b> Write the expiry date of the drug being issued	12/2015

Step	Action	Notes/Example
11.	<b>Quantity Issued:</b> Write the quantity of NTDsmedicines being issued to the facility	600
12	<b>Remarks:</b> Add any comments regarding the quantity issued	For clarity, write the quantity issued in packs of cartons or Tins.
13.	Detach the first three (3) copies and send with the NTDsmedicines to the receiving facility.	The signed yellow copy will be returned to the issuing facility as proof of delivery (POD).
<b>Receiving Facility</b>		
14.	<b>Quantity Received:</b> Write the quantity of NTDsmedicines being received.	600
15	<b>Remarks:</b> Add any comments regarding the quantity received	Complete, 50 damaged, short of 50 etc.
<b>Signatures</b>		
16.	<b>Approved By:</b> Write the Name, Designation, Signature, date and mobile number.	This is filled in by the Store Manager, Store Pharmacist, LG NTDs coordinator or officers-in-charge at issuing facility or their designate.
17.	<b>Issued By:</b> Write the Name, Designation, Signature, date and mobile number.	This is filled by the Store pharmacist, Store officer at the issuing store.
18.	<b>Delivered By:</b> Write the Name, vehicle registration no, Signature, date and mobile number.	This is filled in by the person responsible for transporting the NTDsmedicines.
19.	<b>Received By:</b> Write the Name, Designation, Signature, date and mobile number.	This is filled in by the person designated to do so at the receiving facility.

Step	Action	Notes/Example
20.	<p><b>Witnessed By:</b></p> <p>Write the Name, Designation, Signature, date and mobile number..</p>	<p>This is filled in by the person designated to do so at the receiving facility.</p> <p><b>The designates include:</b> The state NTDs coordinator, The LGA NTDs coordinator, Ward Head and Village head or their representatives</p>

<b>This transaction s has been completed when:</b>
<p>The description, unit, expiry date and batch No. of each NTDs drug has been filled in the Stock Allocation, Issue and Receipt Voucher.</p> <p>The Quantity allocated and Issued has been entered on the Stock Allocation, Issue and Receipt Voucher for each item.</p> <p>The quantity received has been entered on the Stock Allocation, Issue and Receipt Voucher for each item received;</p> <p>Names, Designations, Signatures, dates and phone Numbers have been completed on the voucher by the concerned personnel.</p> <p>The yellow copy (POD) of the Stock Allocation, Issue and Receipt Voucher with the Quantity received filled in and signed has been received from the transporter and filed by the issuing store for its records.</p>



FEDERAL REPUBLIC OF NIGERIA  
NEGLECTED TROPICAL DISEASES PROGRAM

Serial No: \_\_\_\_\_

ALLOCATION / ISSUE/ RECEIPT VOUCHER

State: \_\_\_\_\_

LGA: \_\_\_\_\_

Name Of Issuing Facility: \_\_\_\_\_

Date: \_\_\_\_\_

Name Of Receiving Facility: \_\_\_\_\_

For Issuing Facility Use							For Receiving Facility Use		
S#	Item (Description Strength & Dosage Form)	Unit* (e.g Tablet, Bottle, Tube)	Quantity Allocated	Lot/ Batch No.	Exp. Date	Quantity Issued	Remarks	Quantity Received	Remarks
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

Goods checked & delivered in good condition except items detailed in the above discrepancy remarks				
APPROVED BY:	ISSUED BY:	DELIVERED BY:	RECEIVED BY:	WITNESSED BY:
Name: _____	Name: _____	Name: _____	Name: _____	Name: _____
Designation: _____	Designation: _____	Designation: _____	Designation: _____	Designation: _____
Signature: _____	Signature: _____	Signature: _____	Signature: _____	Signature: _____
Date: _____	Date: _____	Date: _____	Date: _____	Date: _____
Phone No: _____	Phone No: _____	Phone No: _____	Phone No: _____	Phone: _____

### 5.10 Completing the Stock Ledger

This job aid will guide you through the process of completing the store ledger. The Store ledger is used to track each NTDsmedicine in the stores. Each time there is a change in the quantity of the NTDsmedicines in the stores, it must be recorded on the appropriate page of the ledger; that is when products are received or issued. The information tracked on the store ledger will facilitate the management of inventory at the facility.



Task:	Completing the Store ledger
Completed by:	Store officer, Store Pharmacist, or Store Manager.
Purpose:	To track the inflow and outflow of NTDs medicines and the balance at every point in time.
When to perform:	Each time there is a transaction (Drug movement like issue, receipt, return, transfer, loss or adjustment etc.) that affects the stock level of a product.

Materials needed: Store ledger, allocation, issue and receipt voucher, return /transfer form, meter rule calculator, red and blue or black pen.

Step	Action	Notes/Example
1.	<b>State:</b> write the name of the state	
2.	<b>LGA:</b> Write the name of the LGA	Daura
3.	<b>Name of Facility:</b> Write the name of the facility.	MCHC Daura
4.	<b>Item Description:</b> Write the medicines name, including the form and strength.	Zithromax tablet 250mg
5.	<b>Unit of Issue:</b> Write the unit for the NTDS drug.	Unit of NTDs medicines is the smallest unit of measure that can be dispensed to a patient. Tablet, Cap, Bottle, Tube, piece, etc.
6.	<b>Date:</b> Write the date of the transaction.	The date should be the day the transaction was carried out. 5/5/2014
7.	<b>Received from / Issued to:</b> Write the facility or the person/organization from which the NTDs medicines is coming or is being sent.	FCMS, State Medical Stores, LGA medical store, PHC Samiya.
8.	<b>Transaction Voucher No:</b> Write the voucher number of the form that accompanied the NTDs medicines.	1001010
9.	<b>Batch Number:</b> Write the batch number of the product.	EPA2222

10.	<b>Expiry Date:</b> Write the expiration date of the product.	30/12/2014
11.	<b>Quantity Received:</b> Write the quantity of the product that is received.	1,000
12.	<b>Quantity Issued:</b> Write the quantity of the product that is being issued.	500
13.	<b>Losses:</b> Enter the exact amount of Losses to the inventory on this date. Explain any losses in the “Remarks”	Losses are quantities removed from your stock for anything other than dispensing to patients or issuing to
14.	<b>Adjustments:</b> Enter adjustments either positive or negative, if any. Explain any adjustments in the “Remarks” column	<p><b>Adjustments</b> are quantities of a product received from any source other than the approved supply chain source.</p> <p>Adjustment can either be positive (+) or negative (-): To the facility receiving it is a positive (+) adjustment while to the facility transferring it is a negative (-) adjustment to their stock balances.</p> <p>Always use a (+) sign to indicate positive (+) adjustments, and a negative (-) sign to indicate negative adjustments.</p> <p>A positive (+) adjustment could be when products are “found” during a physical count.</p> <p>Adjustments may also be made to correct mathematical mistakes</p>

15.	<p><b>Balance:</b> Calculate and write the new stock balance.</p>	<p>If products were received, add the quantity received to the previous stock balance and write the total.</p> <p>If products were returned to your store, add the quantity returned to the previous stock balance and write the total.</p> <p>If products were returned by your store, subtract the quantity returned from the previous stock balance and write the total.</p> <p>If products were issued, subtract the quantity issued from the previous stock balance and write the total.</p> <p>If products were lost or adjusted, add or subtract the quantity from the previous stock balance and write the total.</p>
16.	<p><b>Signature:</b> Sign the store ledger once the stock transaction has been recorded.</p>	<p>XXXXXXXXXX</p>
17.	<p><b>Remarks:</b> Write any comment related to the transaction that may be needed.</p>	<p>Example: Damaged, transferred, or lost</p>

**The task is complete when:**

- When the state, LGA, facility name, item description, unit of issue, item code, batch number, transaction date, transaction voucher number and expiry date are filled in.
- When the date, received from/issued to columns are completed for every transaction.
- When one of the following columns is completed: Quantity Received, losses, adjustments or Quantity Issued.
- When the stock balance has been calculated and recorded.
- When the person recording the transactions signs the store ledger.
- When the officer makes remarks where necessary.



## 5.11 Completing the Medicines Returns and Transfer Forms

This job aid will guide you through the process of completing the NTDsmedicines return/transfer form from one level to another. Drug return process is the movement of NTDsmedicines from a lower to a higher level while drug transfer is the movement of NTDsmedicines between facilities at the same level

This is a transaction record which is in quadruplicate (4 copies). On completion of the above activity, the copies are distributed as follows:

- White copy: Receiving facility
- Yellow copy: Returning/transferring facility
- Green copy: The transporter
- Blue copy: This remains at the returning/transferring facility (tickler copy).

<b>Task:</b>	Completing the NTDsmedicines return/transfer form.
<b>Completed by:</b>	The officer at the community, FLHF or LGA that is returning/transferring the NTDsmedicines. The officer approving the return/transfer of the NTDsmedicines. The person responsible for the transport of the NTDsmedicines. The person receiving the NTDsmedicines. The person witnessing the transaction.
<b>Purpose:</b>	To track the return/transfer of NTDsmedicines.
<b>When to perform:</b>	Each time NTDsmedicines are to be returned/transferred.
<b>Materials/Tools needed:</b>	Blank NTDsmedicines return/transfer form, calculator, meter ruler and pen.

Step	Actions	Notes/Example
1	<b>State:</b> Write the name of the state.	<b>State:</b> Niger
2	<b>LGA:</b> Write the name of the LGA that is returning/transferring the medicines.	<b>LGA:</b> Kontagora
3	<b>Receiving facility:</b> Write the name of the facility where the NTDsmedicines are to be returned/transferred.	<b>Receiving facility:</b> FLHF/LGA/ State CMS
4	<b>Medicines Returning/Transferring Facility:</b> Write the name of the facility that is returning/transferring the NTDsmedicines.	<b>Medicines Returning/transferring Facility:</b> PHC Ibeto, Kontagora LGA store or CMS
<b>For each drug being returned/transferred:</b>		
5.	<b>Item description, Strength &amp; dosage form:</b> Write the name and description of the drug.	<b>Item description, Strength &amp; dosage form:</b> Zithromax tablet 250mg
6.	<b>Unit:</b> Write the smallest unit of measure for the NTDs drug.	<b>Unit:</b> Tablet, Cap, Bottle, Tube, etc.
7.	<b>Batch No. :</b>	<b>Batch No. :</b>

	Write the batch number of the medicines being returned/ transferred.	EPA22221
8.	<b>Expiry Date:</b> Write the expiry date of the medicines being returned/transferred.	<b>Expiry Date:</b> December 2014 or 12/2014
9.	<b>Quantity Returned/transferred:</b> Write the quantity of NTDsmedicines being returned/transferred.	<b>Quantity returned/transferred:</b> 600 tabs, caps, tubes, or bottles.
10.	<b>Reason for Return/transfer:</b> Write the reason for which the product is being returned	<b>Reason for Return/transfer:</b> Damaged, expired, unused or redistribution.
12.	<b>Items return/transfer officer:</b> The person that is returning/transferring the NTDsmedicines writes his/her name and signature, mobile number and date.	Musa Bashir, <i>MB</i> , 080xxxxxxxxxxxx, 16/11/15
13.	<b>Items return/transfer Approving Officer:</b> The person who approves the return/transfer writes his/her name, signature, mobile number and the date.	Moses David, <i>MD</i> , 080xxxxxxxxxxxx, 16/11/15
14.	<b>Transporter:</b> The Driver transporting the NTDsmedicines writes his/her name, signature, mobile number, date and vehicle registration number.	Nagogo Akanbi, <i>NA</i> , 080xxxxxxxxxxxx, 16/11/15, BDG 114 XY
15.	<b>Receiving Facility:</b> The person who receives the returned/transferred NTDsMedicines writes his/her name, signature, mobile number and the date.	Jide John, <i>JJ</i> , 080xxxxxxxxxxxx, 17/11/15
16.	<b>Receiving Witness:</b> The person who witnesses the receipt of the returned/transferred NTDsMedicines writes his/her name, signature, mobile number and the date.	Amarachi Onyema, <i>AO</i> , 080xxxxxxxxxxxx, 17/11/15
17.	<b>Remarks:</b> This is written by the Receiving officer to acknowledge the quantity and condition of the returned medicines.	eg complete, incomplete, unlabeled, improperly packaged etc

- **This task is completed when:**
- The names of the State, LGA, facility to which the NTDsmedicines were sent and the facility returning/transferring the medicines have been completed.
- The returned/transferred drug is fully described by batch number, expiry date, the quantity returned/transferred recorded and the reason(s) for the transaction stated.
- When the person returning/transferring the medicines signs the form.
- When the transporter signs the form.
- When the approving officer signs the form.
- When the witness to the transaction signs the form. When the receiving officer signs the form.
- When a signed copy of the form is sent back to the facility that returned/transferred the NTDsmedicines.



**FEDERAL REPUBLIC NIGERIA**

**NEGLECTED TROPICAL DISEASES PROGRAM**

**RETURN/ TRANSFER FORM**

Serial No: \_\_\_\_\_

State: \_\_\_\_\_ LGA: \_\_\_\_\_

Receiving Facility: \_\_\_\_\_

Return / Transfer Facility<sup>1</sup>: \_\_\_\_\_

S #	Item Description, Strength & form	Unit	Lot / Batch No.	Expiry Date	Quantity in units	Reason for Return/ Transfer
1.						
2.						
3.						
4.						
5.						

Item(s) Return / Transfer officer		Item(s) Return / Transfer Approving Officer	
Name		Name	
Signature		Signature	
Phone No		Phone No	
Date		Date	

Transporter
Name of Driver: _____ Signature: _____
Phone No: _____ Date: _____
Vehicle Reg. No: _____

Receiving officer		Witness	
Name		Name	
Signature		Signature	
Phone No		Phone No	
Date		Date	
Remarks: _____			
_____			

<sup>1</sup> Facility also includes schools, community , medical stores and health facility

## 5.12 Completing the Quarterly Stock Status Report

This job aid will guide you through the process of completing the stock status report of NTDsmedicines. The form is to be completed on a quarterly basis. This form is in duplicates and comes as a booklet. On completion of the form (which is at the first week of a new quarter), the copies are distributed as follows:

- White copy: Next Level in the supply chain e.g. LGA medical store submits report to State CMS
- Pink copy: Retained in the booklet of the facility submitting the report.

<b>Task:</b>	Preparing the stock status report for NTDsmedicines
<b>Completed by:</b>	Store officer, Store manager/Pharmacist in charge at the facility (LGA and SCMS)
<b>Purpose:</b>	To provide a report of the quantity issued, quantity received losses, adjustments and stock balance at each level of the supply chain on a regular basis for decision making.
<b>When to perform:</b>	First week of a new quarter
<b>Materials needed:</b>	Blank stock status report form, store ledger, actual quantities from physical count
<b>Note:</b>	<i>The persons filling out the form should apply a little pressure to ensure that the carbonated copy is legible.</i>



Step	Action	Notes/Example
<b>Reporting Facility (CMS, LGA Store )</b>		
1.	<b>Month/Year</b> Write the month and year the report was prepared	April, 2014
2.	<b>State:</b> Write the name of the state.	Kano
3.	<b>LGA:</b> Write the name of the LGA.	Filled only for LGA report
4.	<b>Quarter:</b> Tick the reporting quarter	Quarter 1: Jan – March Quarter 2: April – June Quarter 3: July – September Quarter 4: October – December
5.	<b>Item Description, Strength &amp; Dosage form:</b> Write the description, strength and dosage form of the NTDsmedicines.	Zithromax tablet 250mg
6.	<b>Opening Balance</b> Write the stock on hand (SOH) at the beginning of the reporting quarter	50,000 Tabs. The opening balance is the previous closing balance of the last quarter
7.	<b>Quantity Received:</b> Write the total quantity of the drug(s) received during the reporting quarter	120,000 Tabs.
8.	<b>Quantity Issued:</b> Write the total quantity of the drug(s) issued during the reporting quarter	110,000 Tabs.
9.	<b>Losses:</b> Enter the exact quantity of losses to the inventory during the reporting quarter.	500 Tabs Losses are quantities removed from your stock for anything other than dispensed to patient or issued to other facilities e.g. expired, lost, stolen, pilfered or damaged

Step	Action	Notes/Example
10	<p><b>Adjustment:</b></p> <p>Enter adjustments</p> <p>either positive or negative done during the reporting quarter</p>	<p><b>Adjustments</b> are quantities of a product received from any source other than the approved supply chain source.</p> <p>Adjustment can either be positive (+) or negative (-): To the facility receiving it is a positive (+) adjustment while to the facility transferring it is a negative (-) adjustment to their stock balances.</p> <p>Always use a (+) sign to indicate positive (+) adjustments, and a negative (-) sign to indicate negative adjustments.</p> <p>A positive (+) adjustment could be when products are “found” during a physical count.</p> <p>Adjustments may also be made to correct mathematical mistakes previously made in recording. Be sure to indicate if the adjustment was negative or positive.</p>
11.	<p><b>Closing balance:</b></p> <p>The actual quantity after the physical count at the end of the reporting quarter.</p>	59,500 Tabs.
<b>Signatures</b>		
16.	<p><b>Reported By:</b></p> <p>Write the Name of the officer preparing the report.</p>	Mallam Bukar Musbau.
17.	<p><b>Designation:</b></p> <p>Write the title/position of the officer preparing the report.</p>	Store Manager, Store Pharmacist, or officer-in-charge of the facility.

Step	Action	Notes/Example
18.	<p><b>Signature:</b></p> <p>The officer who prepared the report signs it</p>	XXXXXXXXXXXXXX.
19.	<p><b>Date:</b></p> <p>Write the date the report was prepared.</p>	2 <sup>nd</sup> April, 2014

<b>This report has been completed when:</b>
<ol style="list-style-type: none"> <li>1. The month, year, state, LGA and reporting quarter have been filled.</li> <li>2. The item description, opening balance, quantity received, quantity issued and closing balance have been filled.</li> <li>3. When applicable the losses and/or adjustment have been filled.</li> <li>4. The name of the person preparing the report, designation, date and signature has been filled.</li> </ol>



**Task:** Preparing the expiry date tracker for NTDs medicines

**Completed by:** Store officer, Store manager/Pharmacist in charge at the facility (LGA and SCMS)

**Purpose:** To provide a report of the quantity, batch number and expiry date of both usable and non usable medicines in the reporting quarter.

**When to perform:** First week of a new quarter

**Materials needed:** Blank expiry date tracker, store ledger, actual quantities from physical count

**Note:** *The persons filling out the form should apply a little pressure to ensure that the carbonated copy is legible.*

Step	Action	Notes/Example
<b>Reporting Facility (CMS, LGA Store )</b>		
1.	<b>Month/Year</b> Write the month and year the report was prepared	April, 2014
2.	<b>State:</b> Write the name of the state.	Kano
3.	<b>LGA:</b> Write the name of the LGA.	Filled only for LGA report

Step	Action	Notes/Example
4.	<b>Quarter:</b> Tick the reporting quarter	Quarter 1: Jan – March Quarter 2: April – June Quarter 3: July – September Quarter 4: October – December
5.	<b>Item Description (Strength &amp; Dosage form):</b> Write the description, strength and dosage form of the NTDs medicines.	Zithromax tablet 250mg
6.	<b>Quantity:</b> Write the quantity of the expired medicines and stock on hand by their batches for the reporting quarter.	200 Tabs
7.	<b>Batch Number:</b> Write the respective batch number for the expired medicines.	EPA22221
8.	<b>Expiry Date:</b> Write the expiry date of each drug	4 <sup>th</sup> May, 2014.
9.	<b>Remarks:</b> State whether the drug is expired or damaged	Damaged/expired
<b>Signatures</b>		
10.	<b>Reported By:</b> Write the Name of the officer preparing the report.	Mallam Bukar Musbau.
11.	<b>Designation:</b> Write the title/position of the officer preparing the report.	Store Manager, Store Pharmacist, or officer-in-charge of the facility.
12.	<b>Signature:</b> The officer who prepared the report signs it	XXXXXXXXXXXXXX.

Step	Action	Notes/Example
13.	<p><b>Date:</b></p> <p>Write the date the report was prepared.</p>	2 <sup>nd</sup> April, 2014

<b>This report has been completed when:</b>
<ol style="list-style-type: none"> <li>5. The month, year, state, LGA and reporting quarter have been filled.</li> <li>6. The item description, quantity, batch number, expiry date and remarks have been filled.</li> <li>7. The name of the person preparing the report, designation, date and signature has been filled.</li> </ol>





### **5.13 Feedback Reports**

When data is received from the lower level, it is verified for correctness. Observations made after verification should be sent as feedback to the lower levels. Hence feedback reports are sent from higher levels to lower levels informing them about their performance both good and bad. It also encourages improved performance of the medicines supply chain. Feedback report can be provided through email, phone calls or memo.

## **6. REVERSE LOGISTICS AND WASTE MANAGEMENT**

**Reverse logistics** refers to process of returning usable surplus supplies (and expired or damaged supplies) from lower level to the next level in the supply chain in order to facilitate redistribution to places where they are needed.

**Health Waste management** refers to process of managing expired, damaged or other unusable Medicines and commodities. This is important to prevent dispensing or usage expired or damaged products with serious health consequences. Efforts should be made by all stakeholders to ensure that medicines are kept safe from unauthorized individual and returned to a safe location for disposal after the end of their life or in case of damage.

### **6.1 Reverse logistics of NTDs Medicines**

The process for returning unused damaged or expired Medicines as well as roles and responsibilities of key stakeholders are as follows:

- CDDs/CI/Teachers return unused, damaged or expired Medicines to the Front line healthy facility/Zonal Education office after the completion of treatment for the year using the appropriate tool (Reporting forms).
- FLHFS/ZONAL EDUCATION OFFICER receives the returned Medicines from the community directed distributors/Community implementers/Teachers in their area and document appropriately send to the LGA medical store under the supervision of the NTDs LGA coordinator.
- NTDs LGA COORDINATOR confirms the receipt of Medicines returned to the LGA and facilitates the movement of the medicines to the State central medical store.
- LGA/STATE CENTRAL MEDICAL STORE OFFICERS receives the medicines returned to the store and document appropriately.
- STATE NTDs COORDINATOR confirms receipt of returned Medicines from all LGAs on behalf of the State NTDs programme.

## Timelines and stock movement procedures

Timelines	Stock Movement Level	Stock Movement Procedures	Reason(s)
Immediately after treatment	CDDs/CIs/Teachers	CDDs/CDIs/Teachers return Medicines to front line health facility/LGA education officer	Damaged, expired, not used etc for return of medicines should be stated alongside with other information such as the quantity returned, batch number etc.
One week after treatment	Frontline Health Facility/LGA Education Officers	Frontline Health Facility/LGA Education Officers return Medicines to LGA central medical store after due consultation with the LGA NTDS Coordinator	Damaged, expired, not used etc for return of medicines should be stated alongside with other information such as the quantity returned, batch number etc.
One week after treatment	LGA medical Store	LGA medical store officer keeps custody of returned products and keeps records.  Update the stock ledger and also prepare the stock status quarterly report.	Same as above
Two weeks after treatment	State Central Medical Store	Take custody of returned products and keeps records.  State collates the quantity returned/reasons with the batch numbers clearly stated.  Update the stock ledger and also prepare the stock status quarterly report.	Same as above

## **6.1 SOP on management of waste documentation and destruction.**

Management of expired/damaged Medicines:

- Gathering/collection of the Medicines at the FLHF level.
- Report should be made to the LGA level.
- Verification/stock taking of the medicines at the State Level.
- Transfer of medicines to NAFDAC designated sites by FMOH / CMS from the state central medical stores.
- FMOH arrange for disposal of the Medicines

## **6.2 Waste Management of NTDs Medicines**

Wastes generated in the NTDS programme may includedamaged medicines, medicines containers, dispensing envelopes, packaging materials, etc.

Generally, there are four key steps to the management of Medicines and other related products, they are:

- a) Segregation into various components, including reusable and safe storage in appropriate containers;
- b) Transportation to waste treatment and disposal sites
- c) Treatment( for Medicines that require treatment before final disposal)
- d) Final disposition.

Primary packaging and storage takes place where waste is generated. Secondary packaging is used for transportation. Proper segregation of waste generated will greatly reduce the amount of waste that needs expensive treatment. For this reason, items such as cartons, packaging, and non-consumable disposables (e.g., dispensing envelopes) should be segregated from Medicines. Expired and damaged Medicines should be properly segregated from other wastes in the segregation process, as they may otherwise be resold by waste pickers.

## Appendix

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### **Reference**

ISIAPS,2015. *Supply Chain Management Manual for Neglected Tropical Diseases Health Managers*, April 2015.