

THE UNITED REPUBLIC OF TANZANIA  
MINISTRY OF HEALTH AND  
SOCIAL WELFARE



# Integrated Logistics System (ILS) Procedures Manual

*Roll-Out Version*

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## ACRONYMS

Term	English	Swahili
ARV	Anti-Retroviral (drug)	Dawa ya kupunguza makali ya UKIMWI
CHF	Community Health Fund	Mfuko wa Afya ya Jamii
CHMT	Council Health Management Team	Timu ya Halmashauri ya Usimamizi wa Afya
CHSB	Council Health Services Board	Bodi ya Halmashauri ya Huduma za Afya
DACC	District AIDS Control Coordinator	Mratibu wa Ukimwi wa Wilaya
DCCO	District Cold Chain Officer	Afisa Hifadhi ya Baridi wa Wilaya
DED	District Executive Director	Mkurugenzi Mtendaji wa Wilaya
DMO	District Medical Officer	Mganga Mkuu wa Wilaya
DTO	District Transport Officer	Afisa Usafiri wa Wilaya
EDP	Essential Medicines Package	Kitita cha Dawa Muhimu
EPI	Expanded Program on Immunization	Mpango wa Taifa wa Chanjo
FBO	Faith-Based Organization	Shirika la Dini
FP	Family Planning	Uzazi wa Mpango
HIV	Human Immunodeficiency Virus	Virusi vya Ukimwi (VVU)
HMIS	Health Management Information System	Mfumo wa Taarifa za Uendeshaji wa Huduma za Afya (MTUHA)
HTC	Hospital Therapeutic Committee	Kamati ya Tiba ya Hospitali
ILS	Integrated Logistics System	Mfumo wa Ugavi na Usambazaji wa Dawa na Vifaa
IUD	Intra Uterine Device	Kitanzi
MCH	Maternal and Child Health	Afya ya Mama na Mtoto
MSD	Medical Stores Department	Bohari Kuu ya Madawa
MTEF	Medium-Term Expenditure Framework	Mfumo wa Matumizi ya Kipindi cha Kati
<b>NEMLIT</b>	<b>National Essential Medicines List of Tanzania</b>	
NGO	Non-Governmental Organization	Asasi Zisizo za Serikali
NHIF	National Health Insurance Fund	Mfuko wa Taifa wa Bima ya Afya
NTLP	National Tuberculosis and Leprosy Program	Mpango wa Taifa wa Kifua Kikuu na Ukoma
PSU	Pharmaceutical Services Unit	Kitengo cha Dawa na Vifaa Wizara ya Afya
RACC	Regional AIDS Control Coordinator	Mratibu wa UKIMWI wa Mkoa
RCCO	Regional Cold Chain Officer	Afisa Hifadhi ya Baridi wa Mkoa
R&R	Report & Request for Medicines and Related Medical Supplies and Equipment	Fomu ya Taarifa na Maombi ya Dawa na Vifaa
STI	Sexually Transmitted Infection	Magonjwa yaambukizwayo kwa njia ya ngono
VA	Voluntary Agency	Shirika la Kujitolea/Hiari

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# **I. INTRODUCTION**

## ***A. The Purpose of this Manual***

This manual is intended to introduce a new system for ordering and distributing most of the medicines and related medical supplies needed to provide health services in Tanzania. This system is called the Integrated Logistics System (ILS). The manual serves as a reference for health care staff in the completion of their tasks related to the management of medicines and related supplies.

## ***B. Integrated Logistics System***

### *What is ILS?*

The Integrated Logistics System is a system for managing various categories of health supplies, using a single set of procedures. The ILS is a type of indent system where Dispensaries, Health centers, and Hospitals order quantities of each supply according to their needs and within their budget.

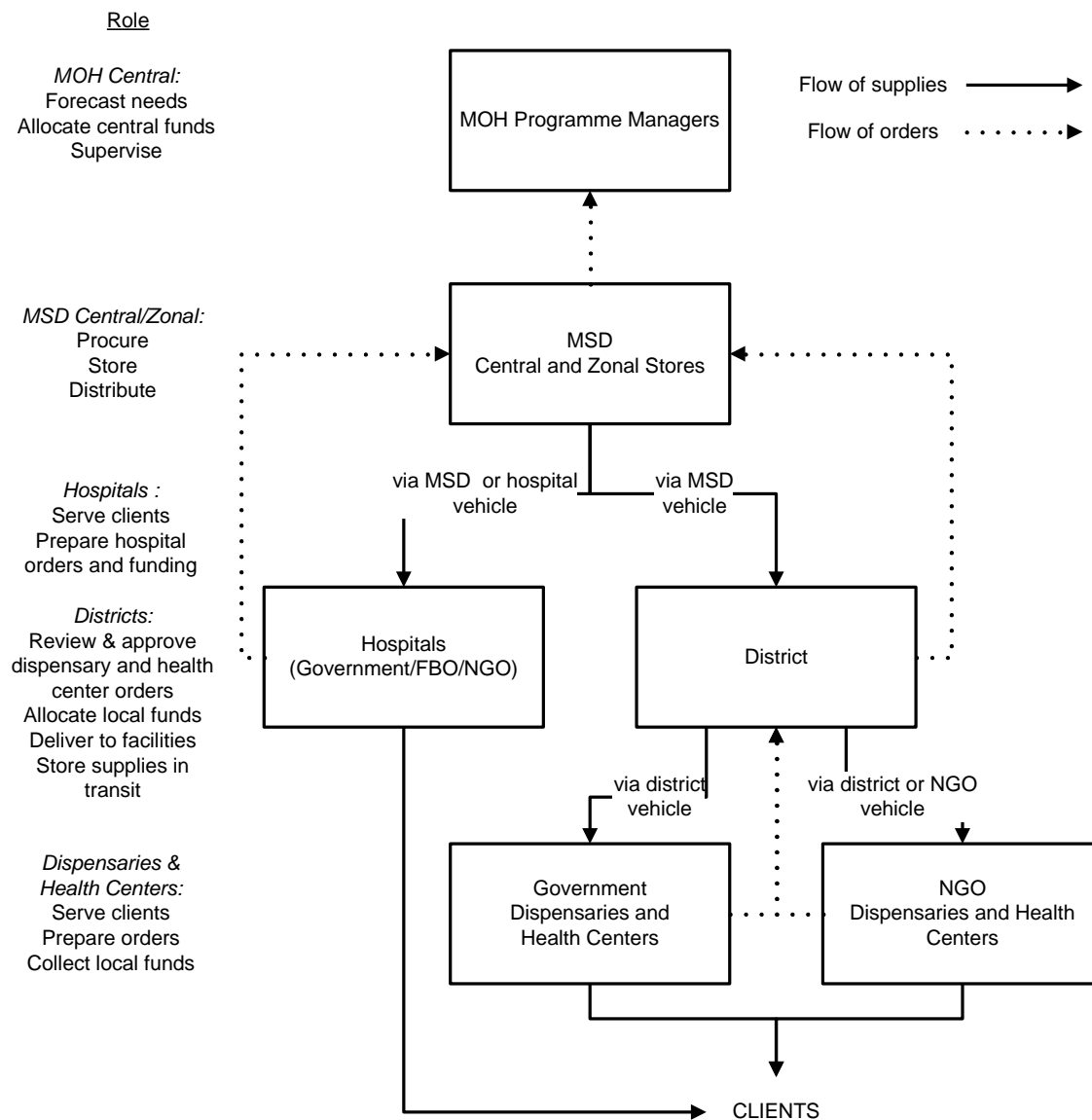
To be successful, the ILS must fulfill the Six Rights of supply management. The system, and its staff, must ensure that:

- the Right Item
- in the Right Quantity
- of the Right Quality
- is available at the Right Place
- at the Right Time
- for the Right Cost.

### *How does the ILS work?*

In simple terms, facility staff determines needs and make orders. All supplies in the ILS are managed using the same basic systems and procedures. Order quantities are based on the quantities of supplies that are used to serve clients and the quantities of stock held by the facility at the time the order is placed. The orders are sent to the supplier (MSD). The supplier packs the supplies and delivers them to the districts or directly to hospitals. The districts then distribute the supplies to health centers and dispensaries. See Figure 1 below.

Figure 1: Movement of Supplies and Information in the ILS



What categories of supplies are included in the ILS?

The ILS takes an integrated approach. The ILS is based on the best elements of all of the categories of supplies. These are:

- essential medicines
- contraceptives and condoms
- STI medicines
- lab supplies
- dental supplies
- radiology supplies
- medical supplies



The ILS also includes several special categories of supplies that are managed in a similar, but slightly modified way. These are:

- vaccines
- HIV tests
- Anti-retroviral (ARV) medicines

The ILS will manage, in an integrated manner, all of the supplies needed to support the programs that use these supplies, including the management tools.

What are the key benefits of the ILS?

- allows each facility to determine its own needs
- assists in managing drug finances
- reduces the number of forms previously used in vertical systems
- enhances record keeping
- facilitates supervision
- promotes a more rational use of medicines and transportation
- enables data collection for planning and budgeting
- minimizes wastage and pilferage
- relies on the lessons already learned from other systems, particularly the “Indent System,” a system for ordering essential medicines that has been tested and demonstrated to be effective in dispensaries and health centers where it is implemented

What supplies are included in the ILS?

All supplies managed by dispensaries, health centers, and hospitals are included in the ILS. To make it easier to collect information on these supplies, the ILS is divided into several classes of supplies:

#	Class	Definition
1	<i>Priority supplies</i>	<p>These supplies that should always be in the facility. Priority supplies were chosen to be pre-printed on ILS forms because they are consumable, are used in large volumes, respond to priority health needs, and need to be ordered frequently. When funding is limited, these supplies should be purchased first. For free or donated supplies, these are provided at no charge to the facility. Consequently, the facility should order as many as it can effectively use during the quarter (according to the formulas included in the ILS) and there should be no reason not to have these supplies on hand. MSD will work to ensure that these supplies will always be in stock and that the full order for these supplies will be honored.</p>

#	Class	Definition
2	<i>Additional supplies</i>	All additional supplies that are not pre-printed should also ideally always be in the facility. When funding is limited, however, it may not be possible to order 100% of the facility's needs. If a facility's full budget allocation or supplemental funding available has not yet been used for priority supplies, the facility should purchase additional supplies from the remaining funds. The MSD will work to ensure that these supplies are also in stock, but it may occasionally be necessary to reduce orders for supplies that are not in full supply at the central level.
3	<i>Special supplies</i>	These supplies are ordered in a similar, but slightly modified manner as priority and additional supplies in the ILS. Special supplies are ordered only by facilities that offer and are authorized to provide these supplies as part of their services. Special supplies include HIV tests, anti-retroviral medicines (ARVs), and vaccines.

The list of supplies in each class is expected to change over time.

All essential medicines, contraceptives and condoms, STI, laboratory, dental, radiological and medical supplies as well as special supplies should be managed using the forms provided in the ILS.

### **C. Financing under ILS**

#### How are medicines financed at the dispensary, health center, or hospital level under the ILS?

A key feature of the Integrated Logistics System is that all facilities, from dispensaries to referral hospitals, will take charge of *managing* their own finances related to the purchase of medicines and related supplies. However, most financial support will continue to be allocated from the central Ministry of Health and Social Welfare.

Although the ILS includes some financial information, this manual should not be the only source of information about financing. At the end of this manual is a list of related documents on financial management. What follows below is only an overview of the drug financing system.

One of the concerns of an integrated system is that the cost of needed supplies may exceed the value of allocated funds. Furthermore, as the government continues to decentralize, responsibility for collecting funds is being transferred to lower levels. This means that districts will be responsible for raising at least part of the funding needed for medicines and related medical supplies. Therefore, complementary funding mechanisms have been introduced at the district level. These include:

- **Community Health Funds:** At the community level, community health-care financing (CHF) was introduced. CHF is an insurance plan in which funds are collected from the community and placed in a central account. If a member of the community becomes ill, the CHF account is used to pay for the medicines and related supplies. Some community members might choose not to join the CHF and these people pay a user fee each time they visit a health facility to obtain services and supplies and services. (It is expected that,

over time, these people will pay more for their illnesses than those who joined the CHF.) User fees are paid into the CHF account.

- *Health Insurance:* It is expected that several insurance plans will also provide funding of patients' needs. The largest current insurance plan is the National Health Insurance Fund (NHIF). Under NHIF, government workers are covered by the government. They are issued an insurance card which they present at a facility. The cost of the medicines, related supplies and services they receive is billed to the NHIF and reimbursed to the district. In the future, private insurance plans, including those provided by employers, may also become a source of funds for some facilities.
- *User fees:* Clients visiting facilities may be asked to pay a fee for the services and/or medicines they receive. While the amount requested is less than the actual cost of the service, the funds generated can be used to complement central-level allocations.
- *Donor funds:* Some districts or regions may benefit from the support of a donor agency. In this case, donors may provide funds that can be used to purchase medicines and supplies.

Councils may be involved in all, some, or none of these drug-financing mechanisms. The ILS will track the source of funding only to the extent that it assists in ensuring that supplies are available. Guidance in this manual concerning financial management is suggested only and should not, in any case, be used to invalidate or circumvent existing financial regulations.

#### *What happens to donated medicines and related medical supplies for specific programs?*

Donated medicines and related medical supplies come from a variety of donors. As was noted in the financing information, donors may provide direct funding (i.e., cash payments) to some districts or facilities. Donors may also provide a supply of medicines, related supplies, and/or equipment. In other cases, donors may provide a limited amount of selected items. Facilities should order the overall quantity of each item that they need. If part of this need can be covered by donated supplies, it will decrease the cost of the facility's order.



## II. FACILITIES, STAFF AND MANAGEMENT TOOLS IN THE ILS

### A. Facilities Included in the ILS

The ILS system has been designed to accommodate the needs of all government facilities. It also includes all non-governmental organizations (NGO), such as faith-based organizations (FBO), or other voluntary agencies (VA) that have been authorized by the Ministry of Health and Social Welfare to purchase medicines and related medical supplies from MSD. The ILS includes all types of facilities, from dispensaries to referral hospitals. All organizations and facilities should complete the forms in the same way.

### B. Staff and Their Roles in the ILS

#### 1. Dispensary and Health Centre

##### (i). Facility In-Charge

The Facility In-Charge, usually a Clinical Officer, or Assistant Medical Officer does the following:

No.	Task	Section in Manual
1	Review/authorize quarterly reports/orders for the facility	V-A
2	Submit R&R form to the DMO	V-A
3	Supervise overall ILS functions	IX
4	Ensure proper record keeping	XI

##### (ii) Dispenser / Store in-charge

At dispensaries or health centers, the dispensers or the staff in-charge of the pharmacy store are key persons in the ILS. These staff may be pharmaceutical technicians, assistants, nurses or any other person assigned by the facility in charge to perform that task. The dispenser/store in-charge will do the following:

No.	Task	Section in Manual
1	Maintain stores records	IV
2	Conduct physical inventory at specified times	VIII-C
3	Complete quarterly reports/orders	V-A
4	Issue supplies within the facility	VI-D
5	Receive supplies	VII-A
6	Store supplies properly	VIII-A

##### iii) Village Health Committee

The Village Health Committee plays an important role at the dispensary or health center. The Committee is involved in witnessing the receipt of in-coming shipments (see section VII-A). Committee members may also liaise with the village government to ensure security of the dispensary or health center. (Now known as Hospital Health Services Committee, Health Center Health Services Committee and Dispensary Health Services Committee at the respective level of service.)

## 2. Staff at the District Level

### (i) District Medical Officer

The DMO will do the following:

No.	Task	Section in Manual
1	Submit requests for supplemental funding to the Council Health Services Board/DED	V-B
2	Approve/authorize orders for submission to MSD	V-B
3	Supervise over all ILS functions	IX

### (ii). District Pharmacist

This also includes persons who have been assigned by the DMO to perform duties that are normally performed by the District Pharmacist. In the ILS, the District Pharmacist will:

No.	Task	Section in Manual
1	Review orders from dispensaries, health centers and District Hospital and submit them to the DMO for authorization	V-B
2	Submit requests for supplemental funding to the DMO	V-B
3	Compile orders from dispensaries, health centers and District Hospital and submit these to MSD after they have been approved by the DMO.	V-D
4	Organize the district's health facilities into groups of facilities to aid in efficient, regular delivery	V-C
5	Ensure that supplies are delivered from the district to dispensaries and health centers	VI-C
6	Supervise all health facilities in the district	IX

### (iii).Other District Staff

Other staff members at the district level are also involved in the management of medicines and related supplies for the district and the health facilities they serve.

CHMT members not mentioned specifically in this manual, including the District Health Officer, District Nursing Officer, District Health Secretary, District Dental Officer, District Lab Technologist and other co-opted members will serve as supervisors of the health centers and dispensaries below them.

### 3. Staff at Hospital Level

#### (i). Medical Officer In-charge of Hospital (District, Regional and Referral Hospitals)

No.	Task	Section in Manual
1	Approve/authorize all hospital ILS orders	V-E
2	Submit requests for supplemental funding	V-E
3	Authorize the local purchase of medicines and related medical supplies	V-E
4	Appoint a sub-committee of HTC which will be responsible for receipt of medicines and related supplies	V-E

#### (ii) Hospital Pharmacist in-charge (District, Regional and Referral Hospitals)

The hospital pharmacist in-charge shall have overall responsibility for the day to day implementation of the ILS. The following ILS-related tasks will be performed by the hospital pharmacist or his/her designated representative.

No.	Task	Section in Manual
1	Maintain stores records	IV
2	Complete quarterly reports/orders	V-E
3	Issue supplies within the facility	VI-D
4	Receive supplies	VI-B
5	Store supplies properly	VIII-B
6	Conduct physical inventory	VIII-C

#### (iii). Hospital Therapeutic Committee (HTC)

The HTC will do the following:

No.	Task	Section in Manual
1	Review and recommend approval of orders for medicines and related medical supplies for the hospital.	V-E
2	Recommend the use of supplemental funds to purchase additional medicines and related supplies from MSD	V-E
3	Recommend the local purchase of medicines and related supplies	V-E

### 4. Staff at the Regional Level

Since supplies in the ILS are distributed from the Medical Stores Department (MSD) directly to districts, the role of the Regional Health Management Team will be to provide supportive supervision. RHMT members are required to conduct supervision visits at the districts they supervise on a routine basis. (See Section IX for general guidelines for supervision.)

## 5. Staff at the Central Level

The central level performs a wide range of functions to provide program support and to promote the availability of the supplies that are needed to serve the clients at facilities.

### (i). Ministry of Health and Social Welfare

The Pharmaceutical and Supplies Unit will do the following:

- monitor the overall performance of the ILS
- liaise with other government ministries/agencies on issues relating to ILS
- provide technical support
- compile annual forecasts of supplies based on facility and programs data
- work with the Medical Stores Department to ensure timely procurement of supplies
- liaise with MSD on issues relating to procurement and distribution
- analyze compiled data from facility and program reports

### (ii). Program Managers

The Program Managers will do the following:

- assist in the preparation of annual forecasts of supplies needed
- determine the supplies to be included in the ILS
- report on program achievements
- collect and disseminate program-related information
- provide feedback to program implementers
- provide feedback to program stakeholders, e.g., donors

### (iii). Medical Stores Department (MSD)

The Medical Stores Department (MSD) is an autonomous institution under Ministry of Health and Social Welfare responsible for provision of service to the public health sector. It has financial and managerial autonomy. Its major responsibilities are:

- procure medicines, medical supplies and equipment; storage and distribution
- receive and process all orders for medicines and related medical supplies
- deliver supplies for dispensaries or health centers, to the DMO's office
- produce and distribute feedback reports to health facilities, districts, program managers and PSU
- maintain, produce and distribute financial statements
- update and distribute price list to facilities
- distribute Management Tools to health facilities during routine deliveries

## ***C. Management Tools Used in the ILS***

Management tools are documents that are used for proper management of resources of a health facility. In order to ensure the continuous availability of quality supplies (in other words, to fulfill the six rights), it is necessary to collect a minimal amount of information.



**(i) Forms and worksheets**

In the ILS, information will be collected using a series of management tools. The tools in the ILS are the following:

Number	Form Name	Purpose	Primary User
Form 1	Prescription Form	To account for medicines prescribed and dispensed to patients	Prescriber, Dispenser
Form 2A	Dispensary or Health Centre Report & Request for Priority Medicines and Related Medical Supplies and Equipment	To order priority medicines, and related supplies, from MSD for dispensaries or health centers.	Dispensary or Health Center in charge
Form 2B	Hospital Report & Request for Priority Medicines and Related Medical Supplies and Equipment	To order priority medicines and related supplies from MSD.	Hospital Pharmacist in charge
Form 2C	Blank Report & Request for Additional Medicines and Related Medical Supplies and Equipment	To order additional medicines and related medical supplies not printed on Forms 2A & 2B .	Dispensary or Health Center in charge or Hospital Pharmacist in charge
Form 3	Order Compilation	To determine if all facilities have sent in their reports and the total funding level needed.	DMO or designee
Form 4	MSD Sales Invoice	To inform a facility what MSD has sent and to compare what is received with what was ordered and approved.	MSD and Dispensary or Health Center In charge or Hospital Pharmacist In charge
Form 5	Customer Statement of Account	To inform facilities how much funding they have remaining in their account.	Facility In-Charge, District Medical Officer, RMO, Medical Officer in charge
Form 6	Goods Received Note (GRN)	To account for the number of packages received from MSD.	Hospital, Dispensary or Health Center In charge, DMO, and MSD
Form 7	Verification and Claims form	To document and report discrepancies observed with goods delivered from MSD and make claims	MSD and Dispensary or Health Center In charge or Hospital Pharmacy In charge

In addition to forms, the ILS also includes several worksheets. Worksheets are intended to be tools that assist in making decisions. The use of worksheets is not required but is encouraged. Worksheets are not pre-printed but can be photocopied from the blank specimens from Section XIV. Worksheets in the ILS include:

Number	Worksheet Name	Purpose	Primary User
1	Assigning Delivery Groups	To assign health facilities to a delivery schedule	DMO
2	ILS Supervision Checklist	To use during supervisory visits	DMO, District Pharmacist and other CHMT Supervisors

### (ii) Registers

In the ILS, there are a number of registers that are used. Registers are management tools that are used in information management. Registers are used to collect, organize and maintain data on transactions that occur in the ILS. They collect data or information that is generated as day-to-day ILS activities are conducted. ILS registers document all transactions from the receipt of commodities until they are dispensed or issued out of the facility and different registers are used at different points in the logistics system.

Number	Register Name	Purpose	Primary User
1	Stores Ledger	To account for supplies stored in storerooms.	Dispensary or Health Center Storekeeper or Pharmacy Storekeeper
2	Patients register	To collect patient data and diagnosis	Prescriber
3	Dispensing register	To collect data on drugs dispensed	Dispenser
4	Injection register	To collect data on injections given	Nurse

Forms, worksheets and registers for managing special supplies are included in the annex for those supplies.





### III. RATIONAL USE OF MEDICINES

#### A. Introduction

Reports from developing countries including Tanzania indicate that prescribing practices in which excessive, inadequate, incorrect prescribing and incorrect dispensing bring about unnecessary financial burden on national and individual health budgets. The practices may also lead to drug resistance. On the other hand, patients also contribute to misuse of medicines through self-medication and non-compliance. To improve the availability, provision and use of medicines, essential medicines programs have been introduced in many countries, including Tanzania, sometimes with considerable effect, but often still hampered by continued irrational prescribing and dispensing practices.

#### B. What is rational use of Medicines?

For a medicine to be rationally used it must be given for an appropriate disease condition, suitable route of administration, including adequate dose, and optimal duration of treatment.

#### C. Factors Underlying Irrational Use of Medicines

Irrational medicine use can be caused by several factors among which are prescriber, dispenser and patient/community factors.

##### 1. Prescriber factors

- Unreliable supplies

Due to unreliable supply of medicines a prescriber may be forced to prescribe inappropriate medicines. For example, unreliable supply of penicillin could lead to unnecessary substitution with cephalosporins.

- Shortages

A prescriber is sometimes forced to prescribe only available medicines, which are not necessarily appropriate for that disease condition in an effort to spare the use of the more appropriate medicine which is in short supply.

- Short expiry medicines

A prescriber may be forced to prescribe medicines with short expiry dates to avoid losses which may occur when those medicines expire in the store.

- Heavy patient load

A prescriber may be forced to prescribe without proper diagnosis and thus prescribe inappropriate medication.

- Lack of continuing education

Lack of current information on management of disease can lead to outdated prescription. Lack of relevant reference materials-unavailability of appropriate reference materials e.g.

Standard Treatment Guidelines (STG), essential drug lists etc. can lead to a prescriber not choosing appropriate medicines.

## 2. Dispenser factors

- Heavy patient load

Too many patients for dispensers may lead to medication errors and irrational dispensing

- Shortages of medicines

Inadequate supplies may force dispenser to dispense inadequate dose to stretch limited supplies, thereby contributing to irrational drug use.

- Inadequate supervision

Poor or inadequate supervision may lead to irrational dispensing, such as not following good dispensing practice (e.g. adequate, labeling, adequate instructions, adequate dose, etc.)

- Lack of continuing education and skills

Outdated knowledge and skills and the lack of new information affects the competence with which dispensers can promote rational use of medicines.

- Poor communication skills

Rudeness of the provider or language barrier between the provider and the patient leading to misunderstanding of the use of medicines by the patient.

## 3. Patient/Client/Community factors

- Misleading beliefs

People tend to think for example that injectables are better than tablets, or imported medicines or expensive medicines are better, than locally manufactured or cheap medicines respectively.

- Inability to communicate problems

Communication barriers, which lead to wrong diagnosis and therefore wrong prescription, consequently wrong dispensing. Communication barriers may include language, or/and stigma.

- Self medication

Taking a drug without prescription/consultation.

## ***D. How to Promote Rational Use of Medicines***

### 1. Rational Prescribing

Rational prescribing is defined as the process in which the prescriber endeavours to make accurate diagnosis of the condition, selects the most suitable medication from those available, prescribes the medicine in the right dosage for a sufficient length of time according to the standard treatment guidelines.

The following steps will ensure rational prescribing:

- a. Define the patient's problems
- b. Specify the therapeutic objective
- c. Identify a suitable drug
- d. Write a prescription
- e. Give the patient proper instruction and warning
- f. Monitor and (stop) the treatment

## 2. Rational Dispensing

Dispensing is a process of supplying drug(s) to a patient. The process requires adequate knowledge, skill and a caring attitude. In addition, careful dispensing is an important component in managing drug supplies because it is the last step which ensures that the patient has received the right drug.

Steps necessary for rational dispensing are:

- (a) Approach patient cordially
- (b) Analyze prescription
- (c) Calculate quantities
- (d) Dispense right quantity
- (e) Check if right medicines are dispensed
- (f) Labeling
- (g) Counter check dispensed medicines
- (h) Counsel patient on medication
- (i) Retain prescription for records.

## 3. Equipment and Apparatus to improve Rational Use of Medicines

The use of appropriate equipment and apparatus for drug dispensing and administration will improve the rational use of medicines. These apparatus include those that enable correct measures of medicines to be dispensed and/or administered. Some of these are designed for use of health personnel, while others are for the use of both health workers and patients to improve drug administration

### **List of equipment/apparatus/tools**

- a. Graduated measuring cylinders of different capacities made of glass or plastic.

- b. Measuring spoons calibrated to dispense specified volumes, e.g., 2.5ml, 5ml, 10ml, etc.
- c. Tablet counters to enhance counting accuracy and prevent contamination
- d. Auto-disable syringes of appropriate design and material, which improve health worker and patient safety
- e. Spatulas of different sizes and made from different materials, e.g., wood, glass, stainless steel for specific purposes.



## IV. REGISTERS IN THE ILS

### A. The Stores Ledger

The Stores Ledger (HMIS-MTUHA Book No. 4) is a register for recording movements of stock kept in the facility:

- a. It is used to record receipts and issues of stock.
- b. It **MUST** be kept up to date by recording immediately, (i.e. without delay), every receipt or issue of stock.
- c. Records for every item **MUST** be on a separate page in the ledger.
- d. Supplies should be differentiated by generic name (Panadol vs. paracetamol), the strength of the product (e.g., Amoxicilin 500mg), and the form (e.g., tablet, suspension). An appropriate item description would be "Amoxicillin Capsules 250mg".
- e. A consistent unit of issue must be applied to all entries in the ledger. It is customary to record entries by the dispensing unit instead of pack sizes.
- f. Each ledger should start with a table of contents page that will help to find the product page quickly. Write page numbers of the ledger. When the page in use is full, indicate on this page as to which page you have transferred the data and indicate on the new page as from where the information has been transferred.
- g. It is recommended that all supplies be entered in alphabetical order for the supplies in a single storage area within the facility.

See the Job Aid, *Opening or Starting a New Page of a Stores Ledger* for detailed instructions.

Stores Ledger is used by health facility stores in-charge(s) during the following activities:

Number	When to Use
1	When establishing ledgers for the first time at the facility
2	When supplies arrive at a facility from MSD or the district, the receipt is recorded on the ledger for the storage area where they will be stored.
3	When supplies are issued from the storage area to the Dispensing area or to other points of use, the issue is recorded in the ledger.
4	At the end of each quarter, supplies in the storage area should be counted (physical inventory). The results should be recorded in the ledger.
5	Whenever supplies are purchased through local procurement, the purchase should be recorded in the ledger
6	Whenever supplies are issued on loan or received on loan to/from another facility, the transaction should be recorded in the ledger.
7	If supplies are found to be expired, broken, damaged, or otherwise unusable, the loss should be recorded as a negative adjustment in the ledger.

These activities are described in detail in the Job Aids, *Opening or Starting a New of a Stores Ledger* and *Updating a Stores Ledger*.

*Separate Stores Ledgers* should be kept for pharmaceutical supplies and non pharmaceutical supplies.

## **B. The Patients Register**

The Patient Register (PR) is a ledger like book. Each page may record between 30 to 35 patients. Inner part of the front cover contains instructions on how to use the PR. Each Prescriber in a health facility has his/her own book. Prescriber “1” starts serial numbering with No. 1-0001 on first day of each month. Prescriber “2” starts with: No. 2-0001, etc. All the names of common medicines/supplies are pre-printed

It is mandatory that each prescriber has her/his own PR with a prescriber’s number, e.g. the In-charge of the facility will always be prescriber No. 1, and on top of the hard cover of her/his PR it will be written: “Prescriber No. 1.” In case of a temporary shortage of registers, prescribers can share.

For instructions on completing the Patients Register refer to Job Aid: *Opening and Filling-In Patients Register*.

### **Importance of the Patients Register (PR)**

The PR provides data for determining the following:

- a. An average daily attendance and seasonal fluctuations in health facility utilization.
- b. Assess prescribing habits/technical skills (rational or irrational prescribing)
- c. Rational medicine use indicators at the facility
- d. Frequency of use of certain medicines (may differ per area!); providing data for next order (and for possible modification of the NEMLIT)
- e. The consumption pattern of the medicines at the facility, both as basis for new order and as parameter for rationality of order
- f. The morbidity pattern of the catchments area
- g. The number of cases that have been referred to higher levels
- h. Provide an idea of the revenue generated at the health facility through medicine sales, e.g. sales through cost sharing, CHF etc.

### **C. The Dispensing Register**

The Dispensing Register (DR) is a ledger like book. Each page may record between 30 to 35 prescriptions. The book has to be used from left to right across the two pages. The names of all priority medicines have been pre-printed. There are spaces for recording the “ADDITIONAL MEDICINES.”

- a. The register should be available at all times in the dispensing room.
- b. It shall be used in recording the quantities of medicines which are actually dispensed from the facility.

For instructions on completing the Dispensing Register refer to *Job Aid: Opening and Filling-In the Dispensing Register*.

### **Importance of the Dispensing Register**

The DR provides the following information:

- a. Figures on average daily attendance and seasonal trends.
- b. Frequency of use of certain medicines (may differ per area); providing data for next order
- c. View of actual use of medicines that were specially ordered for the facility’s catchment area.
- d. Provide the consumption pattern of the medicines at the facility as basis for new order

### **D. The Injection Register**

The Injection Register is very similar to the Dispensing Register. It is used to record and track the dispensing or administration of Injections in the health facility. The Injection Register should be maintained at all places in the health facility where injections are routinely administered, such as Treatment Rooms, or on Wards.

### **Importance of an Injection Register**

The IR provides the following information:

- a. Figures on average daily attendance and seasonal/economical influences
- b. Insight in calculation skills of staff
- c. Frequency of use of certain medicines (may differ per area); providing data for next order

- d. View of actual use of injections that were specially ordered for the facility's catchment area.
- e. Provide the consumption pattern of the medicines at the facility as basis for new order
- f. Provide a rough estimate of the facility's medicines requirements

Total of injections dispensed will be approximately equal to the quantities taken from the store minus the stock at hand.

## V. ORDERING

### A. Ordering by Dispensaries and Health Centers

Under the ILS, dispensaries and health centers will submit orders quarterly (every 3 months) to the DMO for the supplies to meet the needs of their clients. The facility in-charge determines the quantities of supplies they need and ensures that the quantities they order can be paid for and respond to the level of services that are provided by qualified health care workers.

The principles described below guide aspects of the ordering process. Detailed instructions can be found in the *Job Aid: Completing Form 2A: Dispensary or Health Center Report & Request for Priority Medicines and Related Supplies and Equipment, Form 2B: Hospital Report & Request for Priority Medicines and Related Supplies and Equipment, and Form 2C: Blank Report & Request for Additional Medicines and Related Supplies and Equipment at the Dispensary or Health Center, or Hospital.*

It is important for each facility to submit their order at the scheduled time. The facility's order must be submitted to the district during the first week of the first month of the ordering cycle.

1. *Ordering is done through Form 2A: Dispensary and Health Center Report & Request for Priority Medicines and Related Medical Supplies and Equipment (R&R) and Form 2C: Blank Report & Request for Additional Medicines and Related Supplies and Equipment.*

The Dispensary or Health Center storekeeper determines the quantity of each product to order using *Form 2A: Dispensary and Health Center Report & Request for Priority and Related Medical Supplies and Equipment*. The names of the products, MSD code, unit of issue, and price for each item are pre-printed on the R&R form.

The storekeeper or health facility in-charge is required to order all priority supplies each quarter, unless the product is already at or above its maximum stock level. (See the explanation below on maximum stock levels.) That is because priority supplies are the most important supplies to keep in stock. If the facility does not ever use a specific product (e.g., some facilities may not ever issue intrauterine devices (IUDs) due to a lack of trained staff), it should not be ordered.

2. *Calculating the Quantity Requested*

To determine how much to request, *Form 2A: R&R* includes a formula for ordering. That formula is based on logistics data, which is about quantities of supplies (as opposed to numbers about people or services, often called demographic or service statistics data). The logistics data needed to make orders are collected on *Stores Ledgers* (or MTUHA book 4 if it is being used) and are taken from the previous quarter's *Forms 2A: R&R*.

The logistics data that will be taken from these forms and transferred to the R&R include:

#### *Opening Balance*

The opening balance is taken from the ending balance for the facility from the previous quarter's *Form 2: R&R* (or the closing balance for the MTUHA book 4 for the facility ordering the first time.)

#### *Quantity received this reporting period*

The quantity received this period is taken from *Stores Ledger* and includes all receipts of supplies received by the dispensary or health center from the district.

#### *Lost/Adjusted*

Losses and adjustments are taken from *Stores Ledger* and would reflect the total net change in stock for the quarter due to expiration, damage, transfers (issue on loan/receipt on loan), clerical error or other reasons. For example, if there were a loss of 50 and a transfer in of 100, the total adjustment recorded on *Form 2: R&R* would be +50 (a positive sign for quantity gained and a negative sign for quantities lost).

#### *Closing -Balance*

The closing balance for the facility tells how much of each product the facility currently has available for use. The ending balance should always be taken from a physical inventory conducted at the end of the month. See Section VIII-C for information on conducting a physical inventory.

#### *Estimated Quarterly Consumption*

The estimated quarterly consumed quantity is the estimated total quantity of a product put in the hands of a client during the quarter. While it would be possible to collect the actual data by reviewing all registers and client cards for the entire quarter, that method would be extremely time-consuming. Consequently, a simpler formula for estimating consumption for the ILS has been developed. That formula is:

$$\text{Opening Balance} + \text{Received This Period} \pm \text{Lost/Adjusted} - \text{Closing Balance} = \text{Estimated Consumption}$$

The estimated consumption has to be adjusted for products for which there has been a stock out during the reporting period. Stock outs are expected to be rare if products are appropriately ordered to the maximum stock level. Refer to *Job Aid: Handling Stock outs when Completing Form 2 A-C R & R*

If there are frequent stock-outs, then try to find out why the stock-outs are occurring. Are they due to increased dispensing? Are they due to loss, expiry or damage? Were the order quantities for those supplies reduced due to insufficient funds? If a particular cause can be identified for the stock-outs, try to address and resolve the issue.

*Quantity Needed: Based on a System of Maximum-Minimum Inventory control method of determining stock levels*

The maximum stock level for priority medicines and medical supplies in the ILS is fixed at 7 months of stock. The use of 7 months of supply as the maximum is based on the fact health facilities will order all priority supplies every 3 months. A 7 month maximum will provide a facility sufficient stock of each priority supply to use during the quarter (3 months of supply), two months of supply while orders are being processed and shipped, and two months of buffer stock in the event that the need for any supply increases. Therefore, a 7 month maximum should help ensure that no priority supply will be stocked out at any time.

**The maximum stock level** is the upper limit for quantities of supplies kept in a facility. If there is a stock out during the quarter, this means the facility has likely turned away a client to whom it should have been able to provide needed medicines or supplies. It will be necessary to adjust the estimated consumed to ensure that the period of the stock out is accounted for. This is explained in the *Job Aid: Handling Stock outs when Completing Form 2 A-C R & R*

The formula for ordering is:

$$\text{Quantity Needed} = \left( \frac{\text{Estimated Consumption for the quarter}}{3} \right) \times 7 - \text{Closing Balance}$$

*Quantity Requested*

The Quantity Requested is based on the unit of issue from MSD which can be found using MSD catalogue. If the unit of issue for Amoxicillin is 1,000 tablets, and 669 tablets are needed, then 1 unit of issue, or 1,000 Amoxicillin tablets should be requested. When ordering, always round up to the next higher unit pack size or unit of issue if quantity required is less than a full pack. For example, if 1,089 tablets are needed for a unit of issue of 1,000 tablets, round up to 2,000 tablets. If 1,600 tablets are needed for a unit of issue of 1,000 tablets, round up to 2,000 tablets.

The process of determining the Quantity Requested is repeated for all priority medicines and related supplies and equipment.

*Price/Cost/Total Cost*

The price for each product is pre-printed on the form. Therefore, the Cost for the quantity requested (col. I) = Quantity Requested (col. G) x Price (col. H).

At the bottom of each page, the total cost for all items on the page is calculated. This information can then easily be transferred to the "Cost Summary" table at the end of the form.

### *Cost Summary*

After completing all of the pages of *Form 2A: R&R* the Dispensary or Health Center Storekeeper will calculate the total cost of the order. When the “Total Cost of Order” is calculated, either:

a) The “Total Cost of Order” will be less than or equal to the “Total Available Allocation.” In this case, the order is complete and can be finalized.

or

b) The “Total Cost of Order” will be greater than the “Total Available Allocation.” In this case, because the supplies on *Form 2A: R&R* are all priority supplies, supplemental funding should be requested to order these supplies.

### *3. Ordering Additional Supplies*

Additional supplies are those that are not pre-printed on the R & R forms.

If a product, especially one that has never been ordered, managed or used in the past is needed, include it on *Form 2C: Blank Report & Request for Additional Medicines and Related Supplies and Equipment*. Considerations to order such products will include: Is there a staff member at the facility who is trained/qualified to use/dispense the product? Does the product respond to a public health need for the people served by the facility? Is budget available to pay for the product?

The first decision made by the health facility in charge is whether or not there are sufficient funds to order additional supplies, or if the need for additional supplies is likely to receive supplemental funding from the DMO. If so, these supplies should be ordered using *Form 2C*. See *Job Aid: Completing Form 2C: Blank Report & Request for Additional Medicines and Related Supplies and Equipment*.

### *4. Review of Form 2A: R&R and Form 2C: R&R by the Facility In-Charge*

In case the order was completed by a person other than the health facility in charge, the form should be reviewed by the Facility In-charge.

The health facility in charge should look for the following:-

- The supplies being ordered are appropriate to the level of services that are offered at the facility. The facility should not be ordering supplies that its staff is not qualified to dispense or to use correctly.
- The quantity of supplies being ordered is appropriate in terms of issues and stock on hand: order quantities should not result in overstock of supplies (more than the 7 months of stock).
- The quantities of complementary supplies are correct on the basis of medical requirements: if the facility will stock a total of 500 vials of powdered Benzyl penicillin, then they should have 500 vials of water for injection, and not less than 500 syringes as well. Note: This does not mean that the order quantities must be identical. Rather, the total quantity in stock of each product, after the supplies are received, should be similar.
- The quantities of supplies being ordered reflect the standard treatment guidelines. For example, it would be expected that 1<sup>st</sup> line treatments would generally be ordered in larger quantities than 2<sup>nd</sup> line treatments; small



quantities of medicines that are to be used “in rare instances” would be ordered.

- The individual calculations for each product being ordered are correct.
- Assist the Dispensary or Health Center Staff to consider the reasonableness of the request for supplemental funding. The Facility In-Charge and any other facility staff assigned such duties should amend the order until they are satisfied that at least all priority supplies have been ordered and that the additional supplies ordered will meet the health needs of the clients.

The total available funding includes the allocation for the current quarter plus any funds that were not used during previous quarter.

Each district is responsible for developing and communicating to facilities a schedule for all activities related to placing orders and receiving supplies. Based on the group to which the facility belongs, the schedule determines during which months orders should be prepared, during which week orders should be submitted to the district, and during which months the product shipments from the district will be received. Knowing the schedule in advance will help to plan activities at the facility, so that orders can be prepared and submitted on time.

### 5. Late Ordering

If a facility's order is late, it will not be included in that ordering cycle!  
Be sure the facility's order is submitted to the district by the second week of the first month of the ordering cycle.

Remember that every delay in submitting an order means an increase in the chance that the supplies will not arrive on time, thus increasing the risk of a stock-out. If necessary, assign an additional person to help prepare the order so that it can be ready to submit to the district on time.

If, despite the best efforts, an order cannot be submitted on time:

- Prepare the order as soon as possible
- Take the order to the district for review and approval as soon after it has been prepared as possible
- Request the DMO to submit the order to MSD at the first possible opportunity, or, if possible, take the order directly to MSD.

### 6. Emergency Orders

The ILS system is currently NOT designed to handle emergency orders. This is intentional and is based on the recognition that the supply system has no capacity to respond to emergency orders. It is also intended to encourage the facilities to order routinely as planned to forestall the need for emergency shipments. The time taken for ILS orders to move through the system; be filled by MSD; and to be received back at the facility means that it is not agile enough to respond to emergency orders in the true sense of it.

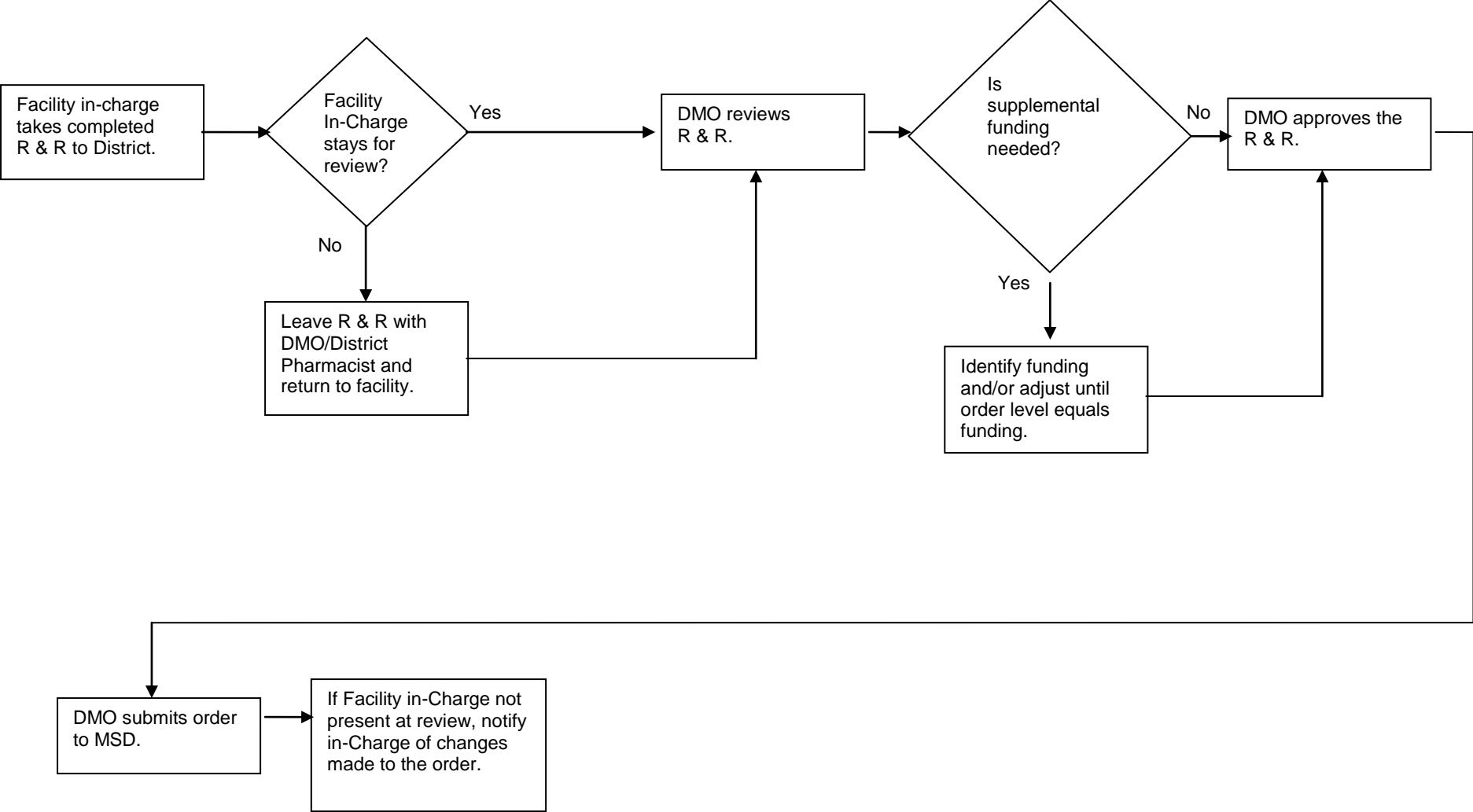
If a health facility runs into the need of an emergency shipment, it is recommended that the facility in-charge liaise with the DMO to obtain the needed supplies through one of the following mechanisms:

- Obtain on-loan the supplies it needs from another facility nearby through transfers.
- Arrange to purchase the needed supplies locally from the open market.
- Arrange to send an individual to directly obtain the supplies from MSD zonal or central.

### ***B. District Review of Dispensary and Health Center Orders***

After an order is completed and reviewed at the facility level, it is taken for review to the DMO or a person he has designated, such as the District Pharmacist or other member of the CHMT. Reviewing an order involves a number of steps. Specifically, the various steps are represented by Chart 1 below.

**Chart 1: Submission and review of R & R Forms**



1) *Facility In-Charge takes Form 2: R&R to district:* Once the R&R has been completed by the Storekeeper, it is ready to be taken to the district for review. The R&R should be received and reviewed at the district level no later than the second week of the month of the quarter.

2) *Can the health facility in charge stay for the review?* Ideally, he/she should be present during the review. There are several advantages to this. For example:

- facility staff can provide input on any changes that need to be made, such as prioritizing supplies that can and cannot be reduced or justifying the purchase of a product.
- facility staff is immediately aware of any changes that are made, particularly if order quantities change.
- facility staff is immediately aware of any budget issues.
- facility staff can learn how to correct any mistakes found on the form.

*If the health facility in charge cannot stay, leave R&R with the DMO and return to the facility.*

3) *DMO reviews the R&R:* The DMO will review the technical aspects of the order for completeness and correctness. As with the Dispensary or Health Center In-Charge review of the R&R, the District Pharmacist should verify that:

- The supplies being ordered are appropriate to the level of services that are offered at the dispensary or health center. The facility should not be ordering supplies that its staff are not qualified to dispense or to use correctly.
- The quantity of supplies being ordered is appropriate in terms of issues and stock on hand: order quantities should not result in overstock of supplies (more than the 7 months of stock).
- The quantities of complementary supplies are correct on the basis of medical requirements: if the facility will stock a total of 500 injections, then they should have not less than 500 syringes as well. Note: This does not mean that the order quantities must be identical. Rather, the total quantity in stock of each product, after the supplies are received, should be complimentary.
- The quantities of supplies being ordered reflect the standard treatment guidelines. For example, it would be expected that 1<sup>st</sup> line treatments would generally be ordered in larger quantities than 2<sup>nd</sup> line treatments; small quantities of medicines that are to be used “in rare instances” would be ordered.
- The individual calculations for each product being ordered are correct.

The total available funding includes the allocation for the current quarter plus any funds that were not used during previous quarters.

See the Job Aid for Reviewing and Finalizing Form 2A-C for detailed instructions.

4) *Is supplemental funding needed?:* If the total cost of the facility order exceeds the total allocation available, then the District Medical Officer, in collaboration with the DED, must identify additional funds that might be available.

The DMO assesses the availability of funds from the CHF, NHIF or other funds that may be available to help cover the total cost of the facility order and this is noted on

the R&R form. Once all available supplemental funding is identified, the total cost of the order is again compared to the available funding. If available funding is greater than or equal to the cost of the order, the order can be approved as-is.

5) *Adjusting Order Quantities.* When the district is compelled to reduce order quantities due to budget limitations, the quantities should be adjusted until the total value of order is equal to or less than funding.

The following are some steps that can be taken:

Replace the expensive version of a product with a less expensive product of the same therapeutic value.	This will help ensure that an illness can be treated.
Reduce the order quantities of as few supplies as possible.	This will keep the number of supplies at risk of future stock out to a minimum.
Reduce the order quantities of supplies that are closest to their maximum stock level.	This will reduce (but not eliminate) the likelihood of a stock out.
Reduce the order quantity by one unit of issue at a time.	This will allow ordering the maximum quantity of a product while still reducing the overall cost.

If the quantities ordered do not reach the maximum stock level, then there is an increased chance of a stock out of the product in the near future. Therefore, adjustments should be made with care.

In the event that the Facility In-charge was not present when the R&R was reviewed, district staff must ensure that the facility is notified of any changes that were made to its orders, so that the facility can plan accordingly. The bottom copy of the R&R submitted to MSD should be given to the facility as soon as possible with notice of the changes made.

In order to ensure that facilities receive their shipments according to schedule, the DMO must submit the R&Rs so that they are received by MSD no later than the end of the third week of the month.

6) *District Medical Officer approves the R&R:* Once the available funding is sufficient to cover the cost of the order through government allocation, by identifying other funding sources, by reducing order quantities, or through a combination of the three, the DMO approves the order and prepares it for transmittal to MSD.

Copies of the R&R are distributed as follows:

- original (copy A) is sent to MSD

- duplicate (copy B) is retained by the DMO
- triplicate (copy C) is retained by the facility

7) *District Medical Officer submits orders to MSD:* Each month the DMO collects the R&Rs submitted by the appropriate group of facilities (A, B, or C) and sends the facility orders to MSD. The DMO prepares a cover sheet, *Form 3: Order Compilation*, on which he lists all facility orders being submitted. (See the *Job Aid, "Completing Form 3: Order Compilation"* for detailed instructions.)

### **C. Role of the DMO in Order Scheduling**

In order to spread the workload for dispensary and health center orders, the DMO should divide facilities in the district into three groups: Group A, Group B, and Group C. Each group will initiate its orders during the assigned month of each quarter (see the sample calendar below), with the related tasks being done over the two months following placement of the order. In other words, at the same time that one group (A, B, or C) is placing an order, another group's order will be in process at MSD, another group will be receiving its previous order, and so forth.

Facilities should be grouped to facilitate product deliveries while minimizing the need for resources (time, vehicles), taking into account geographic location, existing roads, shipment quantities, and other factors.

To assist in dividing the facilities into three groups, use *Worksheet 1, Assignment of Facilities to Delivery Groups*. See the *Job Aid, "Completing Worksheet 1 Assignment of Facilities to Delivery Groups"* for detailed instructions. Be sure to inform facilities to which group they belong, so that they can place their orders on time.

It is the responsibility of each district to divide its facilities into three groups and to determine the specific schedule that will be followed, within the following guidelines:

- Facilities are to prepare their orders during the first week of the month during which they place an order.
- Facilities must submit their orders to the DMO by the end of the first week but no later than the end of the second week of the month during which they place an order
- Districts must review and approve the order and the funding for the order in the second week of the month during which the order is being placed; the review should take place in the presence of the Dispensary or Health Center In Charge
- Districts must submit the orders (R&Rs) to MSD no later than the end of the third week of the month during which the order is being placed

Under the scheduled delivery system, MSD delivers packed and sealed facility shipments to districts who then deliver to facilities. In order to ensure that supplies arrive at the facility by the time they are needed, MSD and the districts follow a schedule (see below) based on the dates the orders are submitted. In most cases, MSD will need 5 weeks to process an order and deliver supplies to the districts; the districts will need 1 – 2 weeks to deliver supplies to the facilities.

The ordering process repeats itself quarterly, so that each facility makes four orders each year as follows:

Group	Orders During	Based on data from
A	January	October-December
	April	January-March
	July	April-June
	October	July-September
B	February	November-January
	May	February-April
	August	May-July
	November	August-October
C	March	December-February
	June	March-May
	September	June-August
	December	September-November

The chart below shows the ordering schedule for a year:

## Schedule of Order Cycle Activities for the Year

Order being...	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
<ul style="list-style-type: none"> <li><b>Prepared</b> R &amp; R completed by facility based on data from past 3 months and submitted in Week 1 of the month. District approval and submission to MSD by Week 3 of the month</li> </ul>	A	B	C	A	B	C	A	B	C	A	B	C
<ul style="list-style-type: none"> <li><b>Processed</b> Orders packed by MSD and prepares to deliver to the District by Week 2 of the following month</li> </ul>	C	A	B	C	A	B	C	A	B	C	A	B
<ul style="list-style-type: none"> <li><b>Received</b> District receives shipment from MSD and arranges delivery to the facilities by Week 3 of the month</li> </ul>	B	C	A	B	C	A	B	C	A	B	C	A

This cycle of activities will repeat from year to year.



#### **D. Role of the District DMO in Compiling Orders**

By the end of the second week of the month, the DMO should have received all of the *Form 2: R&R* from the dispensaries and health centers in the district in group A, B, or C. If not, the District DMO should immediately follow up with dispensaries and health centers that have not reported. The DMO should review and approve the forms.

After collecting all *Form 2: R&Rs*, the District DMO should:

- Complete *Form 3: Order Compilation* with the details on the form, keeping copy 2 of the form as a reference
  - determine which dispensaries or health centers have completed their orders (and follow up during the week with those that have not reported)
  - determine which facilities have requested and received supplemental funds for their orders
  - determine the total amount of supplemental funds that must be submitted to MSD to pay for orders
- Obtain a cheque for the total supplemental funding from the appropriate financial authority
- Submit copy 1 of the completed *Form 3: Order Compilation*, copy 1 of all *Form 2: R&R* from each facility, and the cheque for payment of supplemental funds payable to MSD.
- File copies of the forms as a reference

Larger districts may need to use more than one page of *Form 3: Order Compilation* in order to include the orders from all of its facilities, although only one ordering group should be ordering.

See the *Job Aid, Completing Form 3: Order Compilation* for detailed instructions on how to complete the form.

All facility orders compiled by the DMO should be submitted to the MSD Zonal Store by end of the third week of each month for the appropriate ordering group (A, B, or C.)

#### **E. Ordering at the Hospital Level**

Hospital orders should be prepared by the Hospital Pharmacy In charge, working with the hospital therapeutic committee.

Hospital orders should be placed using *Form 2B: Hospital Report & Request for Priority Medicines and Related Supplies and Equipment*. This form is different only in that there are more supplies pre-printed on this form as compared to *Form 2A: Dispensary or Health Center R&R*. The Hospital will, however, likely need to include a number of additional supplies that do not appear on the form. Therefore, hospitals

should use *Form 2C: Blank Report & Request for Additional Medicines and Related Supplies and Equipment* to order supplies not pre-printed.

All of the steps in Section V, sub-section A above, should be applied to hospital orders. See the *Job Aid: Completing Form 2A: Dispensary or Health Center Report & Request for Priority Medicines and Related Supplies and Equipment, Form 2B: Hospital Report & Request for Priority Medicines and Related Supplies and Equipment, and Form 2C: Blank Report & Request for Additional Medicines and Related Supplies and Equipment at the Dispensary or Health Center or Hospital* for detailed instructions.

The Medical Officer In-charge will approve the hospital's order and will approve the use of the hospital's drug allocation, including the use of any supplemental funding.

The Hospital Pharmacy In-Charge should, after getting the approval of the hospital's HTC, submit the hospital's order to the nearest MSD zonal store for filling.

Hospital orders should be placed quarterly, with the months of ordering being as per their ordering cycle determined at the beginning of the ILS implementation or whenever they join the program, (based on consumption in previous 3 months as appropriate).





## VI. ISSUING SUPPLIES BY MSD TO DISTRICTS

Supplies for dispensaries and health centers are shipped from MSD through the DMO's office. The process involves steps at MSD, between MSD and the districts and then between the districts and the facilities. Supplies for hospitals are delivered to hospitals directly from MSD zonal warehouses.

### A. MSD's Role in Drug Supply

The steps involved in issuing supplies from MSD to the Facilities include:

#### 1. MSD receives facility orders (R&Rs)

MSD receives the approved facility orders that are sent in by the DMO. Orders should reach MSD by end of the 3<sup>rd</sup> week of the month when the orders are submitted.

#### 2. MSD reviews the orders

MSD will review the orders that it receives to ensure that allocated funds are available or that supplemental funds have been provided by a cheque that is sent with the order. For any orders that are not fully funded, MSD will adjust the quantities to match available funds.

#### 3. MSD fills the orders

MSD staff members pick and pack the supplies and seal them in cartons. Inside one carton from the shipment, MSD will include *Form 4: MSD Sales Invoice*, *Form 5: Customer Statement of Account*, and *Form 7: Verification and Claims Form*. The *Sales Invoice* will note the exact quantities of each product that were shipped; the facility will use this information to verify that all shipped supplies have been received. *Form 5: Customer Statement of Account* will inform the facility of its remaining allocation that can be used to cover the cost of future orders. Remember that allocated funds that are not spent during one quarter will be available for use during future quarters.

#### 4. MSD delivers the orders

MSD assembles all of the cartons in the shipment going to each district. Based on the established delivery schedule, MSD vehicles deliver the shipments to each district with the shipments arriving at the district during the second week of the third month of the ordering cycle (see section V-C). MSD will also include *Form 6: Goods Received Note (GRN)* to be signed at the District on delivery. The district will also receive copies of all the *Form 5: Customer Statement of Account* of all the facilities included in the shipment just delivered.

If supplies do not arrive at the scheduled time, the district should contact MSD and try to determine when the shipments will arrive. While waiting for the shipment to arrive, the district can develop an emergency distribution plan. If possible, the DMO or any other assigned person should also notify the facilities of the situation, including the date the district expects to deliver the shipments, so that the facility will be prepared to receive the shipments.

## 5. DMO receives the cartons for the facilities

The district pharmacist/store In-charge or any other appointed person receives the shipment by signing *Goods Received Note* for the shipment and stores the cartons in the storeroom.

### **B. Role of MSD zonal warehouses in Issuing Supplies to Hospitals**

Hospital orders are filled at MSD zonal warehouses. Hospitals are expected to deliver their orders directly to MSD zonal warehouses and can pick up their medicines and related supplies and equipment. MSD can generally pick and pack the orders immediately and will also provide *Form 5: Customer Statement of Account*. Otherwise, MSD will deliver the order to the hospital.

### **C. Role of the DMO in Delivering Shipments to health facilities**

The DMO shall ensure timely availability of transportation to deliver facility shipments within the established timeframe.

In order for districts to perform this task, these steps must be followed at the district level:

#### 1. Obtain funds for deliveries

No later than the end of the 3<sup>rd</sup> week of each month, the DTO (District Transport Officer) requests funds to be available for the delivery of orders. With orders being delivered to approximately one-third of the facilities in the district each month (i.e., Group A/B/C), this should become a routine activity for the DTO.

#### 2. Issue order to dispatch supplies

Not later than the 1<sup>st</sup> week of the month the DMO instructs the DTO to dispatch the shipment to the group of facilities due for delivery that month.

#### 3. Dispatch the shipment to health facilities

The District Pharmacy store in-charge will prepare a transaction record (waybill, issue voucher) to accompany and verify the quantities and conditions of the cartons delivered to the facilities to be signed by the facility in-charge upon delivery of the cartons. The pharmacy store in charge and the driver should check the cartons as they are being loaded to ensure that they have not been tampered with. Cartons should be loaded in a manner to facilitate delivery, with the cartons to be delivered last stacked near the front of the truck, and the cartons to be delivered first stacked near the back of the truck. If other supplies, such as kerosene or chemicals, are being loaded on the same truck with the health supplies, special care must be taken so that those supplies will not come into contact with and damage or contaminate the cartons of health supplies.

The scheduled delivery system is designed to facilitate the movement of supplies from the district to the facilities and recognizes the fact that it is easier to arrange transport from a district to a facility than from a facility to a district. If facilities are frequently required to come to the district to pick up their orders, supplies are more likely to arrive late at the facility and the risk of stock outs will increase.

#### 4. Deliver Supplies at the facilities

The driver and a member of the Council Health Management Team (CHMT) drive to each facility on the delivery schedule/route. Once at each facility, the driver and CHMT member identify the shipment for that facility (the cartons to deliver to the facility), off-load and hand over to the Facility In-charge. The In-charge should sign district generated transaction record, which notes the number of cartons that have been sent by MSD. (In some districts, a copy of the MSD *Form 6: Goods*

If possible, a member of the CHMT should accompany all deliveries. This will facilitate supervision as well as ensure proper delivery of supplies.

*Received Note* received with the shipment may accompany the shipment to the health facilities). The cartons should be inspected for damage, and any remarks should be noted on the shipping documents. Once all of the supplies have been delivered to the facilities on the route, the driver or the CHMT member who accompanied the shipments returns the signed transaction records to the DMO.

Districts are responsible to deliver supplies to health facilities. If this proves absolutely impossible, the district will drop the supplies at a nearby facility from which it will be the responsibility of the facility to pick up the supplies.

#### ***D. Role of the Dispensary or Health Center In charge in Issuing Supplies within a Facility***

The goal of the ILS is to ensure that the majority of supplies are kept within the secure storage area, while also ensuring that the service providers have sufficient supplies to serve end users. A key to the success of the ILS is controlling the movement of supplies within a facility.

As a general rule, storekeepers should issue supplies one unit pack at a time. Consequently, a facility should generally not have more than one open bottle or box of any product at one time unless the product is dispensed in more than one location. An exception would be in smaller facilities, where the Storekeeper may wish to make issues in only one quarter or one half of a tin at a time. This practice can be difficult, because of the need for similar, clean containers, and proper labeling of the containers.



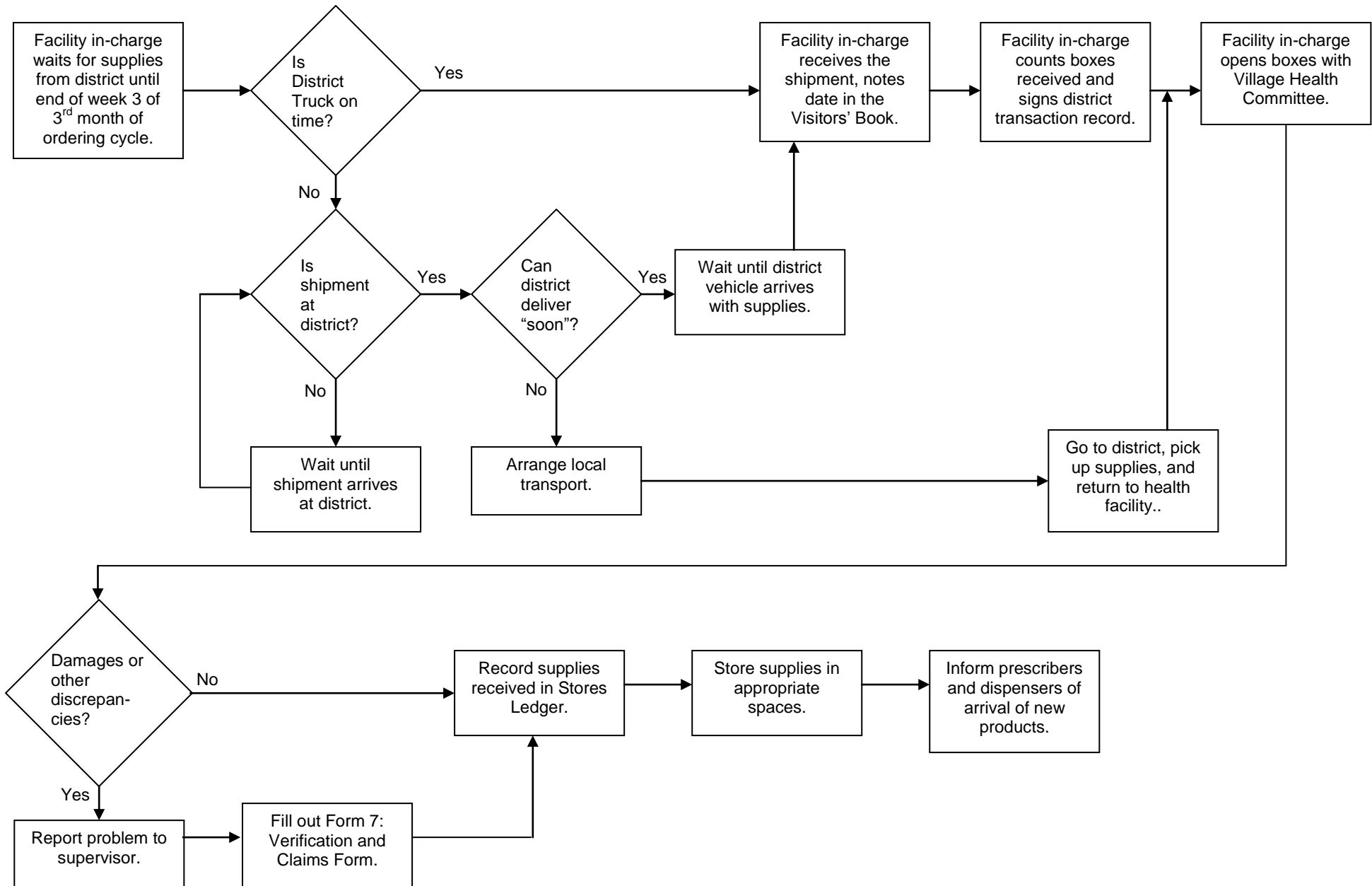


## **VII. RECEIVING SUPPLIES AT DISPENSARIES, HEALTH CENTERS, AND HOSPITALS**

### ***A. Dispensary and Health Center Level***

It is the responsibility of the DMO to ensure that the pre-packaged supplies received quarterly from MSD are delivered to each facility in time. The process by which the supplies are received at the facility can be represented by Chart 2.

**Chart 2: Receiving Supplies**



- 1) Facility waits for supplies from district until week 3 of month 3 of the quarter.— According to the delivery schedule in Section V-Ordering, supplies should be delivered from the DMO to health centers and dispensaries by the end of the third week of the third month of the quarter. (For example, if the quarter is Feb/Mar/Apr, the expectation is that the order will be received within the third week of April.)
- 2) Is delivery on time?—The Facility-In-charge should check to see if the truck coming from the district is on time.
  - 2a) Shipment at district?—If the supplies do not arrive on time, the facility in-charge should contact the district to determine if MSD has delivered the facility's order to the district.
  - 2b) Wait until shipment at district.—If the facility's order is not at the district, the facility should wait until it has arrived.
  - 2c) Shipment at the district but not delivered to the facility on time? -Facility in charge should follow up with the DMO. Determine if the District can arrange to deliver the shipment in good time, otherwise, arrange pick up.
- 3) Facility receives shipment, noting date on the district generated transaction record.—The facility should maintain records of the GRN or the district generated transaction record to enable monitoring of deliveries. The district should deliver these cartons, intact, to the facilities. At the facility, the facility in-charge will count the number of cartons and sign for that receipt. The contents of the cartons will not be known until they are opened later.
- 4) Open cartons with a Village Health Committee (VHC) member and two other witnesses present.—As soon as possible after the shipment arrives at the facility the in-charge should notify the VHC and arrange for a member(s) to be present for the opening of the carton. It is necessary that this step be completed immediately after the receipt of the sealed cartons. If no member of the Village Health Committee is available, the facility in charge should contact the village government which would name a person to be a witness. Both the facility in-charge and the Village Health Committee member, and witnesses should compare what is delivered with what is on *Form 4: MSD Sales Invoice*. In case of any discrepancies, unacceptable shelf life, or damage, the facility in-charge should fill out and sign *Form 7. Verification and Claims Form* in triplicate (packed inside one of the cartons) to be signed by all three witnesses. A copy of Form 7 is retained at the facility, a copy is sent to the DMO and the original sent to MSD.

See the *Job Aid, Completing and Interpreting Form 7: Verification and Claims Form* for additional information.

The box will also contain *Form 5: Customer Statement of Account* which should be given to the Facility In charge. The statement of account will be used to determine the amount of the central allocation that can be spent for the next order. See the *Job Aid, Interpreting Form 5: Customer Statement of Account* for additional information.

- 5) Record receipt in *Stores Ledger*—All acceptable supplies should be recorded in the *Stores Ledger/MTUHA Book 4*. Unacceptable supplies should be quarantined (separated) into a special area to ensure that they will not be dispensed. Facilities should return unacceptable supplies to the district. Unacceptable supplies returned from the district will be returned to MSD, during the next MSD delivery.

*See the Job Aid, “Updating Stores Ledger” for detailed instructions.*

- 6) Store supplies appropriately —See Section VIII, Storing Medicines and Related Supplies. Remember to store supplies so that the supplies first to expire are the first to be issued (FEFO, first expiry, first out).
- 7) Inform Prescribers and Dispensers of arrival of supplies.—These staff members should be informed so they are aware of the new shipment, particularly if a product was previously stocked out.

## **B. The Hospital Level**

The process by which district hospitals, regional hospitals, and referral hospitals receive supplies from MSD is essentially the same with the following minor differences:

- Orders from MSD should be received by the hospital by the end of the 2<sup>nd</sup> week of the 3<sup>rd</sup> month of the quarter.
- The hospital should take their order directly to the MSD Zonal Store and can pick up the supplies directly. Otherwise, MSD will deliver the order to the hospital.
- The sub-HTC should witness the receiving of shipments in accordance with their responsibilities as specified in the functions of the HTC.

## **C. Handling Orders that have been Modified by MSD**

### 1. Modifications because MSD is out of stock

MSD is designated as the primary supplier of health supplies in Tanzania. However, in instances when needed supplies are not available at MSD, DMOs can make purchases from local suppliers on behalf of the dispensaries and health centres, the hospital local purchases are taken care of by the Medical Officer in-charge. All outside orders must be paid for through funds that are accessible through the district, such as CHF, NHIF, or other locally managed funds. Another important consideration is price; the district must ensure that the prices paid for supplies purchased from outside suppliers are competitive. For local purchases, the Public Procurement Act must be adhered to.

Local purchases should be a last resort, and should only be made after it is confirmed that MSD will not be able to provide the product. MSD will do so *on Form 4: MSD Sales Invoice*.

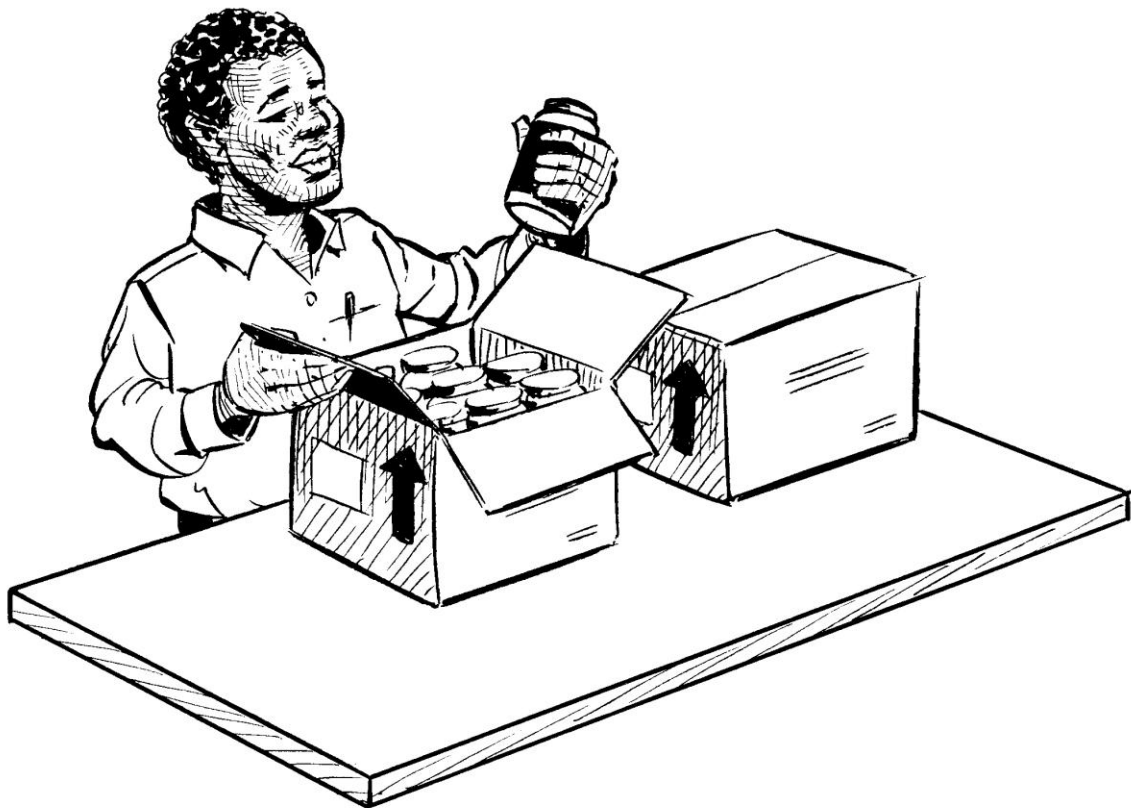
## 2. Supply of new products not ordered by the facility

Sometimes a product that was not ordered on the R&R will be shipped by MSD. This may happen when a specific program within the Ministry of Health and Social Welfare is beginning a new activity that requires a new product.

If the product is unfamiliar, get instructions on how to use/dispense the product before using it.

## 3. Modification to the total cost of the order

Facilities and hospitals may find, when reviewing *Form 5: Customer Statement of Account*, that the total cost of the facility's order has actually been changed. This may be a result of changes in product prices at MSD that affect the total cost of the order. This may also result from MSD sending donated products to the health facilities hence not charging the facility for that product.





## VIII. STORING MEDICINES AND RELATED SUPPLIES

Storing is the safe keeping of medicines and related supplies to avoid spoilage and theft. Medicines and medical supplies are expensive; they should therefore be stored under the correct combination of temperature and security.

Storage conditions will affect the quality of the supplies being stored. Rooms that are too hot, stacks of cartons that are too high, and other poor storage conditions can cause damage to health supplies. Maintaining storerooms in the suitable condition possible helps ensure that supplies will not become damaged or otherwise will be wasted. Also, a well-organized storeroom will simplify a facility's work; time will not be wasted trying to find needed supplies.

### A. Stores Organization and Shelving

Organize the storage facility following these guidelines:

- Organize the storage area into zones as needed: a cold storage area for vaccines and other supplies requiring cold storage; a secure room or locked cage for narcotics and controlled substances; a zone in which to store flammable materials, ideally in a separate building or room.
- Within each area, group health supplies by product type/form. This means that all tablets/capsules will be stored together, all syrups together, all injectables together, and so on. Liquids should be stored on lower shelves. Non-drug consumables will also all be stored together.
- Within grouping by product type, arrange supplies in alphabetical order according to their generic name, not brand or trade name.
- Have a specific place for each product and mark the shelf with the generic name of the health product or non-drug consumable.
- Organize the storage area in an orderly manner so health supplies can be found easily and re-stocked easily.
- Organize supplies on their shelves according to FEFO, first-to-expire, first-out. Put supplies that will expire sooner in front of or on top of supplies that will expire later.

Do not issue supplies if they will not be consumed before they will expire.

### B. Guidelines for Storage

The purpose of storage is to protect the quality and package integrity of supplies as well as to ensure overall product safety, while at the same time making them available for use. In general, supplies should be protected from sun, heat and water. Follow manufacturer recommendations for storing supplies. This information is usually printed on the product cartons and boxes. The following are storage procedures that should be followed at all facilities:

Storage Procedure	Rationale
<p>1. Clean and disinfect storeroom regularly, and take precautions to discourage harmful insects and rodents from entering the storage area.</p>	<p>Rodents and some insects can damage both the supplies and the shipping cartons and inner packaging. To pest-proof the store means to stop the pests from getting in. A clean store keeps pests away. Avoid having food and drinks in the warehouse as these increase the risk of pests.</p> <p>Getting rid of some pests may be difficult and beyond the storekeeper's means. Keeping the storeroom clean, however, should be easy.</p>
<p>2. Store health supplies in a dry, well lit, and well ventilated storeroom—out of direct sunlight.</p>	<p>If the store gets hot, the heat may cause some of the supplies to spoil (i.e., decrease shelf life). For example, the shelf life of oral contraceptives and condoms is generally 4 to 5 years. However, this period may be reduced if temperatures inside the warehouse rise above 40°C. For condoms, shelf life depends directly on storage conditions, and under poor storage conditions shelf life is likely to be much shorter. Although air conditioning is ideal it is expensive. Alternatives are ceiling fans and/or forced ventilation. Direct exposure to sunlight can also reduce the shelf life of supplies. Use roofing and windows that shade the interior of the store from sunlight. Store supplies in their shipping cartons. Moving supplies out of direct sunlight should be easy.</p>
<p>3. Protect storeroom from water penetration.</p>	<p>Water destroys either supplies or their packaging. If packaging is damaged, this makes the product unacceptable to the client even if the product is undamaged. The obvious preventive measure for water damage is to repair the storeroom so that water cannot enter, including leakage from the roof. Other measures include stacking supplies off the floor on shelves (at least 10 cm off the floor and 30 cm away from walls) since moisture can seep through walls and floors and into the supplies.</p>
<p>4. Keep fire safety equipment available, accessible, and functional, and train employees to use it.</p>	<p>Being able to stop a fire before it spreads can save valuable supplies, not to mention the storage space itself. Keeping fire extinguishers or a bucket of sand accessible is easy, even if keeping them in working order may be more difficult. Keeping one near the door is always a good idea. Make sure the right equipment is available—water works on wood and paper, but will not work in an electrical or chemical fire.</p>



Storage Procedure	Rationale
5. Store latex supplies away from electric motors and fluorescent lights.	Latex supplies, including condoms, surgical gloves and catheters, can be damaged if they are directly exposed to the light of fluorescent lamps. These, and electric motors, create a chemical called ozone, which can rapidly deteriorate latex supplies. Latex supplies in their paper boxes and cartons are more protected from this damage and should only be unpacked when necessary.
6. Maintain cold storage, including a cold chain, as required.	Cold storage, including the cold chain, is essential for maintaining the shelf life of medicines that require it. Once these supplies have left cold storage, they may become permanently damaged. Where the flow of electricity is unreliable, bottled gas or kerosene-powered refrigeration may be necessary. Boxes or insulated coolers may be sufficient for rapid transport.
7. Limit storage area access to authorized personnel and lock up controlled substances.	Ensure that all stock movement is authorized, by locking the storeroom, limiting access to persons other than Pharmacy store personnel, and ensuring that both incoming and outgoing stock matches documentation. Also inventory records should be periodically verified by a systematic physical inventory. More than one key to the storeroom should be available to ensure that the storeroom can always be accessed. However, control of a second key should be maintained so that not everyone can access the storeroom. One way to do this would be to have the key in a centrally-located lock box, under the control of the Facility Supervisor.
8. When possible, stack cartons at least 10 cm off the floor, 30 cm away from the walls and other stacks, and no more than 2.5m high.	<p>Shelves should be placed away from walls and far enough apart to allow one to walk freely around each shelf. This promotes air circulation and facilitates movement of stock, cleaning, and inspection. Proper stacking of supplies will avoid crushing cartons at the bottom of a stack. Cartons should be stacked no more than 2.5 meters high. This will also reduce potential injury to facility personnel.</p> <p>Keeping supplies away from walls promotes circulation and prevents cartons from moisture damage that may occur if water condenses or penetrates the walls.</p>
9. Arrange cartons with arrows pointing up (↑), and with identification labels, expiry dates, and manufacturing dates clearly visible.	Arrows indicate that the product should be stored with the arrows pointing up to prevent leakage particularly to fluids and other damages. For example, if Depo-Provera® is stored on its side or upside down, caking will occur making it difficult to mix when one wants to use it. The identification labels help makes it easier to follow FEFO, and make it easier to select the right product. Stress that if shipping cartons do not show either a date of manufacture or an expiration date, the date of receipt of supplies at the receiving facility should be clearly marked on the cartons and in stores ledgers.

Storage Procedure	Rationale
	Write large, easy-to-read numbers with a marker. Rewrite in large numbers the manufacturing or expiration dates if the original markings are small or difficult to read.
10. Store health supplies to facilitate “first-to-expire, first-out” (FEFO) procedures and stock management.	Supplies that have been recently received may sometimes be older than the existing stock.  For products with no expiry date, use the “first-in- first-out” (FIFO) principle. Mark Cartons or packages with the Date of Receipt to facilitate this.
11. Store health supplies away from insecticides, chemicals, flammable supplies, hazardous materials, old files, office supplies, and equipment; always take appropriate safety precautions.	Insecticides and other chemicals may affect the shelf lives of a number of supplies and should be stored in a separate area in the store room. Some medical procedures involve the use of flammable supplies e.g. anaesthetic gases. Bottled gas or kerosene is used to power refrigerators, alcohol is used in sterilization, and mineral spirits is used to power Bunsen burners. These are all highly flammable supplies that should be stored away from other supplies and near a fire extinguisher.
12. Separate damaged and expired health supplies from usable supplies, remove them from inventory immediately, isolate and dispose using established procedures.	By separating these supplies out, FEFO is more easily implemented. By destroying or disposing off damaged supplies right away, more space is available.

### **C. Conducting a Physical Inventory**

A physical inventory is a count of the quantity of each supply in a facility and is one of the most frequent activities in dispensaries, health centers, and hospitals. Because the supplies are actually counted, the inventory information comes from two locations: the quantities on the shelf in the storeroom and from the quantities kept by Dispensers in the facility.

Quantities on the shelf in the storeroom could be taken from *Stores Ledger* book. However, in a physical inventory, the quantity on the shelf should be compared to the quantity recorded on the ledger. If the quantity in the ledger does not match the quantity on the shelf, the ledger should be updated and an adjustment entered. Since the shelf should contain whole bottles of each supply, a physical count of the storeroom can be completed quickly.

The number of tablets in a bottle marked for 1,000 tablets may not be exact because some tablets may have broken during transportation and because manufacturers often weigh the bottles rather than count the individual tablets. For example, a bottle marked for 1,000 tablets may actually contain 998-1,002 tablets.

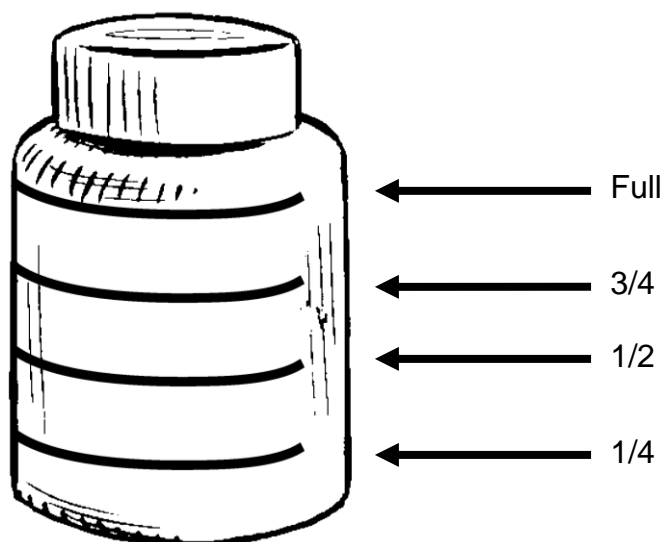
Quantities kept by Dispensers in the facility will also need to be counted. Using the *Stores Ledgers*, the Storekeeper should look for the most recent issues of a product from the storeroom to a Dispenser. The pharmacy store in-charge should then visit the Dispenser to count the product. Some supplies may have been issued to more than one Dispenser. For example, Co-Trimoxazole may have recently been issued to service providers (e.g. STI and MCH clinics). It will be necessary to count the product in both locations.

The stores in-charge should not physically touch or count the tablets in open containers, since handling the tablets may damage them. It will therefore be necessary to estimate the quantity in a bottle to the nearest one quarter of a bottle. For a bottle of 1,000 tablets, one quarter is equal to 250 tablets and for a bottle of 500 tablets; one quarter is equal to 125 tablets.

To help estimate the quantity in a bottle, Dispensers may follow these steps when opening a new bottle:

- Remove any inner seal or cotton wadding.
- Tap the bottle lightly to settle the tablets.
- Using a wax crayon or marker, mark the top of the bottle where the tablets stop. Bottles are rarely filled to the top.
- Mark a point halfway between the first mark and the bottom of the bottle.
- Mark a point halfway between the second mark and the bottom of the bottle.
- Mark a point halfway between the first and second marks.

The bottle should now be marked in quarters, as in the picture below:



When estimating closing balance, use the marks on the side of the bottle to estimate each quarter of a bottle.

The physical inventory for the facility is the total of the quantity on the shelf in the storeroom plus the quantities held by all dispensers. For example, if there are two tins of 1,000 tablets on the shelf and an estimated 250 tablets (one quarter of one tin) held by a dispenser, the inventory for the facility is the total or 1,250 tablets. The total is used to complete Forms 2A-C: Report & Request for Medicines and Related Supplies and Equipment.

It is necessary to count the stock both in the storeroom and with Dispensers because Dispensers may be holding significant quantities of a product, especially in a small dispensary. For example, consider a dispensary that has one bottle of 1,000 Vitamin A capsules on its shelf. When that bottle is issued to a Dispenser, the balance on *Stores Ledger* is 0. However, the actual stock is the 1,000 capsules that remain with the Dispenser. If an order were placed, it would appear that a stock out had occurred, when in fact, there was no stock out. Additionally, using the formula would result in ordering a new bottle of Vitamin A, when none was truly needed. Thus, when Dispenser stocks are not included, over-ordering will occur. It is therefore important to include stock available within the entire facility.

#### ***D. Disposal of Unusable Supplies***

Unusable health supplies should be disposed of in accordance with established guidelines. The disposal of unusable supplies should be done as quickly as possible so they do not occupy space in the store that could be used for serviceable supplies.

#### ***E. Cold Chain Storage***

The potency of vaccines, sera, HIV test kits, some ARVs and many other items depends on cold storage. Vaccines, in particular must be kept at precisely controlled temperatures from the point of manufacture to the point of administration.

Cold chain storage includes all of the previously mentioned guidelines for storage. In most facilities, the storage of cold chain supplies (such as some HIV test kits, reagents for syphilis testing, and anti-snake venom) will require sharing the space in the vaccine refrigerator. The health facility staff should minimize the number of times the cold store is accessed. Additionally, a temperature card or board (often a chalk board) should be used to note the temperature of the cold storage twice daily. Remember to check the manufacturer's instructions on the vials or cartons—some supplies, like HIV tests, require cool storage (generally 2-8 °C) while others, like some vaccines, require cold or frozen storage (-20-0 °C). Supplies must be stored at all times within the correct temperature range.

#### ***F. Quality Control through Visual Inspection***

Visual inspection is the process of examining supplies and their packaging by eye to look for obvious problems with product quality. The health facility staff in-charge of stores should conduct a visual inspection each time supplies are being handled; when receiving, issuing, or dispensing supplies, or when conducting physical inventory.

##### **1. What to look for when inspecting supplies**

Supplies of different types show damage in different ways. Here are some common ways to detect this damage.

Tablets: For tablets of the same drug and dose, be sure that:

- Tablets are identical in size, shape and color
- Tablet markings are identical (scoring, lettering, numbering)
- There are no defects such as spots, cracks, stickiness, etc.
- There is no unexpected odor when bottle is opened

Capsules: For capsules of the same drug and dose, be sure that:

- Capsules are identical in size, shape and color
- Capsule markings are identical (lettering, numbering)
- There are no defects such as spots, cracks, stickiness, etc.
- There are no empty, open or broken capsules

Parenterals: For injectable medicines, be sure that:

- Solutions are clear, suspensions are milky
- Dry solids are free of foreign particles
- Containers are not leaking

Oral Contraceptives: Be sure to look for:

- Changes in color of pills or crumbling under pressure of a finger.

Condoms: Be sure to look for:

- Lubricant has dried or changed color and/or condom has lost its color or the packaging and/or the condom is broken.
- There is no unexpected odor when the inner box or foil wrapper is opened

2. What to do if supplies in storage show signs of damage or spoilage

- Check expiration date on product or carton.
- If expired, follow procedures for handling of unusable supplies.
- If within the shelf life, check to see if any storage history is available. If "ideal" conditions have probably not been followed, remove any damaged supplies and follow the procedures for handling of unusable supplies. If "ideal" conditions have been followed seek a second opinion on whether products are suitable for use.







## **IX. SUPERVISION OF THE ILS**

This section of the manual generally refers to supervision of health facilities (dispensaries, health centers and hospitals). However, this section is also applicable to regional, zonal, and central-level supervision of districts as well.

### ***A. Overview of Personnel Supervision and Performance Monitoring***

Two of the most important responsibilities logistics personnel carry out are monitoring and supervision. Monitoring and supervision are the backbone of an effective logistics system. Without continuous monitoring of logistics activities and supervision of the personnel who carry out these responsibilities, the overall quality of the logistics system may weaken, which in turn may jeopardize the availability of supplies and the quality of service provided to clients.

There are several reasons why logistics activities should be monitored and personnel supervised on a regular basis:

- to ensure that all records are correctly maintained and reports are submitted in a timely manner;
- to ensure that planned logistics activities are being carried out according to schedule; and
- to ensure that clients are getting the health supplies they need when they need them.
- to ensure that established logistics guidelines and procedures are being followed.
- to identify performance weaknesses and to improve performance by providing immediate on-the-job training as needed; and
- to ensure they have the knowledge and skills they need to effectively manage the logistics system.

Most supervisors agree that if they are to be truly effective supervisors they must know how to complete the tasks they are supervising. In the logistics system this means that supervisors must be able to effectively carry out all of the responsibilities of the personnel at the level below them.

In general, most logistics activities can be monitored by reviewing records and reports. These reviews can frequently be done from an office. For example, checking reports can determine if a facility is maintaining stock balances between maximum and reorder levels, or if there are unusual quantities of supplies expiring or lost.

Effective supervision, on the other hand, can only take place in the presence of the facility staff. Supervisors should plan to spend time supervising and providing on-the-job training during each supervisory visit

## **B. How to Measure the Facilities' Logistics Performance**

1) While monitoring the logistics system from reports look for the following indicators:

- Timeliness of reports: Did the reports arrive within the designated time period? (by the 10<sup>th</sup> of the first month of the ordering cycle)
- Accuracy of the reports: Are the calculations correct? Do the ending balances from one report equal the beginning balances of the following report? Do the numbers reported make sense?
- Completeness of reports: Is all information required included in the report?
- Completeness of reporting: Are reports received from all the facilities that should report?
- Consistency of reports: Do the quantities issued from one level equal the total quantities received at the next level?
- Stockouts: Do the reports indicate any stockouts of any supplies?
- Stocked according to maximum and reorder levels: Are the stock levels within the designated maximum and reorder levels for that facility?
- Losses: What quantities of stock were lost due to theft, damage or expiry?

2) Logistics indicators at the facility

- Orderly arrangement in the stores and the dispensing area
- Proper record keeping
- Stores ledgers are up to date
- Dispensing registers in place
- Cleanliness of the stores
- Cleanliness of the staff
- Adequate storage space

Problems that are found during routine reviews of reports received should be discussed during the next supervisory visit to the facility concerned.

## **C. How to Conduct Supervision**

The following list provides suggestions for how to conduct logistics supervision during a supervisory visit, so that the visit is useful for the person doing the supervision and for the people who are receiving the visit as well. These suggestions can be applied when the supervision is done from a higher level, or when it is done within a facility:

- Conduct supervisory visits based on objective criteria such as job descriptions, motivation of health workers, techniques, the work plan of a given unit, the objectives of the supervisory visit, and the calendar of visits.
- Select the most important observations; organize observations into those that are general observations and those that are specific to the person supervised; provide feedback by giving specific examples of things that need changing and do this in a non-threatening, friendly manner.
- Help the person being supervised to participate in the process: It is important to help the person being supervised to participate because it lets him/her

know that his/her opinions are important, that he/she is part of the solution and can do something about resolving the problem.

- Be ready to provide technical or other assistance when needed. Offer help without removing responsibility for action. When you provide on the job training or coaching do not take over the actual execution of the activity.
- Hold organized and productive meetings with an agenda that meets the needs of the participants (health workers, district supervisors, etc.). Be conscious of workers' needs that can be responded to.
- Show interest in employees but give them independence and responsibility.
- Reinforce positive behavior!
- Take appropriate measures to correct negative behavior!
- Give feedback in a timely manner.
- If discipline is required, be specific and consistent with all employees.
- Ensure that all tasks that are appropriate for the removal of expired/damaged/excess supplies are undertaken.

*Worksheet 2: ILS Supervision Checklist* includes areas for Supervisors to review and discuss when supervising the ILS.



## X. ACTIONS AT THE CENTRAL LEVEL

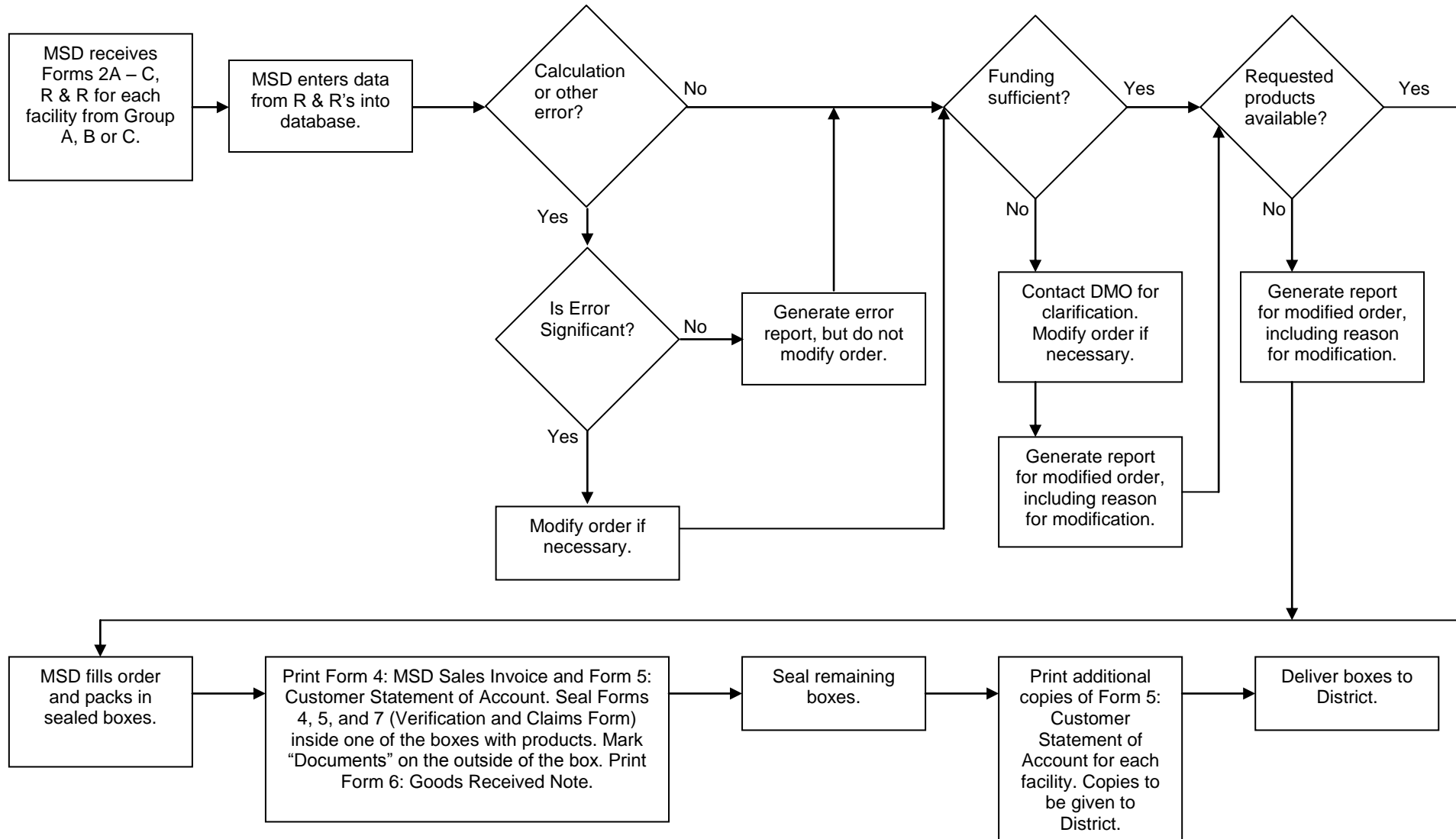
This manual is intended to be used primarily at the facility and district level. However, it may be helpful to understand how the central level will support districts and health facilities and how data will be used to make central-level decisions.

Data entered into the MSD database from *Form 2: Report & Request for Medicines and Related Supplies and Equipment* will be made available to program managers. Program managers will use these data to:

- Follow up with facilities that did not report
- Provide feedback to facilities about their performance
- Trouble-shoot problems in distribution within districts and from the central level to districts
- Work with CHMTs on logistics issues faced in the district
- Monitor overall program performance
- Review MSD's work in distribution, ensuring that all needs have been met
- Forecast annual needs
- Monitor the demand for supplies and adjust in-coming shipments accordingly
- Report to the Ministry of Finance and to donors the disposition of the supplies and funds they have provided
- Work with donor groups to coordinate in-coming donations
- Advocate, promote and ensure inclusion of all health supplies in annual MTEF budgeting process for all programs
- Add/modify/delete supplies included in the ILS, based on actual demand
- Ensure that budget allocations and other complimentary funding mechanisms support the availability of medicines and related medical supplies
- Review the ILS structure and design, modifying it as necessary

The Chart 3 shows what will happen to an order received by MSD.

**Chart 3: Processing Orders at MSD**









## XI. JOB AIDS

This section contains all the job aids listed throughout the manual. These are:

<b>Sub-section</b>	<b>Job Aid Name</b>
A	<i>Opening or Starting a New Page of a Stores Ledger</i>
B	<i>Updating Stores Ledger</i>
C	<i>Opening and Filling-in the Patients Register</i>
D	<i>Opening and Filling-in the Dispensing Register</i>
E	<i>Opening and Filling-in the Injection Register</i>
F	<p><i>Completing</i></p> <ul style="list-style-type: none"> <li>• <i>Form 2A: Dispensary or Health Center Report &amp; Request for Priority Medicines and Medical Supplies and Equipment</i></li> <li>• <i>Form 2B: Hospital Report &amp; Request for Priority Medicines and Related Supplies and Equipment</i></li> <li>• <i>Form 2C: Blank Report &amp; Request for Additional Medicines and Related Supplies and Equipment at the Dispensary, Health Center, or Hospital</i></li> </ul>
G	<i>Handling Stock outs when Completing Forms 2A-C: R&amp;R</i>
H	<i>Reviewing and Finalizing Form(s) 2A and 2C: Dispensary or Health Center Report &amp; Request for Priority Medicines and Medical Supplies and Equipment by the District or Form 2B: Hospital Report &amp; Request for Priority Medicines and Related Supplies and Equipment by the Hospital Therapeutic Committee</i>
I	<i>Completing Form 3: Order Compilation</i>
J	<i>Interpreting Form 4: MSD Sales Invoice</i>
K	<i>Interpreting Form 5: Customer Statement of Account</i>
L	<i>Completing Form 6: Goods Received Note</i>
M	<i>Completing Form 7: Verification and Claims Form</i>
N	<i>Completing Worksheet 1: Assignment of Facilities to Delivery Groups</i>

## Job Aid A: Opening or Starting a New Page of a Stores Ledger

<b>TASK:</b>	Opening a <i>Stores Ledger</i> for the first time or Starting a new page in a ledger
<b>COMPLETED BY:</b>	Dispensary or Health Center in charge or Hospital pharmacy in charge
<b>PURPOSE:</b>	To keep track of supplies at a facility
<b>WHEN TO PERFORM:</b>	Where there is no ledger page for a supply, to start a new page in a current ledger
<b>MATERIALS NEEDED:</b>	One book for <i>Stores Ledger</i> book should be used for each class of supplies—Priority, Additional, Special, pen (blue, black, red)

Step	Action	Notes
1	Select the action by using the following logic: <i>IF</i>	<i>THEN</i>
	Opening a new Stores Ledger book.	<i>Skip to Part A, Step #2</i>
	Starting a new page in a <i>Stores Ledger</i> book.	<i>Skip to Part C, Step #10</i>
<b>Part A: Complete the Cover Information</b>		
2	<b>Facility Code Number:</b> Write the code number for the facility where the Stores Ledger will be used.	This code should be provided to you by Ministry of Health and Social Welfare.  This code can also be found on <i>Form 5: Customer Statement of Account</i> .
3	<b>Facility Name:</b> Write the name of the facility as it appears on MSD forms.	
4	<b>Type of Facility:</b> Write the type of facility.	Facilities can be: <ul style="list-style-type: none"> <li>• (GOV) Government</li> <li>• (NGO) Non-government Organization</li> <li>• (FBO) Faith Based Organization</li> <li>• Other</li> </ul>
5	<b>Name of Council/Region:</b> Write the name of the council (or district) and region in which this facility is located.	
6	<b>Date Ledger Book Opened:</b> Write the date the ledger was started.	New ledgers should be opened when older ledgers are full. Write a reference to the previous ledger on the new ledger.  Example: Continued from Ledger Book #1.
7	<b>Date Ledger Book Closed:</b> Write the date of the last entry in this book.	
8	<b>Ledger No.:</b> Write the serial number of this Stores Ledger.	The ledgers should be serially numbered.  For example: Stores Ledger 1 is the 1 <sup>st</sup> ledger for priority medicines, Stores Ledger 2 is the 1 <sup>st</sup> ledger for additional medicines, etc.
<b>Part B: Number the Pages in the Stores Ledger</b>		
9	<b>Page No.:</b> Number all of the pages in the Stores Ledger.	Start with page number 1 on the first page after the Table of Contents and number all of the pages sequentially.

<b>Part C: Complete the Table of Contents</b>		
10	<p><b>Supply Item:</b> On the Table of Contents page, write the name, formulation and strength of each supply to be noted in the Ledger Book and assign page numbers for each supply item.</p>	<p>Start the item on the next available page number according to any previous listings in the Table of Contents.</p> <p>Entering the names of the items in alphabetical order will facilitate the process.</p> <p>You can reserve a group of pages for fast moving items. For example: Amoxicillin Capsules 250 mg.: 1 – 5 Benzyl Penicillin Pdr F Inj 5: 6 Syphilis RPR: 7 – 8 etc.</p> <p>For items that are being listed in the Table of Contents for the second, third, etc. time, write “Cont.” (Continued) next to the previous entry for the item and the reference to the new page number.</p> <p>Example: Syphilis RPR: 7 – 8, <b>Cont. 33</b></p>
<b>Part D: Start a new page in a Stores Ledger</b>		
11	<p><b>Go to the page number for the item you are noting.</b></p>	<p>Refer to the page number(s) that you assigned in the Table of Contents for the item.</p>
12	<p><b>Description of Item:</b> Write the name, form and strength of the item.</p>	<p>When entering the description of supplies follow the order in the Table of Contents.</p> <p>Example: Amoxicillin Capsules 250 mg</p>
13	<p><b>MSD Code:</b> Fill in the code number designated by MSD for each supply.</p>	<p>The number can be found on <i>Form 2: R&amp;R</i>. If you do not have the number, or if there is no number, leave it blank.</p> <p>Example: 04938298</p>
14	<p><b>Unit of Issue:</b> Write the MSD packing size of the supply.</p>	<p>The “Unit of Issue” is the smallest amount received from MSD. This information can be found in the MSD Product Catalog.</p> <p>Example: EACH, Tin/1,000, Bottle/500, Box/1000, Carton/3000, “For ALu; Dispenser/30” etc.</p>
15	<p><b>Dispensing Unit:</b> Write the minimum dispensing unit for the supply.</p>	<p>The “Dispensing Unit” is the smallest unit that would be dispensed to a client.</p> <p>Example: tablet, capsule, vial, piece, cycle, 'for Alu ; blisters' etc.</p>
16	<p><b>Minimum Stock Quantity:</b> Leave this space empty.</p>	<p>Minimum Stock Quantity is not used for the management of medicines.</p>

17	<b>Start a new page in the ledger.</b>	
	<i>IF</i>	<i>THEN</i>
	<p>Starting a new page in a brand new Ledger Book for the first time, or for starting a new page for a new product:</p>	<p>Under the <b>Date</b> column, write the date on which the page in the ledger was started.</p> <p>Under the <b>To/From</b> column:  → If you are starting a brand new Ledger Book, write “physical inventory.”  → If you have just received the goods from MSD, write “MSD” OR  → If you have received the goods from any other source, write the name of that source here.</p> <p>If you have received goods from MSD, write the quantity received in the “Received From” column.  OR  If you have received goods from any other source, write the quantity received in the “Adjustments” column (as a + adjustment).</p> <p>Under the <b>Balance</b> column, either:  → write the result of the physical inventory of the product you have on hand.  → write the total quantity of product received from either MSD or any other source.</p> <p><b>GO TO STEP 18.</b></p>
	<p>Starting a new page in a Ledger Book because the page in the previous ledger book is full:</p>	<p>Under the <b>Date</b> column of the old ledger page: Write the date on which the page in the old ledger was closed.</p> <p>Under the <b>To/From</b> column of the old ledger page: Write the words “Balance Carried Forward” as the last entry in the old ledger, and indicate the page reference of the new ledger.</p> <p>Under the <b>Balance</b> column of the old ledger page: Write the closing stock balance.</p> <p>Go to the item’s page of the new ledger book.</p> <p>In the <b>Date</b> column: Write the date on which the page in the new ledger was started.</p> <p>In the <b>To/From</b> column: Write the words “<b>Balance Brought Forward</b>” (<b>BBF</b>) and indicate the page reference of the old ledger.</p> <p>In the <b>Balance</b> column: Write the closing stock balance from the previous ledger page.</p> <p><b>GO TO STEP 18.</b></p>

	<p>Starting a new page in a Ledger Book because the old page in the same Ledger Book is full:</p>	<p>Under the <b>Date</b> column: Write the date on which the old ledger page was closed.</p> <p>Under the <b>To/From</b> column: Write the words “Balance Carried Forward” as the last entry on the old page, and indicate the page reference of the new ledger page.</p> <p>Under the <b>Balance</b> column: Write the closing stock balance.</p> <p>Go to the item’s new page of the ledger book.</p> <p>In the <b>Date</b> column: Write the date on which the new ledger page was started.</p> <p>In the <b>To/From</b> column: Write the words “<b>Balance Brought Forward</b>” (<b>BBF</b>) and indicate the page reference of the old page.</p> <p>In the <b>Balance</b> column: Write the closing stock balance from the previous page.</p>
18	<p><b>Remarks:</b> Write any remarks associated with this ledger entry.</p>	
19	<p><b>Initials:</b> Write your initials.</p>	<p>Example: DM</p>
<p><b>THIS TASK IS COMPLETED WHEN:</b></p> <ul style="list-style-type: none"> <li>• The cover of the book is completely filled out.</li> <li>• Every supply to be noted is listed in the Stores Ledger book.</li> <li>• New pages are filled and referenced to previous records.</li> <li>• The person filling in the ledger has put his/her initials.</li> <li>• Table of contents is complete.</li> </ul>		



## Job Aid B: Updating Stores Ledger

<b>TASK:</b>	Updating <i>Stores Ledger</i> when recording receipts, issues, adjustments (issues on loan/losses/receipt on loan), and physical inventory.
<b>COMPLETED BY:</b>	Dispensary or Health Center In-Charge, or Storekeeper and Hospital Pharmacy or Stores in-charge or Storekeeper
<b>PURPOSE:</b>	<ul style="list-style-type: none"> <li>To record supplies received</li> <li>To record supplies issued</li> <li>To track transfers</li> <li>To track losses/adjustments</li> </ul>
<b>WHEN TO PERFORM:</b>	<ul style="list-style-type: none"> <li>When supplies are received or issued</li> <li>When supplies are transferred from one facility to another facility (not from the district or MSD)</li> <li>When supplies are removed from the storage area for reasons other than for issuing to clients (e.g., for demonstrations, expiration, damage)</li> <li>When recording the result of a physical inventory</li> </ul>
<b>MATERIALS NEEDED:</b>	<i>Stores Ledger</i> , pen (red for receipts and blue/black for issues), supplies or receipt or issue voucher

Step	Action	Notes
1	<b>Locate page to record supply transaction:</b> Use the Table of Contents to identify the page you need.	
2	<b>Date:</b> Write the date of the transaction.	
3	Select the transaction and write the appropriate information in the boxes on the ledger.	
	<i>IF</i>	<i>THEN</i>
	Supply received from MSD or District.	<p>In the <b>Ref. No.</b> column: Write the appropriate receipt/ issue voucher number.</p> <p>In the <b>To/From</b> column: Write the Name of the Facility that issued/shipped the supply.</p> <p>In the <b>Quantity Received</b> column: Convert the quantity received into dispensing units and enter the converted quantity.</p> <p>Example: You received 5 tins of 1,000 tablets of Paracetamol tablets 250mg. <math>5 \times 1,000 = 5,000</math>. Enter 5,000 onto the Stores Ledger.</p> <p><i>Skip to Step #5</i></p>

	<i>IF</i>	<i>THEN</i>
	Supply issued from a District to a Dispensary or Health Center, or from a Hospital Storage to a Dispensing Area within the hospital.	<p>In the <b>To/From</b> column: Write in the location where the supply was sent or the name of the person to whom the supply was given.</p> <p>In the <b>Ref. No</b> column: Write the reference number of the transaction (if applicable).</p> <p><b>Quantity Received:</b> Leave this box empty.</p> <p><b>Quantity Issued:</b> Write in the quantity of supply issued. Enter as the total number of Dispensing Units issued.</p> <p><i>Skip to Step #5</i></p>
	Supply transferred in from or to a facility.	<p>Supply Transferred are supplies that have entered or left the facility's supply by means other than the regular flow of supplies from MSD.</p> <p>In the <b>Ref. No.</b> column: Write the reference number of the transaction.</p> <p>In the <b>To/From</b> column: Write in the Name of the Facility to which or from which the supply was transferred.</p> <p><i>Skip to Step #4</i></p>
	Supply locally bought	<p>In the <b>Ref. No.</b> column: Write the reference number of the transaction, if applicable.</p> <p>In the <b>To/From</b> column: Write "Local Purchase".</p> <p><i>Skip to Step #4</i></p>
	Supply damaged in facility.	<p><b>Ref. No.:</b> Leave this box empty.</p> <p><b>To/From:</b> Write "Damage".</p> <p><i>Skip to Step #4</i></p>
	Supply expired in facility.	<p><b>Ref. No.:</b> Leave this box empty.</p> <p><b>To/From:</b> Write "Expired"</p> <p><i>Skip to Step #4</i></p>
	Physical Inventory conducted in facility	<p><b>Ref. No.:</b> Leave this box empty.</p> <p><b>To/From:</b> Write "Physical Inventory".</p> <p><i>Skip to Step #6</i></p>



4	<p><b>Adjustments:</b> Write in the quantity of the adjustment.</p>	<p>Transferred supply can be an increase (positive number) or decrease (negative number) to your supply.</p> <p>If the adjustment increases the quantity of the supply, it is a positive adjustment. Place a + sign next to the adjustment number.</p> <p>Example: Microval + 600</p> <p>If the adjustment decreases the supply of the supply, it is a negative adjustment. Place a – sign next to the adjustment number.</p> <p>Example: Condom - 3,000</p> <p>Supply Locally Bought is an increase.</p> <p>Supply Damaged or Expired is a decrease.</p> <p>Example : Condom - 200</p>
5	<p><b>Balance:</b> Bring the ledger page up to date by calculating the balance and write the quantity in the box.</p> <p><i>Skip to Step #8</i></p>	<p>Quantity Received is an increase to the supply and should be added to the balance.</p> <p>Quantity Issued is a decrease to the supply and should be subtracted from the balance.</p> <p>Adjustments can be an increase or decrease to supply. See previous step and calculate as appropriate.</p>
6	<p><b>Balance:</b> (From Physical Inventory) Count the actual quantity of usable supplies available and write the quantity you counted in the balance box.</p>	<p>Usable supplies should not include supplies that are damaged, expired, or supplies that will expire before they can be issued or used.</p>

7	Select the appropriate action:	
	<i>IF</i>	<i>THEN</i>
	The balance of the previous entry on the ledger equals the quantity you counted in the physical inventory.	<i>Skip to Step #8</i>
	The balance of the previous entry on the ledger DOES NOT equal the quantity you counted in the physical inventory.	<p>There is a possibility that errors were made. Use the following steps to help locate an error or to validate the difference.</p> <ol style="list-style-type: none"> <li>1. Check the ledger for math errors.</li> <li>2. Recount the stock; there could have been an error when counting the stock.</li> <li>3. If the difference still exists after the two previous steps are completed, an adjustment to the stock balance needs to be recorded. In the <b>Adjustments</b> column, enter the quantity of the adjustment, (it can be positive or negative).</li> </ol> <p>Example : Condom + 100</p> <ol style="list-style-type: none"> <li>4. If an adjustment is made, investigate why it had to be made.</li> </ol>
8	<b>Remarks:</b> Write any remarks relevant to transaction just entered	In particular, adjustments should be explained in this box.
9	<b>Initials:</b> Write your initials.	Example: JM
<p><b>THIS TASK IS COMPLETED WHEN:</b></p> <ul style="list-style-type: none"> <li>• The date, and reference number (if applicable), have been recorded.</li> <li>• The transaction is recorded in the To/From boxes</li> <li>• The quantity of the transaction is recorded in the Qty Received, Qty Issued, or Adjustments box.</li> <li>• The balance on the ledger page is brought up to date.</li> <li>• The transactions have been explained in the remarks box.</li> <li>• The person filling in the ledger book has put his/her initials.</li> </ul>		

### Job Aid C: Opening and Filling-In the Patients Register`

<b>TASK:</b>	Opening and Filling-in the Patients Register
<b>COMPLETED BY:</b>	Prescriber(s)
<b>PURPOSE:</b>	To collect and maintain data on patients and medications at the health facility
<b>WHEN TO PERFORM:</b>	When starting the program, receiving a new register or replacing the filled one
<b>MATERIALS NEEDED:</b>	Patients Register, blue or black and red pen

Step	Action	Notes
1	Select the action by using the following logic: <i>IF</i>	<i>THEN</i>
	Opening a new Patients Register	Go to step # 2
	Starting a new day in Patients Register	Skip to step # 9
<b>Opening a new Patients Register</b>		
2	<b>Name of Council:</b> Write the name of the council in which this facility is located.	e.g., Mvomero
3	<b>Name of HC/Disp:</b> Write the name of the facility and level.	Facility name and level: <ul style="list-style-type: none"> <li>• Dispensary</li> <li>• Health Centre</li> <li>• Hospital</li> </ul>
4	<b>Facility Code:</b> This code should be provided to you by the Ministry of Health and Social Welfare.	This code can be found on <i>Form 5: Customer Statement of Account</i> .
5	<b>Period of use</b>	In the “ <b>From</b> ” column: Write the date when the register was started. In the “ <b>To</b> ” column: Write the date when the register was closed
6	<b>Register number</b> __ : Write register number in sequential order depending on the number of prescribers at the facility.	Each prescriber should be given a register. Each prescriber should be assigned a number which will be written in the register.
7	<b>Prescriber’s Name</b>	Write down the prescriber’s name.
8	<b>Prescriber’s Number</b>	Write down the serial number assigned to this prescriber.
<b>Starting a new page/day in a Patients Register</b>		
9	Patient data/record	
	<b>Date:</b> of attendance by patient.	Start each day’s entries with the date.
	<b>Serial number:</b>	Enter the serial number of the patient. Note: Each prescriber has his/her own book and the serial number of the patient is a combination of the prescriber number and the serial number of the patient in order of attendance e.g., The first patient of Prescriber 1 will be 1-0001 and the first patient or prescriber 2 will be 2-0001, etc.
	<b>Subscriber</b>	Write CH for CHF members, NH for NHIF members, EX for those exempted and UF for User Fee

	<b>Attendance Note:</b> A* A or R.	Following letters on PR, left page stand for: A* First attendance this year A: Patient, already registered this year with a new health problem R: Re-attendance = repeated visit for the same health problem
	<b>Patient's name</b>	Write down the patient's name as registered at the facility
	<b>Age</b>	Write the age of the patient as a whole number. For children under a year write the number of months as a fraction of 12, say 5/12
	<b>Sex</b>	Record the sex of the patient
	<b>Village or Hamlet</b>	Record the village or hamlet of residence of the patient
	<b>Diagnosis</b>	You should use more than one line in cases where a patient is diagnosed to have more than one health problem.
10	Filling-in the prescribed medicines	
	All prescribed medicines should be entered into Patients Register	
	<i>IF</i>	<i>THEN</i>
	The prescribed medicines are tablets/capsules or Syrups, suspension or Ointments/Cream	All medicines prescribed in tablet/capsule form their quantities should be recorded in whole numbers (i.e. avoid recording 10½ tablets instead write 11).  All syrups, suspensions/ointments etc. should be recorded in terms of bottles/tube etc. e.g. 1 bottle, 2 bottles etc, but not ½ a bottle 10mls or 30cc etc.
	The prescribed medicine is injection	All injectables should be recorded in terms of the total number of Injections prescribed once. e.g. if you prescribe 5 injections of PPF just write 5 under Procaine Pen. Fortified.
	The prescriber has prescribed an infrequently used medicine.	All " <b>ADDITIONAL MEDICINES</b> " should be written in the blank columns.
11	<b>Prescription number</b>	Complete a prescription form and write down the number of the prescription in the register
12	<b>Value of treatment</b>	Record the cost of medicines prescribed. Write clearly the figures for each type of client (Refer Step 11)
13	<b>Remarks</b>	Write remarks for each patient attended where applicable. <b>Note:</b> Write any remarks and/or all referral cases in the last column on the right hand side page.
14	<b>Recording total units prescribed</b> a. Add up the quantities of each medicine prescribed for every completed page b. Write the total of each medicine per page in the row of boxes at the bottom of each page (Jumla ya kila dawa .. etc.).	

15	<b>Ending a day:</b>	Draw a line in red ink under the last patient record on that day.
16	<b>Starting a new day:</b>	<p>Start a new day by skipping two lines from the previous day.</p> <p>Repeat steps as in Step 11</p>
<p><b>THIS TASK IS COMPLETED WHEN:</b></p> <ul style="list-style-type: none"> <li>• The patient record/data has been filled in the PR.</li> <li>• Prescribed medicines have been recorded in PR.</li> <li>• The prescription number has been recorded in PR</li> <li>• Cost of services provided has been recorded in PR</li> <li>• The remarks where applicable have been written in PR</li> </ul>		

## Job Aid D: Opening and Filling-in the Dispensing Register

<b>TASK:</b>	Opening a new Dispensing Register or making entries for a new day in an existing DR
<b>COMPLETED BY:</b>	Dispenser(s)
<b>PURPOSE:</b>	To record medicines dispensed and related supplies used as per prescriptions at the facility
<b>WHEN TO PERFORM:</b>	When dispensing medicines and related supplies to patients attending the facility
<b>MATERIALS NEEDED:</b>	Dispensing Register, a blue or black pen and a red pen

Step	Action	Notes
1	Select the action by using the following logic: <i>IF</i>	<i>THEN</i>
	Opening a new Dispensing Register	Go to step # 2
	Starting a new day/date in Dispensing Register	Skip to step # 6
<b>Part A: Complete the Cover Information</b>		
2	<b>Name of Council:</b> Write the name of the council to which the facility is located.	e.g. Mvomero
3	<b>Facility Name:</b> Write the name of the facility and level.	Facility name and level: <ul style="list-style-type: none"> <li>• Dispensary</li> <li>• Health Centre</li> <li>• Hospital</li> </ul>
4	<b>Facility Code:</b> This code should be provided to you by Ministry of Health and Social welfare. It is part of the facility identification.	This code can be found on <i>Form 5: Customer Statement of Account</i> or from other official documents.
5	<b>Period of use</b>	In the “ <b>From</b> ” column ..: Write the date when the register was started. In the “ <b>To</b> ” column ..: Write the date when the register was closed
<b>Starting a new day/date in a Dispensing Register</b>		
6	<b>Prescription data/record</b> <i>IF</i>	<i>THEN</i>
	<b>Page number</b>	Serially number each page in the register. Before entering records on each page, write down the page number.
	<b>Date</b>	Record the date of receiving prescription
	<b>Prescription number</b>	Write down the number of the prescription in hand
	<b>Subscriber</b>	Write CH for CHF members, NH for NHIF members, EX for those exempted and UF for User Fee
7	<b>Filling the dispensed medicines</b>	
	Record the quantity of medicines dispensed as per prescription	
	<i>IF</i>	<i>THEN</i>

	<p><b>Frequently used medicines:</b> The list of Priority medicines have been pre-printed in the Frequently used medicines column in the Dispensing Register.</p>	<p>All medicines prescribed in tablet form their quantities should be recorded in whole numbers (i.e. avoid recording 10½ tablets instead write 11).</p> <p>All syrups, suspensions/ointments etc. should be recorded in terms of bottles/tube etc. e.g. 1 bottle, 2 bottles etc, but not ½ a bottle 10mls or 30cc etc.</p>
	<p><b>Infrequently used medicines</b></p>	<p>All “ADDITIONAL MEDICINES” should be written in the heading of the blank columns. This shall be in the same alphabetical sequence from one page to another for the sake of overview of use and consumption. It may be advisable to make a list of all medicines not pre-printed in the register that are managed in the facility and to write these down in alphabetical order when a new register is opened.</p>
8	<p><b>Value of Medicines Dispensed</b></p>	<p>Record the cost of medicines dispensed Write clearly the figures for each type of client Refer Step 8</p>
9	<p><b>Write dispensers initials</b></p>	<p>Each dispenser should write his/her initials to the prescription dispensed and dispensing register</p>
10	<p><b>IF</b></p>	<p><b>THEN</b></p>
	<p><b>You have ended the day but not finished the page....</b></p>	<p>Draw a line in red under the last prescription record on that day.</p> <p>Sum up a total quantity of medicines and value of medicines dispensed that day.</p> <p>Write the total of each medicine and cost in the row of boxes below the red line for that day for that page.</p> <p>Go to Step 11.</p>
	<p><b>You have ended the day AND ended the page...</b></p>	<p>Draw a line in red under the last prescription record on that day.</p> <p>Sum up a total quantity of medicines and value of medicines dispensed for each day on that page.</p> <p>Write the total of each medicine in the row of boxes at the bottom of the page in “Total Unites Dispensed” (Jumla ya kila dawa .. etc) and calculate the total value of all medicines dispensed on that page in the row of boxes near “Subtotal TSHS” at the bottom of the page.</p> <p>Go to Step 11.</p>

	<p><b>You have ended the page but not ended the day...</b></p>	<p>Sum up a total quantity of medicines and value of medicines dispensed for each day on that page plus what has been dispensed thus far for the current day.</p> <p>Write the total of each medicine in the row of boxes at the bottom of the page in “Total Unites Dispensed” (Jumla ya kila dawa .. etc) and calculate the total value of all medicines dispensed on that page in the row of boxes near “Subtotal” at the bottom of the page.</p> <p>Continue to the next page. You will NOT use any of the numbers dispensed from the previous page in the sums of the day the next page.</p> <p>You are finished completing this page and may skip to “This Task is Completed When:”</p>
<p>11</p>	<p><b>Starting a new day:</b></p>	<p>Start a new day by skipping two lines from totals line of the previous day.</p> <p>Repeat steps as in Step 6</p>
<p><b>THIS TASK IS COMPLETED WHEN:</b></p> <ul style="list-style-type: none"> <li>• The prescription date has been filled in the DR.</li> <li>• The prescription number has been filled in the DR.</li> <li>• The dispensed medicines have been filled in the DR.</li> <li>• Cost of medicines dispensed have been recorded in DR</li> <li>• Daily total cost is filled in DR</li> <li>• The dispensers initials have been filled in DR</li> </ul>		



## Job Aid E: Opening or Starting a New Page of the Injection Register

<b>TASK:</b>	Opening an <i>Injection Register</i> for the first time or Starting a new page in an <i>Injection Register</i>
<b>COMPLETED BY:</b>	Nurse at the Injection Room, or other Service provider in the injection room or ward
<b>PURPOSE:</b>	To record the amount of injectables used as per prescriptions at the facility
<b>WHEN TO PERFORM:</b>	Where there is no page in a current Injection register for recording services, when injections are administered at the service point
<b>MATERIALS NEEDED:</b>	Injection Register book, pen (blue, black, red)

Step	Action	Notes
1	Select the action by using the following logic: <i>IF</i>	<i>THEN</i>
	Opening a new Injection Register.	<i>Skip to Part A, Step #2</i>
	Recording Receipts from Store or Pharmacy	<i>Skip to Part C, Step # 10</i>
	Recording injections administered in the <i>Injection Register</i> book.	<i>Skip to Part D, Step #18</i>
<b>Part A: Complete the Cover Information</b>		
2	<b>Name of Council:</b> Write the name of the council (or district) and region in which this facility is located..	.
3	<b>Name of HC/Disp:</b> Write the name of the facility as it appears on Official Ministry of Health and Social welfare documents and MSD forms	
4	<b>Facility Code Number:</b> Write the code number for the facility where the Injection Register will be used	This code should be provided to you by Ministry of Health and Social Welfare.  This code can also be found on <i>Form 5: Customer Statement of Account</i>
5	<b>Period of Use: From:</b> Write the date the Injection Register was started.	New registers should be opened when older registers are full.  .
6	<b>To:</b> Write the date of the last entry in this book.	
7	<b>Register Number</b> Write the serial number of this Injection Register.	The registers in the facility should be serially numbered.  For example: Injection Register 1 is the 1 <sup>st</sup> register, Injection Register 2 is the 2 <sup>nd</sup> Register, started upon completion of the 1 <sup>st</sup> register or kept at a second location for administering injections in the same facility such as the ward or treatment room, etc.
<b>Part B: Number the Pages in the Injection Register</b>		
8	<b>Page No.:</b> Number all of the pages in the Injection Register	Start with page number 1 on the first page and number all of the pages sequentially

9	<b>Name of Injectable:</b> On top of each page, write down the name of the injectable medicine to be recorded on the page.	It will be customary to list all the injections routinely administered in the facility and then to divide the number of pages in the register book, assigning the number of pages proportionate to the amount of its use to each injectable. Write the Full Generic name of the injectable in the space provided, e.g., Benzylpenicillin, Proacine Penicillin Fortified, etc.
<b>Part C: Recording Receipts from facility store or pharmacy</b>		
10	Record all bulk supplies received from facility store or pharmacy in the injection register in RED ink.	
11	<b>Date:</b> Write the date of the transaction.	Dates of receipts should be written with a red pen
12	<b>Prescription Number:</b>	Leave Blank (see 14 below)
13	<b>Patient Name:</b>	Leave Blank (see 14 below)
14	Write the words " <b>Quantity Received</b> " across the columns for Patient Name and Prescription Number	
15	<b>Amount</b> <b>A: Total Received:</b> Write the total number of vials or ampoules received	This is the total number of individual units of injectable received. e.g., if 50 vials of Procaine Penicillin Fortified 4 MU is received, Write 50
16	<b>Balance (mu/mg...):</b> Convert the total number of vials received into the total strength of medication. Add the results to any existing balance and write this down.	This is the total of all the strength of active medication per vial received. e.g., in the example above of 50 vials of Procaine Penicillin Fortified (PPF) 4MU, the total amount of PPF will be 50 X 4MU = 200MU. This number will be entered as such or added to any amount of PPF balance existing at the time of the receipt.
17	<b>Sign:</b> Sign or initial the register against the entries just made.	
<b>Part D: Recording injections administered</b>		
18	<b>Go to the page number for the injectable you are noting.</b>	.
19	<b>Date:</b> Write the date of administration of the injection.	The date should be the date the injection was given to the patient/Client. It should normally be the current date since the records are expected to be made immediately before or after the injection is given. (For a single injection prescribed, the date could be the same as that on the prescription. Otherwise it is the date the service was actually received)
20	<b>Prescription number:</b> Write the number of the prescription.	The number can be found on the prescription submitted by the patient/client. If the prescription bears no unique number leave blank or write in a related number, such as the receipt number is the service is paid for.  Example: 0493
21	<b>Patient Name:</b> Write the recipient of the injection as stated on the prescription form	

22	<b>Age:</b> write the age of the recipient of the injection..	Ages must be expressed as whole numbers. For infants below 1 year old, the age is expressed as a fraction of 12 months. e.g., Write 10/12 for a ten month old child.
23	<b>Dosage:</b> Write the dosage in IU, MU, mg or other strength as specified by the prescription..	Make sure that the dosage actually administered is recorded.
24	<b>Route:</b> Specify with a check mark or a tick in the appropriate column the route of administration used for the injection.	Select <i>i.v</i> for intravenous, <i>i.m</i> for intramuscular and <i>s.c</i> for subcutaneous as appropriate.
25	<b>Amount A: Received</b> Leave Blank	
26	<b>Amount B: Balance</b> Subtract the amount administered recorded in the <b>Dosage</b> column from the balance recorded in the preceding entry and write the results in this column.	The balance should be a reducing number.
27	<b>Sign:</b> Sign or initial the register against the entries just made	
<p><b>THIS TASK IS COMPLETED WHEN:</b></p> <ul style="list-style-type: none"> <li>• The cover of the book is completely filled out.</li> <li>• Every injectable to be noted is listed in the Injection Register book.</li> <li>• Bulks receipts and recorded in red ink in the register.</li> <li>• Injections administered are recorded in the register.</li> <li>• Each entry is signed.</li> </ul>		

**Job Aid F: Completing Form 2A: Dispensary or Health Center Report & Request for Priority Medicines and Related Supplies and Equipment, Form 2B: Hospital Report & Request for Priority Medicines and Related Supplies and Equipment, and Form 2C: Blank Report & Request for Additional Medicines and Related Supplies and Equipment at the Dispensary or Health Center, or Hospital**

<b>TASK:</b>	Completing <i>Form 2A-C: Report &amp; Request for Medicines and Related Supplies and Equipment</i> at the Dispensary, Health Center or Hospital
<b>COMPLETED BY:</b>	Dispensary or Health Center In-charges or Pharmacy in-charge of Hospital
<b>PURPOSE:</b>	<ul style="list-style-type: none"> <li>To report on the quantities of supplies received and dispensed during the quarter</li> <li>To determine order quantities for each supply</li> <li>To provide MOH with data and information on supply usage and stock levels</li> </ul>
<b>WHEN TO PERFORM:</b>	Quarterly
<b>MATERIALS NEEDED:</b>	<p><i>Form 2A: Dispensary Report &amp; Request for Priority Medicines and Supplies and Equipment</i> or <i>Form 2B: Hospital Report &amp; Request for Priority Medicines and Supplies and Equipment</i>, The Stores Ledger book(s) for all storage areas, the most recent <i>Form 5: Facility Statement of Account</i>, pen, calculator. <i>Form 2C: Blank Report &amp; Request for Additional Medicines and Related Supplies and Equipment</i> may also be needed.</p> <p>See Section V-A of the ILS Manual for additional information.</p>

Step	Action	Notes
<b>Select the appropriate form</b>		
1	Select the appropriate form: <i>IF</i>	<i>THEN</i>
	If the facility is a dispensary or health center and ordering Priority Supplies.	Use <i>Form 2A: Dispensary or Health Center Report and Request for Priority Medicines and Related Supplies and Equipment</i>
	If the facility is a hospital and ordering Priority Supplies.	Use <i>Form 2B: Hospital Report &amp; Request for Priority Medicines and Related Supplies and Equipment</i>
	If any facility is ordering Additional Supplies.	Use <i>Form 2C: Blank Report &amp; Request for Additional Medicines and Related Supplies and Equipment</i>
<p><b>Note:</b> All dispensaries and health centers are expected to complete <i>Form 2A: R&amp;R</i> first, by ordering up to their maximum stock level all priority supplies.</p> <p>All hospitals are expected to complete <i>Form 2B: R&amp;R</i> first, by ordering up to their maximum stock level all priority supplies.</p> <p>Facilities can order Additional Supplies using <i>Form 2C: Blank R&amp;R</i>, if funds are available.</p>		
<b>Completing the Top Section of the Page</b>		
2	<b>Facility Code:</b> Write the facility code. This code should be provided to you by the Ministry of Health and Social Welfare.	This code can also be found on <i>Form 5: Customer Statement of Account</i> .
3	<b>Facility Name:</b> Write the facility name.	

4	<b>Type of Facility:</b> Write the type of facility.	Facilities can be: <ul style="list-style-type: none"> <li>• (GOV) Government</li> <li>• (NGO) Non-government Organization (Not for Profit)</li> <li>• (FBO) Faith Based Organization</li> <li>• Other</li> </ul>
5	<b>Name of Council:</b> Write the name of the district where the dispensary, health center, or hospital is located.	
6	<b>Date Submitted:</b> Write the date that the report is submitted.	
7	<b>Reporting Period:</b> Write the period that this report covers. Write in Beginning Month, Ending Month and Year.	Example: February – April, 2004
<b>Calculating the Quantity to Request</b>		
8	If the facility does not manage a supply on the preprinted list, write "N/A" in the Beginning Balance column and leave the remaining columns blank.  Go to the next supply.	"N/A" (not applicable) signifies that the supply is not stocked at the facility, since the facility never uses or never intends to use the supply.
9	<b>Unit of Issue:</b> The unit of issue is pre-printed on <i>Forms 2A</i> and <i>2B</i> . For Additional Supplies, write in the unit of issue.	Use the most recent unit of issue information from the MSD Product Catalog.  Example: Box 500 tabs
10	<b>Opening Balance:</b> Write the stock on hand balance at the beginning of the quarter.	The Opening Balance for the current quarter equals the Closing Balance (column D) from the previous quarter.
11	<b>Received This Period:</b> Write the total quantity of the supply your facility received during the quarter.	The quantity received is found in <i>Stores Ledger Book</i> .
12	<b>Lost/Adjusted:</b> Write the total quantity of losses/adjustment for the quarter. If they were not any losses/adjustments enter 0.	The quantity lost/adjusted is found in <i>Stores Ledger Book</i> .  If the result is a positive place a plus (+) before the number  If the result is a negative place a negative (-) before the number.

13	<p><b>Closing Balance:</b> Calculate and write the Closing Balance for the day the order form is completed.</p> <p><i>Stores Ledger</i>, get the quantity of supply in the storeroom. Then visit the Dispensers of the facility and count the supplies that they have on hand. Note: Estimate the number of supplies in an open bottle.</p> <p>The “Closing Balance” for the facility is total of the quantities on the shelf in the storeroom plus the quantities held by all the facility’s dispensers.</p>	See Section VIII-C of manual for instructions on estimating the supplies in a bottle.
14	<p><b>Estimated Consumption:</b> Calculate and write the estimated consumption for the quarter.</p> <p>The Estimated Consumption (E) equals Opening Balance (A) plus Received This Period (B) plus or minus Lost/Adjusted (C) minus Ending Balance (D)  <math>E = A + B \pm C - D</math></p>	If you experienced a stockout of this supply during the quarter, see the <i>Job Aid G: “Handling Stockouts when Completing Forms 2A-C: R&amp;R”</i> for detailed directions on estimating consumption during the stock period.
15	<p><b>Quantity Needed:</b> Calculate and write the quantity of the supply needed to reach the maximum stock level.</p> <p>The Quantity Needed (F) equals Estimated Consumed (E) divided by 3, multiply the result by 7, and from this subtract the Ending Balance (D)  <math>[(E \div 3) \times 7] - D</math></p>	
16	<p><b>Quantity Requested:</b> Write the quantity of the supply you will order, rounded to the next MSD unit of issue.</p>	<p>Supplies must be ordered and paid for according to MSD units of issue. You may not order less than the minimum unit of issue. Requirements should ALWAYS be rounded to the next higher number of units when necessary</p> <p>Examples:  290 blisters are needed and come in dispensers of 30 blisters. Therefore, 10 dispensers should be ordered.  If 40 blisters are needed round up and order 2 dispensers.</p>
17	<p><b>Price:</b> The price is pre-printed on <i>Forms 2A and 2B For Additional Supplies</i>, write in the price.</p>	Use the most recent pricing information from the MSD Product Catalog.

18	<p><b>Cost:</b> Calculate and write the cost of the supply you are requesting.</p> <p>The Cost equals the Quantity Requested (G) multiplied by the Price (H) for the unit of issue. G x H</p>	Columns J and K are completed at the District level. Leave these columns blank.
19	Select the appropriate condition: <i>IF</i>	<i>THEN</i>
	More supplies need to be requested	Go to step #9. Repeat steps 9 –19 until all supplies on form are requested. There may be several pages of supplies to request.
	All supplies are requested	Continue with step #22.
<b>Calculating the Cost and Funds Allocation for the Supplies</b>		
20	<p><b>Total cost this page:</b> Add up the Cost (I) for each supply on the page and write the total in the Total Cost this page box.</p> <p>Repeat this step for each page.</p>	Leave “Total approved cost this pg.” Blank—this will be completed at the District level.
21	<b>Cost Summary/Total Cost:</b> Transfer the total cost for each page into the appropriate line in the Cost Summary table located on the last page of form 2.	Take care not to make a mistake when copying over the numbers.
22	<b>Sub-total:</b> Add the costs from each page, 1-5.	This is the total cost for all priority supplies.
23	<b>Total cost of additional supplies from Form 2C: Blank R&amp;R (if any):</b> Leave this blank until Step 29.	
24	<b>Total cost of order:</b> Leave this blank until Step 29.	
25	<b>Total available allocation:</b> Write the current total amount of allocated funds available to the facility.	<p>The current amount of allocated funds available is found on the most recent <i>Form 5: Customer Statement of Account</i>. The form arrived in a carton with the last shipment.</p> <p>If allocated funds are not available then write zero.</p>
26	<p>Calculate the funds status by determining the difference between the Sub-total and Total available allocation. The result will determine the next steps.</p> <p>Do the following subtraction, Total available allocation minus (-) the Sub-total</p>	<p>If the result is a positive number, the sub-total is less than total available allocation, resulting in extra funds available.</p> <p>If the result is a negative number, the sub-total is more than total available allocation, resulting in a shortage of funds.</p>

	Select the appropriate condition: <i>IF</i>	<i>THEN</i>
	If there are extra funds (a positive number in step #29.)	<i>Skip to Step #29</i>
27	If Supplemental Funding is needed, (a negative number in step #26.), leave the Total cost of additional supplies from <i>Form 2C: Blank R&amp;R</i> blank and copy the Sub-total into the Total cost of order.	However, even when a facility needs supplemental funding for its priority supplies, it may wish to determine the total cost of additional supplies because the DMO may be able to provide funding to cover these needs. The facility is encouraged to skip to Step 29 and order additional supplies, even if they may not be funded.  <i>Otherwise, skip to Step #28.</i>
28	<b>Supplemental Funding Needed:</b> Write the funding needed. This is the negative number that you got in step #26.  Write the number as a positive number.  <i>Skip to Step # 31</i>	This is the amount of supplemental funding that will need to be requested from the DMO to complete the order.  The DMO will fill out the appropriate forms when he/she review the order.
29	Complete <i>Form 2C Report &amp; Request for Additional Medicines and Related Medical Supplies and Equipment</i> that the facility needs.  Go back to Step #1 and continue, until you reach step #25 Total Available Allocation	Extra funds can be used to purchase additional supplies, up the amount of funds available.
30	<b>Total cost of additional products from Form 2C: Blank R&amp;R.:</b> Write in the total cost from all pages of <i>Form 2C: Blank R&amp;R</i> .	
31	<b>Total cost of order:</b> Add the Sub-total and the Total cost of additional products from <i>Form 2C: Blank R&amp;R</i> .	
	Select the appropriate condition: <i>IF</i>	<i>THEN</i>
32	The new total amount exceeds the total available (from Step #25).	Write the difference under “Supplemental funding needed.” The facility should consider reducing the quantities of Additional Supplies requested on <i>Form 2C: Blank R&amp;R</i> or be prepared to justify the request for supplemental funding for the Additional Supplies.
	The new total amount is less than the total available (from Step #25).	In the unlikely event that funds remain after completing <i>Form 2C: Blank R&amp;R</i> , the funds will be used in the next quarter.



<b>Signing and Approving the Forms</b>		
33	<b>Review the order with the Dispensary or Health Center In-Charge or the Medical Officer In-Charge:</b> Make sure the order is correct and complete and that all priority supplies have been ordered.	In addition to checking for completeness and calculation errors, see section V A and B of the ILS Procedures Manual for more detailed information.
34	<b>Completed By and Signature:</b> Person completing the form writes their name and signs.	
35	<b>Approved By:</b> Completed at the District Level. Leave blank.	
36	Dispensaries and health centers should deliver <i>Form 2A: R&amp;R</i> and <i>Form 2C: Blank R&amp;R</i> , to the District for review by the District Medical Officer.  Hospitals should deliver <i>Form 2B:R&amp;R</i> and <i>Form 2C: Blank R&amp;R</i> , to the Hospital Therapeutics Committee for review and approval.	
37	File bottom copy of <i>Form 2A-C: R&amp;R</i> . When the DMO or HTC has approved the form(s) a copy is filed at the dispensary, health center, or hospital.	
<p><b>THIS TASK IS COMPLETED WHEN:</b></p> <ul style="list-style-type: none"> <li>• The top section of the form(s) is (are) filled in.</li> <li>• Data columns Unit of Issue through Cost have been filled for each of the supplies on the form or the Beginning Balance (col. A) is marked "N/A."</li> <li>• The cost information has been filled on each page.</li> <li>• The cost summary table is filled in.</li> <li>• The form(s) have been delivered to the DMO/District Pharmacist for dispensaries and health centers or the HTC for hospitals for their review and approval.</li> <li>• The bottom copy of <i>Form 2A-C: R&amp;R</i> is filed at the facility after the DMO or HTC has approved the order.</li> </ul>		

### Job Aid G: Handling Stockouts when Completing Forms 2A-C: R&R

<b>TASK:</b>	Adjusting the Quantity Needed on <i>Forms 2A-C: Report &amp; Request for Medicines and Related Supplies and Equipments</i> when a stockout has occurred during the quarter.
<b>COMPLETED BY:</b>	Dispensary or Health Center In-charge or Hospital Pharmacy in-charge
<b>PURPOSE:</b>	To adjust the Quantity Needed
<b>WHEN TO PERFORM:</b>	Quarterly, when supplies are ordered, for those supplies that have stocked out in the entire facility during the quarter. Note: The stockout of Priority Supplies should happen rarely.
<b>MATERIALS NEEDED:</b>	<i>Forms 2A&amp; 2C: R&amp;R</i> for dispensaries or health centers, and <i>Forms 2B and C: R&amp;R</i> for hospitals, calculator, pen, blank paper

Step	Action	Notes
1	On a blank piece of paper, write down the quantity Estimated Consumed from column E for the supply that has stocked out.	Example: 120
2	Count and write down the number of days the supply was stocked out from both storeroom and all dispensary locations.	The number of days for which Form 1: the Stores Ledger balance is 0 and for which the entire facility was out of stock.  Example: 10
3	Subtract the number of days the supply was stocked out from 90, the average total number of days in a quarter. The result is the total number of days the supply was in stock.	90 days is the average number of days in a quarter, including weekends.  Example: $90 - 10 = 80$
4	Divide the number of days the supply was in stock by the total number of days in the quarter. The result is the percentage of time the supply was in stock.	The result is in decimals since we are calculating the percentage of the time that the supply was stocked.  Example: $80 \div 90 = 0.89$ or 89%
5	Divide the Estimated Consumption by the percentage of time in stock. Round to the nearest whole unit. This is the estimated quantity that would have been consumed if the supply had been in stock.	The Estimated Consumption is the figure you wrote down in step #1.  Example: $120 \div 0.89 = 134.83$ or 135
6	<b>Substitute the new figure to calculate the Quantity Needed (column F).</b> Use the formula $E \div 3 \times 7 - D$ . Remember that E is the figure you just calculated. Round to the nearest whole unit.	Example: Assuming the Closing Balance (D) is 0, because of the stockout: $135 \div 3 \times 7 - 0 = 315$
7	Circle the Quantity Needed (column F) to indicate that the figure has been changed.	
8	<b>Complete the rest of the columns on the form.</b>	

**THIS TASK IS COMPLETED WHEN:**

- For supplies that were stocked out during the quarter, the Quantity Needed has been adjusted using the calculations above.
- The adjusted Quantity Needed has been circled to indicate that the figure has been changed.
- The rest of the columns on the form for this supply are completed.

**Job Aid H: Reviewing and Finalizing Form(s) Form 2A: Dispensary or Health Center Report & Request for Priority Medicines and Related Supplies and Equipment, Form 2B: Hospital Report & Request for Priority Medicines and Related Supplies and Equipment, and Form 2C: Blank Report & Request for Additional Medicines and Related Supplies and Equipment at the Dispensary or Health Center, or Hospital**

<b>TASK:</b>	Reviewing and Finalizing <i>Form 2A, 2B and 2C: Report &amp; Request for Medicines and Medical Supplies and Equipment</i> at the District
<b>COMPLETED BY:</b>	DMO and District Pharmacist in consultation with the Facility In-charge for Dispensary and Health Center orders; the Hospital Pharmacy In-Charge for hospital orders, HTC/Hospital Medical Officer In-Charge
<b>PURPOSE:</b>	<ul style="list-style-type: none"> <li>To ensure that supply orders are within available budget</li> <li>To approve order quantities for each supply</li> <li>To ensure that supply orders are within established guidelines</li> <li>To finalize the orders in preparation for submission to MSD</li> </ul>
<b>WHEN TO PERFORM:</b>	<ul style="list-style-type: none"> <li>For the DMO, during the 2<sup>nd</sup> week of each month, for ordering group A, B, or C</li> <li>For the hospital, at the beginning of every quarter.</li> </ul>
<b>MATERIALS NEEDED:</b>	Form 2A-C: R&R for facility, pen, calculator

Step	Action	Notes
<b>Review of order by the District Pharmacist or HTC</b>		
1	<p>Check the timeliness of dispensary or health center reports:</p> <ul style="list-style-type: none"> <li>Was the report received by the end of the second week of the month?</li> <li>Did the dispensary or health center submit their order with the correct ordering group A, B, or C?</li> </ul> <p>Check the timeliness of hospital orders:</p> <ul style="list-style-type: none"> <li>Was the hospital order submitted by the end of the 1<sup>st</sup> week on the ordering month?</li> </ul>	<p>If the report was not received on time, remind the dispensary, health center, or hospital pharmacy in-charge of the importance of timely reporting to avoid stockouts and to better use transport resources.</p>

2	<p>Review <i>Form 2A-C: Report &amp; Request for Medicines and Supplies and Equipment</i> for appropriateness and correctness and correct any errors found on the form.</p> <p>Below are questions to answer:</p> <ul style="list-style-type: none"> <li>• Is the top section of the form complete?</li> <li>• Are all priority supplies on <i>Form 2A</i> or <i>2B</i> that are offered by the facility ordered?</li> <li>• Are the quantities needed (column F) reasonable given the Closing Balance and the Estimated Consumption?</li> <li>• Are the Quantities Requested (column G) correctly calculated based on the unit of issue?</li> <li>• Are the Costs (column I) correct?</li> <li>• On the last page are the Total cost of order and the Total available allocation correct?</li> <li>• If the facility is ordering using <i>Form 2C: Blank R&amp;R</i>, are they only ordering supplies that it will dispense/use?</li> </ul>	<p>Select a few supplies at random to check the full calculation. If you find errors, check additional supplies or check all supplies.</p>
3	<p>Compare the total cost of the order and the total available allocation indicated on the <i>Cost Summary Table</i> of the R&amp;R.</p> <p style="text-align: center;"><i>IF</i> <span style="float: right;"><i>THEN</i></span></p>	
	<p>Total cost of the order is less than or equal to the Total available allocation</p>	<p>No adjustment needs to be made, <i>Skip to Step #8</i></p>
	<p>Total cost of the order is greater than the Total available allocation</p>	<p><i>Go to #4</i></p> <p>Note: The Storekeeper should have already written Supplemental Funding needed on the Cost Summary table.</p>
<b>Supplemental Funding Needed from DMO or HTC</b>		
4	<p>Request supplemental funding from the DMO or HTC</p>	<p>Liaise with the DMO or HTC to identify funding sources that can be used to supplement the facility's available allocation.</p>
	<p style="text-align: center;"><i>IF</i></p> <p>Supplemental funding has been approved.</p>	<p style="text-align: center;"><i>THEN</i></p> <p>a. Write the total amount of supplemental funding approved in the "Supplemental Funding needed" row of the "Cost Approved" column of the <i>Cost Summary</i> table.</p> <p>b. Write the amount of supplemental funding approved by source of funding in the Supplemental Funding table. Calculate the total amount of supplemental funding approved.</p>

	Supplemental funding has not been approved.	Write the number zero in the “Supplemental Funding needed” row of the “Cost Approved” column of the <i>Cost Summary</i> table.
<b>Verification or Adjustment of the Quantities to Order by District Pharmacist or Hospital Pharmacy In-Charge</b>		
5	<p>Calculate the Total Available Allocation:</p> <p>Add the “Total available allocation” figure from the “Total Cost” column and the “Supplemental funding needed” figure to get the “Total available allocation” in the “Cost Approved” column on the <i>Cost Summary</i> chart.</p>	<p>This is the total amount of funds available for the purchase of the supplies.</p> <p>If the DMO or HTC did not provide Supplemental Funding, the “Total available allocation” in the “Cost Approved” column will be the same as “Total available allocation” in the “Total Cost” column.</p>
6	Compare the “Total cost of the order” and the “Total available allocation” in the “Cost Approved” Column.	
	<i>IF</i>	<i>THEN</i>
	Total cost of order is less than or equal to the Total available funding (including supplemental funds)	No additional adjustments need to be made based on budget. <i>Skip to Step #8.</i>
	Total cost of the order is greater than the Total available allocation, and no additional funds can be accessed to help cover the costs of the order.	One or more order quantities of supplies will need to be reduced. <i>Skip to Step #7.</i>
7	<p>Reduce the total cost of the order by reducing order quantities on <i>Form(s) 2A-C: R&amp;R.</i></p> <p>Below are some suggestions for reducing quantities due to budget limitations:</p> <ul style="list-style-type: none"> <li>• Reduce the order quantities of as few supplies as possible. This will keep the number of supplies at risk of future stockout to a minimum.</li> <li>• Replace the expensive version of a supply with a less expensive supply of the same therapeutic value. This will help ensure that an illness can be treated.</li> <li>• Reduce the order quantities of supplies that are closest to their maximum stock level. This will reduce (but not eliminate) the likelihood of a stockout.</li> <li>• Reduce the order quantity by one unit of issue at a time. This will allow you to order the maximum quantity of a supply while still reducing the overall cost.</li> </ul> <p>When the Total cost of order is less or equal to the Total Available Funding, <i>Skip to Step #8.</i></p>	<p>Reducing order quantities should only be done in cases where no funding can be identified to cover the full cost of the order.</p> <p>All Priority Supplies should be given priority over Additional Supplies.</p>

8	<p><b>Approved Quantity:</b> For each supply being ordered on Form(s) 2A-C: R&amp;R write the final Approved Quantity (based on units of issue).</p>	<p>If no adjustments were made, then the Approved Quantity (column J) will equal the Quantity Requested (column G).</p> <p>If adjustments were made to a supply, then the Approved Quantity (column J) will be less than the Quantity Requested (column G).</p>
9	<p><b>Approved Cost:</b> For each supply being ordered write the final Approved Cost.</p> <p>The Approved Cost (K) equals the Approved Quantity (J) multiplied by Price (H). <math>K = J \times H</math></p>	<p>If no adjustments were made, then the Approved Cost (column K) will equal the Cost (column I).</p> <p>If adjustments were made to a supply, then the Approved Cost (column K) will be less than the Cost (column I).</p>
10	<p><b>Total approved cost this page:</b> Add up the Approved Cost (K) for each supply on the page and write the total in the "Total approved cost this page" box.</p> <p>Repeat this step for each page.</p>	
11	<p><b>Initial/Signature:</b> Write your initial or signature in the "Initial/Signature" box to the right of the "Total approved cost this page" box.</p>	
12	<p><b>Cost Approved:</b> Transfer the Total Approved Cost for each page into the appropriate line in the Cost Summary table located on the last page of Form 2.</p>	
13	<p><b>Total cost of order/Cost Approved column:</b> Add up the Cost Approved column on the Cost Summary table and write the total in the Total Cost of Order box in the "Cost Approved" column.</p>	
14	<p><b>Total available allocation/Cost Approved column :</b> No action needed.</p>	This box was filled in Step #5 above.
15	<p><b>Supplemental funding needed/Cost Approved column:</b> No action needed.</p>	This box was filled in Step #4 above.
16	Deliver the Report and Request Form(s) to the District Medical Officer or Hospital Medical Officer In-Charge.	Submit <i>Form 2A or 2B: R&amp;R, and 2C if completed.</i>
<b>Order Approval by the DMO or Hospital Medical Officer In-Charge</b>		
17	DMO or Hospital Medical Officer In-Charge reviews and verifies that the available funding covers the total cost of the order.	The "Total cost of order" in the Cost Approved column should be less than or equal to the sum of the "Total available allocation" in the same column.

18	<b>Approved By and Signature:</b> The DMO or Hospital Medical Officer In-Charge approving the form writes his name and signs.	
19	<b>Distribution of Form(s):</b> <ul style="list-style-type: none"> <li>• The original Copy A is sent to MSD by the District DMO or Hospital Pharmacy In-Charge.</li> <li>• The middle copy, Copy B, is retained by the DMO or hospital.</li> <li>• The bottom copy, Copy C, is retained by the dispensary or health center placing the order.</li> </ul>	Accompanying forms are distributed in the same manner

**THIS TASK IS COMPLETED WHEN:**

- The DMO/District Pharmacist or has reviewed and corrected errors made in making the order.
- The Approved Quantity and Approved Cost columns for all items being ordered are completed.
- If needed, Supplemental Funding Sources have been identified, approved by the DMO, and recorded in the Supplemental Funding Table of the Form 2.
- The Cost Summary table has been completed.
- The total funding available covers the full cost of the supplies being ordered.
- All forms used to make the order have been approved and signed by the DMO or the Me.
- Forms are distributed as per Step #19.

## Job Aid I: Completing Form 3: Order Compilation

<b>TASK:</b>	Completing <i>Form 3: Order Compilation</i>
<b>COMPLETED BY:</b>	District Pharmacist
<b>PURPOSE:</b>	<ul style="list-style-type: none"> <li>To summarize the value of orders placed by dispensaries and health centers in the district.</li> <li>To determine if all dispensaries and health centers have ordered.</li> <li>To calculate the total amount of supplementary funds needed to pay for the supplies ordered.</li> </ul>
<b>WHEN TO PERFORM:</b>	Monthly, at the end of each ordering cycle—A, B, or C
<b>MATERIALS NEEDED:</b>	Forms <i>2A-C: Report &amp; Request for Medicines and Related Supplies and Equipment</i> for all dispensaries and health centers in the district, blank <i>Form 3: Order Compilation</i> , pen, calculator

Step	Action	Notes
1	<b>District:</b> Write name of the district for which the Order Compilation is being prepared.	Example: Mvomero
2	<b>Group:</b> Write the letter that designates the ordering group of the health facilities that will be listed on the form.	Groups are either A, B, or C.
3	<b>Beginning Month/Ending Month/Year:</b> Write the months and year for the period that is covered in this compilation.	These should be the months of the quarter for which orders are being submitted.  Example: (for orders submitted in December 2006) Sept. – November 2006
<b>For each dispensary or health center that will be listed on the form</b>		
4	<b>Dispensary or Health Center Code:</b> Write the code number that designates the dispensary or health center.	Example: 54321
5	<b>Dispensary or Health Center Name:</b> Write the name of the dispensary or health center.	Example: Mvomero
6	<b>Approved Total Cost of Order:</b> Write the total approved cost of the order being placed by the dispensary or health center.	This is the Total Cost Approved listed in the Cost Summary portion on the last page of <i>Form 2A-C: R&amp;R</i> for the dispensary or health center.  Example: T/Sh 4,192,000
7	<b>Total Supplemental Funding Used:</b> Write the amount of supplemental funds that will be used to cover the cost of the dispensary or health center's order.	This is the Total Approved Supplemental Funding Needed listed in the Cost Summary portion on the last page of <i>Form 2A-C: R&amp;R</i> for the dispensary or health center.  If Supplemental Funds were not requested for this facility, write "0" in the box.



8	Select the appropriate action:	
	<i>IF</i>	<i>THEN</i>
	More dispensaries and health centers need to be recorded.	<i>Repeat starting at Step #4</i>  Repeat process till all facilities are recorded. Follow up immediately with any dispensary or health center that has not reported.
	All dispensaries and health centers are recorded.	<i>Skip to Step #9</i>
<b>Calculating the Totals and Submitting the Form</b>		
9	<b>Total/Approved Total Cost of Order:</b> Add up and write the total Approved Total Cost of Order amounts for all facilities listed on the form.	Example: T/Sh 28,170,000
10	<b>Total/Total Supplemental Funding Used:</b> Add up and write the total amount of Supplemental Funds to be used to pay for the orders listed on the form.	The Total Supplemental Funding Used is the amount covered by cheque.  Example: T/Sh 5,640,000
11	<b>Cheque number:</b> Write the number of the cheque that is being submitted with the order.	Example: 763
12	<b>Dated:</b> Write the date on which the cheque is being written.	Example: December 10, 2006
13	<b>In the amount of:</b> Write the amount of the cheque.	The amount of the cheque is the result of step #10.  Example: T/Sh 5,640,000
14	<b>Submitted to MSD on (date):</b> Write the date on which the DMO sends the order to MSD.	<i>Form 3: Order Compilation</i> should be finalized and sent to MSD no later than the end of week 3 of the 1st month of the quarter.
15	<b>DMO Signature:</b> The DMO signs <i>Form 3: Order Compilation</i> .	
16	<b>Distribution of <i>Form 3: Order Compilation</i></b> <ul style="list-style-type: none"> <li>• The original is sent to MSD.</li> <li>• The District keeps the bottom copy for its records.</li> </ul>	<i>Form 3: Order Compilation</i> is submitted to MSD with the originals of <i>Form(s) 2A-C: R&amp;R</i>
<b>THIS TASK IS COMPLETED WHEN:</b>		
<ul style="list-style-type: none"> <li>• All orders for the current group of facilities (A, B, or C) are listed on the form.</li> <li>• A cheque is drawn and recorded on the form, for the total supplementary funds used.</li> <li>• The original of <i>Form 3: Order Compilation</i> and the originals of <i>Form(s) 2A-C: R&amp;R</i> have been submitted to MSD by the end of week 3 of the 1st month of the quarter.</li> </ul>		

## Job Aid J: Interpreting and Completing Form 4: MSD Sales Invoice

<b>TASK:</b>	Interpreting and Completing <i>Form 4: MSD Sales Invoice</i>
<b>COMPLETED BY:</b>	Dispensary or Health Center In-Charge or Hospital sub-HTC
<b>PURPOSE:</b>	To verify the quantities of supplies received from MSD
<b>WHEN TO PERFORM:</b>	When an order is received by a facility
<b>MATERIALS NEEDED:</b>	<i>Form 4: MSD Sales Invoice</i> , received supplies, facility copy of <i>Forms 2A-C, R&amp;R</i> that corresponds to the order received, pen, calculator

Note: *Form 4: MSD Sales Invoice* will be placed in one of the cartons being sent to the facility. MSD will mark the carton with the word “DOCUMENTS” so the facility knows which carton contains the documents. This carton will also contain *Form 5: Customer Statement of Account*.

Step	Action	Notes
<b>Part A: Review the information shown in the Sales Invoice</b>		
1	<b>Page__of__:</b> This is the page number of the current page and the total number of pages in the order.	Depending on the size of the order, there may be several pages to the form.
2	<b>District/Region:</b> This is the name of the district and region where the facility that has ordered is located.	
3	<b>Facility Code:</b> This is the assigned code number that designates the dispensary, health center, or hospital that has ordered.	The Facility Code should be provided to you by the Ministry of Health and Social Welfare.
4	<b>Facility Name:</b> This is the name that designates the dispensary, health center, or hospital that has ordered.	
5	<b>Date facility noted as submitted:</b> This is the date that the facility reported it had submitted its order to the District Pharmacist or HTC.	Date Submitted is taken from the top of <i>Form(s) 2A-C Report and Request</i> of the requesting facility.
6	<b>Date order received by MSD:</b> This is the date on which <i>Form(s) 2A-C: R&amp;R</i> were received at MSD.	
<b>For each product listed on the MSD Sales Invoice:</b>		
7	<b>MSD Code:</b> This is the MSD code number for the supply.	
8	<b>Supply Item:</b> This is the name, formulation and strength of the supply at MSD.	
9	<b>Unit of Issue:</b> This is the packing size of the supply.	
10	<b>Quantity Requested (A):</b> This is the quantity requested by the facility from column G on <i>Forms 2A-C:R&amp;R</i> .	
11	<b>Quantity Approved (B):</b> This is the quantity that had been approved by the DMO or HTC from column J on <i>Forms 2A-C:R&amp;R</i> .	If the DMO or HTC had changed the quantity requested, MSD will only deliver the quantity approved.

12	<b>Order Note (C):</b> If applicable, MSD will select and write the letter that represents the Order Note.	<p>The Order Note indicates errors on the R&amp;R that were made by the facility making the order. MSD will not change the order, but is notifying the facility of the error(s).</p> <p>The Order Note codes are:</p> <table border="0"> <thead> <tr> <th>Code</th> <th>Note</th> </tr> </thead> <tbody> <tr> <td>(A)</td> <td>Closing balance of last quarter not equal to opening balance this quarter—column D of the previous R&amp;R should equal column A of the current R&amp;R.</td> </tr> <tr> <td>(B)</td> <td>Math error in estimated consumption—an error was made in calculating column E of the R&amp;R.</td> </tr> <tr> <td>(C)</td> <td>Math error in quantity requested—the math in column F of the R&amp;R is incorrect.</td> </tr> <tr> <td>(D)</td> <td>Math error in cost—the calculation in column I of the R&amp;R is incorrect.</td> </tr> </tbody> </table>	Code	Note	(A)	Closing balance of last quarter not equal to opening balance this quarter—column D of the previous R&R should equal column A of the current R&R.	(B)	Math error in estimated consumption—an error was made in calculating column E of the R&R.	(C)	Math error in quantity requested—the math in column F of the R&R is incorrect.	(D)	Math error in cost—the calculation in column I of the R&R is incorrect.
Code	Note											
(A)	Closing balance of last quarter not equal to opening balance this quarter—column D of the previous R&R should equal column A of the current R&R.											
(B)	Math error in estimated consumption—an error was made in calculating column E of the R&R.											
(C)	Math error in quantity requested—the math in column F of the R&R is incorrect.											
(D)	Math error in cost—the calculation in column I of the R&R is incorrect.											
13	<b>Batch Number:</b> This is the batch number of the product that was issued.											
14	<b>Expiry Date:</b> This is the expiration date of the product that was issued.	If the product is already expired, or if the product will expire before it can be used, follow the appropriate procedure for obtaining a replacement quantity of the product.										
15	<b>Quantity Issued (D):</b> This is the quantity of the supply issued by MSD.	If the DMO or HTC had changed the quantity requested, MSD will only issue the quantity approved.										
16	<b>Total Value (E):</b> This is the total value of the supply issued by MSD.											
17	<b>Mod. Code (F):</b> [Modification Code] MSD may not be able to supply the quantity or product that was ordered. In this case, MSD will note the reasons for the modification of the order, as explained below.											
	(1) MSD low/out of stock	If MSD does not have sufficient stock (or no stock), the quantity issued (column D) may be less than the quantity requested (column G) or quantity approved (column J).										
	(2) Change in unit of issue	If the unit of issue changes from, for example, 1,000 tablets per bottle to 250 tablets per bottle, the total amount issued may be changed.										
	(3) Change in strength	If the strength of a supply changes, for example, from 500mg to 250mg, the total quantity may be changed.										
	(4) Change in form	If a product changes form, for example, from a tablet to a capsule, this will be noted.										

	(5) Change in price	If the price has changed, MSD will note it, sending the total amount possible, given the financial constraints.
	(6) Substitute equivalent	If an equivalent supply is available, the requested supply may be 0 and the new supply will be the amount issued.
	(7) Product no longer available	If a product is no longer available, the quantity issued will be 0.
	(8) Insufficient facility funds	If the order exceeds the amount of funds, MSD will reduce the order.
	(9) Facility not authorized this item	If the facility orders a supply it is not authorized to receive, for example, if a dispensary orders Pethedine, the quantity issued will be 0.
<b>Part B: Complete the Sales Invoice at the Dispensary or Health Center or Hospital when the shipment arrives</b>		
18	<b>Inform the Village Health Committee or HTC that the cartons have arrived.</b>	
19	<b>In the presence of the appropriate committee member(s), open the carton that contains the documents and retrieve Form 4: MSD Sales Invoice.</b>	
20	<b>Quantity Received (G):</b> Count the quantity of a supply received and write in the number in column G for the appropriate supply.	Repeat this step for each supply listed on the Shipment Advice and supplies in cartons.
21	<b>Received by and Date:</b> Write the name of the Storekeeper that received the supply and the date.	
22	<b>Witnessed by and Date:</b> Write the name of the person(s) that witnessed the receipt of the supply and the date.	
23	<b>Distribute Form 4: MSD Sales Invoice as appropriate.</b>	<ul style="list-style-type: none"> <li>• If there are no discrepancies, the facility keeps the signed form.</li> <li>• If there are discrepancies report the problem to the DMO District Pharmacist and complete a <i>Form 7: Verification and Claims Form..</i></li> </ul>
<b>THIS TASK IS COMPLETED WHEN:</b> <ul style="list-style-type: none"> <li>• The facility has counted the supply and completed the Quantity Received column.</li> <li>• The person receiving the supplies and the witness have signed and filed the form or taken the appropriate action.</li> </ul>		

### Job Aid K: Interpreting Form 5: Customer Statement of Account

<b>TASK:</b>	Interpreting <i>Form 5: Customer Statement of Account</i>
<b>COMPLETED BY:</b>	MSD Personnel complete the form and it is used by Dispensary or Health Center In-charge or Hospital Pharmacy In-charge
<b>PURPOSE:</b>	<ul style="list-style-type: none"> <li>To calculate the new available allocation for the dispensary, health center, or hospital.</li> <li>To inform the facility of their current account balance.</li> </ul>
<b>WHEN TO PERFORM:</b>	Every time an order is issued to a facility
<b>MATERIALS NEEDED:</b>	None

Step	Action	Notes
1	<b>Facility Code:</b> This is the assigned code number that designates the dispensary, health center, or hospital that has ordered. This code should be provided to you by the Ministry of Health and Social Welfare	
2	<b>Facility Name:</b> This is the name that designates the dispensary, health center, or hospital that has ordered.	
3	<b>Type of Facility:</b> This is the type of facility.	Facilities can be: <ul style="list-style-type: none"> <li>(GOV) Government</li> <li>(NGO) Non-government Organization</li> <li>(FBO) Faith Based Organization</li> <li>Other</li> </ul>
4	<b>Council:</b> This is the name of the Council for which the facility has ordered.	
5	<b>Statement Date:</b> This is the date that the statement was prepared by MSD.	
6	<b>Closing Balance Previous Quarter (A):</b> This is the closing balance in the facility's account after the last quarter's order was filled.	This information comes from the previous quarters <i>Form 5: Customer Statement of Account</i> .  Example: 3,000,000 Tsh
7	<b>Value of Current Order (B):</b> This is the value of the current order.	This information comes from <i>Form 4: MSD Sales Invoice/Shipment Advice</i> . It is the value of the current shipment.  Example: 4,060,000 Tsh
8	<b>Supplemental Funds Used (C):</b> This is the amount of supplemental funds used to pay for the current order as authorized by the DMO or HTC.	This information comes from <i>R &amp; Rs</i> or from Approved Supplemental Funding Needed on the Cost Summary Table on <i>Forms 2A-C: R&amp;R</i> .  Example: 1,370,000 Tsh

9	<p><b>New Funds Added (D):</b> This is the amount of newly allocated funds for this facility.</p>	<p>The amount of new funds added is determined by the MOH. Government facilities will receive an allocation of funds from the ministry. NGO facilities will not receive this allocation. In the event that MSD received more funding than the cost of the order, these will be considered new funds added.</p> <p>Example: 4,000,000 Tsh</p>
10	<p><b>Closing Balance (E):</b> MSD will calculate the ending balance for the facility by using the following formula.</p> <p><math>A - B + C + D = E</math></p>	<p>Example: 4,310,000 Tsh</p>
11	<p><i>Form 5: Customer Statement of Account</i> will be placed by MSD in the carton that contains the "Documents".</p>	<p><i>Form 5: Customer Statement of Account</i> will be accompanied by <i>Form 4: MSD Sales Invoice/Shipment Advice</i>, in the sealed carton.</p>
<p><b>THIS TASK IS COMPLETED WHEN:</b></p> <ul style="list-style-type: none"> <li>The facility has reviewed the form for accuracy.</li> </ul>		

## Job Aid L: Completing Form 6: Goods Received Note

<b>TASK:</b>	Completing <i>Form 6: Goods Received Note</i>
<b>COMPLETED BY:</b>	MSD, district, or hospital personnel
<b>PURPOSE:</b>	To provide evidence that a shipment of cartons (for each facility order) was received by the district or hospital.
<b>WHEN TO PERFORM:</b>	Whenever supplies are shipped from MSD to districts and hospitals.
<b>MATERIALS NEEDED:</b>	Cartons of received supplies, <i>Form 6: Goods Received Note</i> , pen (black or blue)

Step	Action	Notes
<b>Cartons are shipped by MSD accompanied by a copy of <i>Form 6: Goods Received Note</i> for each of the facilities that will be receiving an order.</b>		
1	<b>Name of Supplier:</b> Write the name of the organization supplying the facility.	e.g. MSD
2	<b>Supplier Invoice number:</b> Write the number as indicated on the invoice brought with the shipment.	
3	<b>Transporter:</b> Write the name of the transportation agent delivering the shipment to the facility.	It can be: <ul style="list-style-type: none"> <li>• The MSD truck</li> <li>• The District Vehicle</li> <li>• A program vehicle eg RCHS</li> <li>• Other</li> </ul>
4	<b>Boxes in Shipment:</b> Write the number of boxes the driver has been handed over by MSD. .	
5	<b>Indent/LPO number:</b> Enter your R&R order number	One GRN will be completed per facility order. (I.E. a District may receive multiple GRNs, all relate to a specific facility R&R)
<b>Actions at the district level when the shipment arrives from MSD</b>		
6	<b>Supplier Receipt number:</b> Enter the MSD receipt number.	
7	<b>Supplier Delivery Note:</b> Enter the number appearing on the delivery note accompanying the shipment.	e.g. DN 0456
8	<b>Driver:</b> The driver writes his name and signature	
9	<b>Boxes in Shipment:</b> This is the number of boxes in this shipment for the facility listed.	
10	<b>Boxes received:</b> Write the number of boxes received.	The number of boxes received for the facility should equal the number of boxes shipped for the facility.
11	<b>Conditions of Items Received:</b> Visually inspect all the cartons. Look for signs that the carton has been damaged, opened, etc.	For any cartons that show signs of damage, signs that they were opened, etc., make a note as instructed below.

	<b>Code:</b> Leave this box blank.	
	<b>Item Description:</b> Write in a description of the item you are inspecting and which shows signs of problems.	Example: Carton 3 of 4
	<b>Unit:</b> Write in the unit of the item.	Example: Carton
	<b>Quantity:</b> Write in the quantity of boxes you are accounting for.	Example: 1
	<b>Condition:</b> Write in the condition of the cartons/boxes you are reporting on or the nature of the problem.	Example: Carton 3 of 4 has torn seal; may have been opened en route.
12	<b>Signature/Date:</b> The person receiving the shipment at the district level signs his/her name and the date the shipment was received and inspected.	
13	<b>Witness 1, Name/Signature/Date:</b> The person who witnessed the opening and inspection of the shipment writes and signs his/her name and notes the date the shipment was received and inspected.	
14	<b>PART II:</b> Leave this section blank.	Any information about the contents of the cartons will be noted on <i>Form 7: Verification and Claims Form</i> .
15	<b>Distribute Form 6: Goods Received Note as appropriate.</b>	The original of the <i>Goods Received Note</i> is given to the driver of the delivery vehicle for return to MSD. The district/DMO, or hospital retains two copies of the <i>Goods Received Note</i> .
<b>THIS TASK IS COMPLETED WHEN:</b> <ul style="list-style-type: none"> <li>• The district has received and signed for the cartons to be delivered to the dispensaries and health centers they supervise; the hospital has received and signed for its cartons.</li> <li>• The original of <i>Form 6: Goods Received Note</i> with the district acknowledgement of receipt is returned to MSD and the copies are kept at the district or hospital.</li> </ul>		



## Job Aid M: Completing Form 7: Verification and Claims Form

<b>TASK:</b>	Completing <i>Form 7: Claims and Verification form</i>
<b>COMPLETED BY:</b>	Dispensary, health center, or hospital personnel along with appropriate witnesses.
<b>PURPOSE:</b>	To notify MSD of any problems with the items received by the facility.
<b>WHEN TO PERFORM:</b>	Whenever there is a discrepancy in the supplies that are received by a dispensary, health center or hospital.
<b>MATERIALS NEEDED:</b>	Individual items received, Copy of <i>Forms 2A-C: R&amp;R</i> , Copy of <i>Form 4: MSD Sales Invoice</i> .

Note: All shipments by MSD are accompanied by a copy of *Form 7: Verification and Claims Form* in addition to *Form 4: MSD Sales Invoice* and *Form 5: Customer Statement of Account*.

Step	Action	Notes
1	<b>Name of Health facility:</b> Write the name of the health facility	Example: Wotta Dispensary
2	<b>Cycle:</b> Write the ordering cycle for the year for which the order is being verified.	Example: "1 <sup>st</sup> order", "2 <sup>nd</sup> order", etc. of the year
3	<b>Group:</b> Write the order/delivery group to which the facility has been assigned by the district.	Example: A, B, or C
4	<b>Name of the Supplier:</b> Write the name of the supplier.	Example: MSD
5	<b>Supplier Delivery Note:</b> Enter the number appearing on the delivery note accompanying the shipment.	
6	<b>Supplier Invoice number:</b> Enter the number as indicated on the invoice from MSD.	
7	<b>Supplier Receipt number:</b> Enter the MSD receipt number.	
8	<b>Transporter:</b> Write the name of the transportation agent delivering the shipment to the facility.	It can be: <ul style="list-style-type: none"> <li>• the MSD truck</li> <li>• the District vehicle</li> <li>• a program vehicle e.g. RCHS</li> <li>• other (specify)</li> </ul>
9	<b>Driver:</b> The driver of the delivery vehicle writes his name and signature	
<i>IF</i>		<i>THEN</i>
There were items that were ordered but not received		Go to Step #10
If there were items that arrived with close expiry date (3 months or less)		Go to Step #11
If there were other discrepancies due to breakages, invoiced but missing items, or over-issued items		Go to Step #12

10	<b>Complete the section “Items ordered but not received accordingly”:</b>	
	<b>Order form:</b> Write the reporting period of the R & R on which the order was submitted.	Example: Jan. – Mar. 2006
	<b>Item Description:</b> write the name of the item, formulation and strength.	Example: Amoxicillin Capsules 250mg
	<b>Quantity Ordered:</b> Write the quantity as ordered in the R&R	Example: 10,000
	<b>Quantity Received:</b> Write the quantity received	Example: 9,000
<i>IF</i>		<i>THEN</i>
The order had items close to expiry (3 months or less)		Continue with Step #11
The order had other discrepancies (breakages, invoiced but not received, over-issued)		Skip to Step #12
There were no other discrepancies		Skip to Step #13
11	<b>Items With close Expiry Date (3 months or less)</b>	
	<b>Item Description:</b> write the name of the item, formulation and strength.	Example: Amoxicillin Capsules 250mg
	<b>Quantity:</b> Write the quantity that has a close expiry date	Example: 10 tins
	<b>Expiry Date:</b> Write the expiry dates of the products.	Example: June 2006
<i>IF</i>		<i>THEN</i>
The order had other discrepancies (breakages, invoiced but not received, over-issued)		Continue with Step #12 as appropriate Follow Step #12(a) for breakages, 12(b) for invoiced but not received, and/or 12(c) for over-issued
There were no other discrepancies		Skip to Step #13
12 (a)	<b>Breakages:</b> For all the items that are broken and cannot be used by the facility:	
	<b>Invoice No.:</b> Write the MSD invoice number.	
	<b>Code:</b> Write the MSD code number for the item in question.	Example: 10011028
	<b>Item Description:</b> Write the name of the item, formulation and strength.	Example: Co-Trimoxazole Tablets 400mg/80mg
	<b>Unit:</b> Write the MSD unit of issue for that item.	Example: Tin/1,000
	<b>Quantity:</b> Write the number of units that were broken and cannot be used.	Example: 1 tin
	<b>Remarks:</b> Write comments on the problem if any	Example: Crushed tin

12 (b)	<b>Invoiced but Missing:</b> For all items that appear in the invoice and the facility was charged for but have not been issued to the facility.	
	<b>Invoice No:</b> write the MSD invoice number.	
	<b>Code:</b> Write the MSD code number for the item in question.	Example: 10011084
	<b>Item Description:</b> Write the name of the item, formulation and strength.	Example: Ciprofloxacin Tablets 500mg
	<b>Unit:</b> Write the MSD unit of issue for that item.	Example: Tin/100
	<b>Quantity:</b> Write the quantity that is missing but invoiced.	Example: 1 tin
	<b>Remarks:</b> Write comments on the problem, if any.	
12 (c)	<b>Over-Issued:</b> For all items whose quantity received exceeds the quantity ordered or for items that were received but not ordered in the first place.	
	<b>Invoice No:</b> Write the MSD invoice number	
	<b>Code:</b> Write the MSD code number for the item in question.	10011053
	<b>Item Description:</b> write the name of the item, formulation and strength.	Metronidazole Tablets 200mg
	<b>Unit:</b> Write the MSD unit of issue for that item.	Tin/1,000
	<b>Quantity:</b> Write the quantity that was over issued.	2 tins
<b>Remarks:</b> Write comments on the problem, if any.	Ordered 2 tins, received 4 tins	
13	<b>Names and Signatures:</b> After verification and all discrepancies are noted, the health facility in charge and the witnesses (Village health committee members or appointees) write their names, sign and note the date.	Not less than three witnesses should sign the form.
14	<b>Distribution of Form 7: Verification and Claims Form:</b> The health facility staff upon verifying the shipment sends the original and one copy to the DMO. The DMO forwards the original to MSD and keeps a copy. The remaining copy is filed at the receiving dispensary or health center.  Hospitals will forward the original to MSD and keep a copy.	
<b>THIS TASK IS COMPLETED WHEN:</b>		
<ul style="list-style-type: none"> <li>• The facility has noted all the discrepancies in the shipment received.</li> <li>• The original and one copy of <i>Form 7: Verification and Claims Form</i> is sent to the DMO.</li> <li>• A copy of <i>Form 7: Verification and Claims form</i> is filed at the dispensary or health center.</li> </ul>		



**Job Aid N: Completing Worksheet 1: Assignment of Facilities to Delivery Groups**

<b>TASK:</b>	Completing <i>Worksheet 1: Assignment of Facilities to Delivery Groups</i>
<b>COMPLETED BY:</b>	DMO/District Pharmacist working with the District Transport Officer
<b>PURPOSE:</b>	To assign all facilities in the council to an ordering group
<b>WHEN TO PERFORM:</b>	<ul style="list-style-type: none"> <li>• When initiating the ILS in the district.</li> <li>• When changing the routing system for deliveries.</li> </ul>
<b>MATERIALS NEEDED:</b>	Map of the district, names of all facilities, pen, district transport plan (if up to date)

Step	Action	Notes
1	<b>District Name:</b> Write the name of the district.	Example: Uyui
2	<b>Date of Assignment/Re-assignment:</b> Write the date the form is being completed.	The current worksheet will take the place of any previous worksheets.
3	<b>Facility Code:</b> This code should be provided to you by the Ministry of Health and Social Welfare	Example: 0213123
4	<b>Facility Name:</b> Write the unique name of the facility.	Example: Jumla Health Center
5	<b>Town/Village Name:</b> Write the name of the town or village where the facility is.	Example: Jumla
6	<b>Group:</b> Write the letter for the group to which the facility is assigned.	There should be 3 ordering groups in a district—A, B, and C.  Example: B
7	Repeat steps 1-6 until all facilities in the district have been listed.	Facilities should logically be assigned to routes for delivering medicines and related medical supplies within a 2-week period after receipt of cartons from MSD.
8	Send a copy of the worksheet to MSD, retain a copy for use at the District.	
9	Inform facilities as to which delivery group they have been assigned.	
<b>THIS TASK IS COMPLETED WHEN:</b> <ul style="list-style-type: none"> <li>• All facilities in the district have been assigned to a route.</li> <li>• A copy of the worksheet has been sent to MSD.</li> <li>• Facilities have been informed of their delivery group assignments.</li> </ul>		



## **XII. REGISTERS**

There are 4 registers in the ILS. These include the Ledger, Patient Register, Dispensing Register and Injection Register. The following pages provide samples of these documents:

# INTEGRATED LOGISTICS SYSTEM STORES LEDGER

FACILITY CODE NUMBER: \_\_\_\_\_

FACILITY NAME: \_\_\_\_\_

TYPE OF FACILITY (GOV/NGO/FBO/OTHER): \_\_\_\_\_

NAME OF COUNCIL /REGION \_\_\_\_\_

DATE LEDGER BOOK OPENED: \_\_\_\_\_

DATE LEDGER BOOK CLOSED: \_\_\_\_\_

LEDGER NO.



**TABLE OF CONTENTS:**

Serial No.	Supply Item	Page or Folio No.
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THE UNITED REPUBLIC OF TANZANIA MINISTRY OF HEALTH  
INTEGRATED LOGISTICS SYSTEM

Name of Council/Region -----

Name of HC/Disp ----- Facility Code No. -----

Period of use: From ----- /----- /----- To ----- /----- /-----

# PATIENTS REGISTER

Prescriber's Name ----- No. -----



THE UNITED REPUBLIC OF TANZANIA MINISTRY OF HEALTH  
INTEGRATED LOGISTICS SYSTEM

Name of Council/Region -----

Name of HC/Disp ----- Facility Code No. -----

Period of use: From --/-----/----- To -----/-----/-----

# DISPENSING REGISTER

Register Number -----



THE UNITED REPUBLIC OF TANZANIA MINISTRY OF HEALTH  
INTEGRATED LOGISTICS SYSTEM

Name of Council/Region -----

Name of HC/Disp. ----- Facility Code No. -----

Period of use: From --/-----/----- To -----/-----/-----

# INJECTION REGISTER

Register Number -----





### **XIII. FORMS**

This section contains all of the forms listed throughout the manual. These are:

<b>Form #</b>	<b>Form Name</b>
1	Prescription Form
2A	Dispensary or Health Center Report & Request for Priority Medicines, Related Supplies and Equipment
2B	Hospital Report & Request for Priority Medicines and Related Supplies and Equipment
2C	Blank Report & Request for Additional Medicines and Related Supplies and Equipment
3	Order Compilation Form
4	MSD Sales Invoice
5	Customer Statement of Account
6	Goods Received Note
7	Verification and Claims Form

FORM 1, PRESCRIPTION FORM

Ministry of Health and Social Welfare – Integrated Logistics System					
Prescription Form.			Serial No. C 05329603		
Name of Health Facility .....		Code no. of HC/Disp. .....		District/Council .....	
Patient's Name: .....			Sex: M / F Age:.....		
Address: .....			Body weight: kgs .....		
Type of Subscriber*	Card Number:				
RX		Quantity/ No. of Units	Unit Price	Cost	
				<b>Total cost in T.Shs.</b>	
Prescriber's Name: .....			Dispenser's Name: .....		
Sign:..... Date:...../...../.....			Signature.....Date:...../...../ .....		

\*Write CH for CHF Member; NH for NHIF Member; E for Exempted and UF for User Fee

Ministry of Health and Social Welfare– Integrated Logistics System					
Prescription Form.			Serial No. C 05329604		
Name of Health Facility .....		Code no. of HC/Disp. .....		District/Council .....	
Patient's Name: .....			Sex: M / F Age:.....		
Address: .....			Body weight: kgs .....		
Type of Subscriber*	Card Number:				
RX		Quantity/ No. of Units	Unit Price	Cost	
				<b>Total cost in T.Shs.</b>	
Prescriber's Name: .....			Dispenser's Name: .....		
Sign:..... Date:...../...../.....			Signature.....Date:...../...../ .....		

\*Write CH for CHF Member; NH for NHIF Member; E for Exempted and UF for User Fee

## FORM 2A: DISPENSARY OR HEALTH CENTER REPORT & REQUEST FOR PRIORITY MEDICINES AND RELATED MEDICAL SUPPLIES AND EQUIPMENT

Facility Code: \_\_\_\_\_ Facility Name: \_\_\_\_\_ Type (GOV/NGO/FBO/OTHER): \_\_\_\_\_

Name of Council / Region: \_\_\_\_\_ Date Submitted: \_\_\_\_\_

Reporting Period: Beginning Month: \_\_\_\_\_ Ending Month: \_\_\_\_\_ Year: \_\_\_\_\_

PRIORITY SUPPLIES FOR DISPENSARIES AND HEALTH CENTERS													
MSD Code	Supply Item	Unit of Issue	Opening Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Closing Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)x7-D] (F)	Quantity Requested (G)	Price FY 08 (H)	Cost [GxH] (I)	Approved Quantity (J)	Approved Cost (K)
10010001	Artemether/Lumefantrine Tab 20/120mg (Yellow-1x6)	Disp/30								0			
10010002	Artemether/Lumefantrine Tab 20/120mg (Blue-2x6)	Disp/30								0			
10010007	Artemether/Lumefantrine Tab 20/120mg (Pink-3x6)	Disp/30								0			
10010004	Artemether/Lumefantrine Tab 20/120mg (Green-4x6)	Disp/30								0			
10011001	Acetylsalicylic Acid (Aspirin) Tabs 300mg	1000T								1900			
10011002	Albendazole Tabs 200mg	100T								1100			
10011005	Aminophylline Tabs 100mg	1000T								3500			
10011007	Amoxicillin Caps 250mg	1000T								33000			
10011018	Chlorpheniramine Tabs 4mg	1000T								800			
10011021	Chlorpromazine Tabs 100mg	500T								5000			
10011028	Co-Trimoxazole Tabs 400mg/80mg	1000T								9000			
10011031	Diclofenac tabs 50mg	100T								600			
10011033	Doxycycline Caps 100mg	1000T								13000			
10011034	Ephedrine Tabs 30mg	1000T								5000			
10011036	Erythromycin Tabs 250mg	1000T								23500			

125\* Not to be ordered by Dispensaries

Initial/Signature	Total cost this pg.:		Total approved cost this pg.:		Initial/Signature
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Dispensary or Health center sends copies A and B to the DMO. Keep copy C. District sends top copy A to MSD. Keep copy B.

PRIORITY SUPPLIES FOR DISPENSARIES AND HEALTH CENTERS

MSD Code	Supply Item	Unit of Issue	Opening Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Closing Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)x7-D] (F)	Quantity Requested (G)	Price FY 08 (H)	Cost [GxH] (I)	Approved Quantity (J)	Approved Cost (K)
10011037	Ferrous Sulphate + Folic Acid Tabs 200/0.25mg	1000T								3500			
10011038	Folic Acid Tabs 5mg	1000T								1300			
10011045	Hyoscin-N-butyl bromide 10mg	500T								12000			
10011050	Magnesium Trisilicate BPC Compound Tabs	1000T								2500			
10011053	Metronidazole Tabs 200mg	1000T								3400			
10011059	Paracetamol Tabs 500mg	1000T								3600			
10011060	Phenobarbital Tabs 30mg	1000T								2000			
10011062	Phenoxy methyl penicillin Tabs 250mg	1000T								15000			
10011063	Phenytoin Tabs 100mg	1000T								7000			
10011070	Quinine Tabs 300mg*	1000T								33000			
10011084	Ciprofloxacin Tabs 500mg	100T								3800			
10018100	Microgynon Tabs	Each								0			
10018101	Lo-Femenal Tabs	Each								0			
10018102	Microval Tabs	Each								0			
10018456	Sulphadoxine+Pyrimethamine Tabs 500/25mg	100T								0			
10044019	Dextrose 5%, 500mls	24P								12500			
10044021	Sodium chloride 0.9%	24P								11800			
10101016	Erythromycin granules 125mg/5ml	100ML								700			
10101023	Oral rehydration salts (ORS) Pdr for 1 litre	100P								9000			
10101032	Tetracycline 1% ointment, Tube	5GM								500			
10101050	Amoxicillin suspension 125mg/5ml, 100ml	24P								11000			
10101054	Chloramphenicol eye ointment 1%	100P								16000			
10101055	Clotrimazole 1% cream/ointment ,.Tube 2gm	24P								5000			

126\* Not to be ordered by Dispensaries

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PRIORITY SUPPLIES FOR DISPENSARIES AND HEALTH CENTERS													
MSD Code	Supply Item	Unit of Issue	Opening Balance	Received This Period	Lost/ Adjusted	Closing Balance	Estimated Consumed [A+B±C-D]	Quantity Needed [(E÷3)x7-D]	Quantity Requested	Price FY 08	Cost [GxH]	Approved Quantity	Approved Cost
			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
10101056	Oxytetracycline eye 0.1% ointment	20P								4500			
10101057	Paracetamol Syrup 120mg/5mls, 100mls	24P								6800			
10101060	Co-Trimoxazole Suspension 200/40mg/5ml, 100ml	24P								9000			
10112006	Dispensing Envelope	100P								700			
10123001	Chlorhexidine + Cetrimide (Savlon) liquid 1.5%/15%	5LT								16000			
10123003	Cresol Saponated (Lysol) Liquid 50%	5LT								21000			
10123007	Methylated Spirit Liquid 70%	5LT								8000			
10123012	Povidone Iodine Liquid 10%	250ML								1200			
10123014	Washing Soap Bar	Each								500			
10140001	Spectinomycin 2g inj	1VL								4400			
10141001	Adrenaline 1ml inj 1mg/ml	10VL								3200			
10141007	Benzathine penicillin Inj 2.4mu	50VL								15000			
10141008	Benzyl Penicillin Pdr for inj, 5mu	50VL								15000			
10141010	Ceftriaxone Powder Inj 250mg	20VL								10000			
10141011	Chloramphenicol Pdr for inj, 1gm	50VL								12300			
10141020	Diazepam Inj 5mg/ml, 2ml	10VL								1500			
10141024	Ergometrine Inj 0.5mg	10VL								1500			
10141040	Lignocaine 2%, 50ml	10VL								7500			
10141050	Procaine Penicillin Fortified Pdr for inj, 4mu	50VL								16000			
10141052	Quinine Inj 300mg/ml, 2ml	10VL								2000			
10141060	Water For Injection 10ml	100VL								4500			
10148103	Depo-Provera 150 mg	Each								0			

127\* Not to be ordered by Dispensaries

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## PRIORITY SUPPLIES FOR DISPENSARIES AND HEALTH CENTERS

MSD Code	Supply Item	Unit of Issue	Opening Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Closing Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)x7-D] (F)	Quantity Requested (G)	Price FY 08 (H)	Cost [GxH] (I)	Approved Quantity (J)	Approved Cost (K)
20025016	Industrial Gloves	1pair								1800			
20036003	Catgut Chromic 0, 75cm,1/2 circ, round body, 40mm	12P								16000			
20036008	Catgut Chromic 2, 75cm,1/2 circ, hvy tapercut, 35mm	12P								16000			
20036027	Silk Braided 0, 75cm, 3/8 circ, reverse cutting, 45mm	12P								9000			
20036035	Umbilical Cotton Tape 3mm Roll, 100m	Each								3500			
20036050	Silk Braided 1/0, 75cm, 3/8 circ, reverse cutting, 45mm	12P								7000			
20111003	Gloves Examination Latex Non-Sterile size M	100pieces								4000			
20111041	Gloves Surgical Size 7	50pair								11000			
20111042	Gloves Surgical Size 7.5	50pair								17000			
20111045	Syringe disposable w/needle, 10cc	100P								7000			
20111046	Syringe disposable iw/ needle 2cc	100P								4200			
20111047	Syringe disposable w/needle 5cc	100P								4200			
20212002	Fomu 2A: Taarifa na maombi	Each								3500			
20212004	Fomu 2C: Fomu tupu ya maombi	Each								1700			
20212007	Leja ya mali	Each								2400			
20133002	Blood lancets	200P								3500			
20133004	I.V. giving set	25P								6000			
20144004	I.V. canula 20 G	50P								13000			
20144005	I.V. canula 22 G	50P								13000			
20155011	Scalp vein set 23 G	100P								6000			
20166009	Bandage hospital quality 7.5cm x 4m	12P								1000			
20166012	Cotton wool absorbent 500 G	Each								2000			

128\* Not to be ordered by Dispensaries

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PRIORITY SUPPLIES FOR DISPENSARIES AND HEALTH CENTERS													
MSD Code	Supply Item	Unit of Issue	Opening Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Closing Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)x7-D] (F)	Quantity Requested (G)	Price FY 08 (H)	Cost [GxH] (I)	Approved Quantity (J)	Approved Cost (K)
20166013	Plaster Zinc Oxide 2.5cmx5m	12P								4200			
20166028	Gauze absorbent BPC 90 Cm X 100m	Each								12200			
20211811	OPD Cards	250P								2900			
20211812	Ante-Natal Cards MCH #4	25P								4500			
20211813	MCH Growing Charts MCH #1	25P								0			
20211814	Client Card MCH #5	Each								0			
20211842	Daily Dispensing Register Book	EACH								2000			
20211877	Prescription Form A5	100P								2400			
20211878	Daily Collection Register Book	100P								1700			
20255026	Scalpel Blade Size 10	100P								7000			
20277002	Albustix Protein in Urine Reagent Strip	50P								5000			
20277004	Clinistix strips	50P								5000			
20277007	Urinalysis strips (Multistix)	100P								16000			
20291539	RPR for syphilis antigen test 100 tests	KIT								9300			
20297075	Field Stain A	25GM								5000			
20297076	Field Stain B	25GM								5000			
20297088	Oil for microscope (Oil Immersion)	25ML								5700			
20307102	Applicator Stick Wood	100P								1000			
20307121	Stool Specimen Container Plastic Disposable	EACH								500			
20307214	Silver nitrate single use stick	Each								2200			
20307383	Cover Slips 22x22mm	100P								1000			
20318439	Patient Register	Each								0			

129\* Not to be ordered by Dispensaries

Initial/Signature	Total cost this pg.:		Total approved cost this pg.:		Initial/Signature
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PRIORITY SUPPLIES FOR DISPENSARIES AND HEALTH CENTERS													
MSD Code	Supply Item	Unit of Issue	Opening Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Closing Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)x7-D] (F)	Quantity Requested (G)	Price FY 08 (H)	Cost [GxH] (I)	Approved Quantity (J)	Approved Cost (K)
30018134	Copper T IUD	Each								0			
30018135	Norplant implant	Each								0			
30308105	Male condoms	Each								0			

130\* Not to be ordered by Dispensaries

Initial/Signature	Total. cost this pg.:		Total. approved cost this pg.:		Initial/Signature
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Dispensary or Health center sends copies A and B to the DMO. Keep copy C. District sends top copy A to MSD. Keep copy B.



COST SUMMARY		
PAGE	TOTAL COST	COST APPROVED
1		
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5		
6		
Sub-total		
Total cost of additional supplies from <i>Form 2C: Blank R&amp;R</i> (if any)		
Total cost of order		
Total available allocation		
Total Supplemental funding Used		

SUPPLEMENTAL FUNDING USED	
SOURCE	AMOUNT
CHF	
NHIF	
UF	
TOTAL	

Completed by: \_\_\_\_\_

Signature: \_\_\_\_\_

Approved by: \_\_\_\_\_

Signature: \_\_\_\_\_

Dispensary or Health center sends copies A and B to the DMO. Keep copy C. District sends top copy A to MSD. Keep copy B.

## FORM 2B: HOSPITAL REPORT & REQUEST FOR PRIORITY MEDICINES AND RELATED MEDICAL SUPPLIES AND EQUIPMENT

Facility Code: \_\_\_\_\_ Facility Name: \_\_\_\_\_ Type (GOV/NGO/FBO/OTHER): \_\_\_\_\_

Name of Council/Region: \_\_\_\_\_ Date Submitted: \_\_\_\_\_

Reporting Period: Beginning Month: \_\_\_\_\_ Ending Month: \_\_\_\_\_ Year: \_\_\_\_\_

PRIORITY SUPPLIES FOR HOSPITALS													
MSD Code	Supply Item	Unit of Issue	Opening Balance	Received This Period	Lost/ Adjusted	Closing Balance	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)×7-D] (F)	Quantity Requested (G)	Price FY 08 (H)	Cost [G×H] (I)	Approved Quantity (J)	Approved Cost (K)
			(A)	(B)	(C)	(D)							
10010001	Artemether/Lumefantrine Tab 20/120mg (Yellow-1x6)	Disp/30								0			
1001002	Artemether/Lumefantrine Tab 20/120mg (Blue-2x6)	Disp/30								0			
1001007	Artemether/Lumefantrine Tab 20/120mg (Pink-3x6)	Disp/30								0			
10010004	Artemether/Lumefantrine Tab 20/120mg (Green-4x6)	Disp/30								0			
10011001	Acetylsalicylic Acid (Aspirin) Tabs 300mg	1000T								1900			
10011002	Albendazole Tabs 200mg	100T								1100			
10011007	Amoxicillin Caps 250mg	1000T								33000			
10011015	Chloramphenicol Caps 250mg	1000T								20000			
10011020	Chlorpromazine Tabs 25mg	500T								4000			
10011027	Cloxacillin Caps 250mg	1000T								19000			
10011028	Co-Trimoxazole Tabs 400/80mg	1000T								9000			
10011029	Diazepam Tabs 5mg	500T								1300			
10011031	Diclofenac Tabs 50mg	100T								600			
10011033	Doxycycline Caps 100mg	1000T								13000			
10011036	Erythromycin Tabs 250mg	1000T								23500			
10011037	Ferrous Sulphate + Folic Acid Tabs 200/0.25mg	1000T								3500			
10011038	Folic Acid Tabs 5mg	1000T								1300			

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PRIORITY SUPPLIES FOR HOSPITALS													
MSD Code	Supply Item	Unit of Issue	Opening Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Closing Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)×7-D] (F)	Quantity Requested (G)	Price FY 08 (H)	Cost [G×H] (I)	Approved Quantity (J)	Approved Cost (K)
10011039	Frusemide Tabs 40mg	1000T								4500			
10011041	Griseofulvin Tabs 500mg	1000T								52000			
10011045	Hyoscine-N-Butylbromide Tabs 10mg	500T								12000			
10011050	Magnesium Trisilicate BPC Compound Tabs	1000T								2500			
10011053	Metronidazole Tabs 200mg	1000T								3400			
10011054	Nifedipine Retard Tabs 20mg	100T								2800			
10011058	Nystatin Tabs 500000 IU	100T								8000			
10011059	Paracetamol Tabs 500mg	1000T								3600			
10011060	Phenobarbital Tabs 30mg	1000T								2000			
10011063	Phenytoin Tabs 100mg	1000T								7000			
10011066	Prednisolone Tabs 5mg	1000T								8200			
10011070	Quinine Tabs 300mg	1000T								33000			
10011080	Vitamin B Complex Tabs	1000T								1100			
10011084	Ciprofloxacin Tabs 500mg	100T								2800			
10011335	Glibenclamide Tabs 5mg	100T								1500			
10018100	Microgynon Tabs	Each								0			
10018101	Lo-Femenal Tabs	Each								0			
10018102	Microval Tabs	Each								0			
10018456	Sulphadoxine+Pyrimethamine Tabs 500/25mg	100T								0			
10022005	Morphine Inj 10mg/ml	10VL								3900			
10022007	Pethidine Inj 50mg/ml	10VL								5000			
10022008	Pethidine Inj 100mg/2ml	10VL								5500			
10044019	Dextrose 5% Inj 500ml	24P								12500			
10044020	Dextrose 5% Inj 1000ml	12P								11800			
10044021	Sodium Chloride 0.9% Inj 500mls	12P								11800			

PRIORITY SUPPLIES FOR HOSPITALS													
MSD Code	Supply Item	Unit of Issue	Opening Balance	Received This Period	Lost/ Adjusted	Closing Balance	Estimated Consumed [A+B±C-D]	Quantity Needed [(E÷3)×7-D]	Quantity Requested	Price FY 08	Cost [G×H]	Approved Quantity	Approved Cost
			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
10044023	Sodium Chloride + Dextrose Isotonic, Inj 500ml	24P								11800			
10044024	Sodium Chloride + Dextrose Isotonic, Inj 1000ml	12P								11800			
10044025	Sodium Lactate Compound (Hartmann's), Inj 500mls	24P								11800			
10044026	Sodium Lactate Compound (Hartmann's), Inj 1000mls	12P								9800			
10044028	Sodium Chloride Injection 0.9% for IV, 500ml	24P								11800			
10101016	Erythromycin granules 125mg/5ml	100ML								700			
10101022	Nystatin Susp 100000 IU/ml	30ML								800			
10101023	Oral rehydration salts (ORS) Pdr for 1 liter	100P								9000			
10101050	Amoxicillin Suspension 125mg/5ml, 100ml	24P								11000			
10101053	Chloramphenicol Syrup 125mg/5ml, 100ml	24P								12000			
10101054	Chloramphenicol Eye Ointment 1%	100P								16000			
10101055	Clotrimazole 1% Cream/Ointment, Tube 2gm	24P								5000			
10101056	Oxytetracycline eye 0.1% ointment Tube 3.5gm	20P								4500			
10101057	Paracetamol Syrup 120mg/5mls, 100mls	24P								6800			
10101060	Co-Trimoxazole Suspension 200/40mes/5ml, 100ml	24P								9000			
10112006	Dispensing Envelopes	100P								700			
10123001	Chlorhexidine + Cetrimide (Savlon) liquid 1.5%+15%	5LT								16000			
10123003	Cresol Saponated (Lysol) Liquid 50%	5LT								21000			
10123007	Methylated Spirit Liquid 70%	5LT								8000			
10123009	Rectified Spirit (Ethanol) Liquid	5LT								11000			
10123012	Povidone Iodine Liquid 10%	250ML								1200			
10123014	Washing Soap Bar	Moja								500			
10141001	Adrenaline Inj 1mg/ml, 1ml	10VL								3200			
10141002	Aminophylline Inj 25mg/ml, 10ml	10VL								2200			
10141004	Ampicillin Pdr for inj, 500mg	50VL								7000			

PRIORITY SUPPLIES FOR HOSPITALS													
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10141006	Atropine Inj 1mg/ml, 1ml	10VL								1500			
10141007	Benzathine penicillin Inj 2.4mu vial	50VL								15000			
10141008	Benzyl Penicillin Pdr for inj 5mu	50VL								15000			
10141010	Ceftriaxone Pd for inj 250mg	20VL								10000			
10141011	ChloramphenicolPdr for inj, 1gm	50VL								112300			
10141016	Cloxacillin Pdr for inj, 500mg	50VL								14000			
10141019	Dexamethasone Inj 4mg/ml,	10VL								1800			
10141020	Diazepam Inj 5mg/ml, 2ml	10VL								1500			
10141021	Diclofenac Sodium Inj 25mg	10VL								700			
10141024	Ergometrine Inj 0.5mg	10VL								1500			
10141026	Frusemide Inj 10mg/ml, 2ml	10VL								1700			
10141027	Gentamycin Inj 40mg/ml, 2ml	10VL								1000			
10141028	Gentamycin Inj 10mg/ml, 2ml	10VL								3100			
10141031	Hydralazine Pdr for inj 20mg, 1ml	5VL								11000			
10141041	Lignocaine 2% Inj 30 ml	10VL								7500			
10141045	Metronidazole Inj 5mg/ml, 100ml	10VL								5000			
10141048	Oxytocin Inj 5iu/ml, 1ml	10VL								1600			
10141050	Procaine Penicillin Fortified Pdr for inj, 4mu	50VL								13000			
10141051	Promethazine Inj 25mg/ml 2ml	10VL								1200			
10141052	Quinine Inj 300mg/ml, 2ml	10VL								2000			
10141056	Suxamethonium Chloride Inj 50mg/ml, 2ml	10VL								8500			
10141057	Thiopental Pdr for inj, 500mg	25VL								47000			
10141059	Vitamin B Complex Inj 2ml	10VL								1000			
10141060	Water For Injection 10ml	100VL								4500			
10141061	Ketamine Inj 50mg/M, 10ml	25VL								47250			
10141074	Ceftriaxone Pdr for onj, 1g	1VL								2500			

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PRIORITY SUPPLIES FOR HOSPITALS													
MSD Code	Supply Item	Unit of Issue	Opening Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Closing Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)×7-D] (F)	Quantity Requested (G)	Price FY 08 (H)	Cost [G×H] (I)	Approved Quantity (J)	Approved Cost (K)
10141085	Insulin Human Suspension (Soluble), Inj 100IU	10VL								56000			
10141086	Insulin Human Zinc Suspension(Lente), Inj 100IU	10VL								56000			
10148103	Depo-Provera 150mg	Moja								0			
20013006	Film X-Ray (Green Sensitive) 24 X 18 cm	100P								25000			
20013007	Film X-Ray (Green Sensitive) 35 X 35 cm	100P								68000			
20013018	Film X-Ray (Green Sensitive) 30 X 24cm	100P								47000			
20013019	Film E-Ray (Green Sensitive) 40cm X 30cm	100P								78000			
20013020	Film X-Ray (Green Sensitive) 43cm X18cm	100P								54000			
<b>20025001</b>	<b>Barium Sulphate</b>	<b>1KG</b>								<b>7700</b>			
20025005	Lopamiro 370/Omnipaque 300 50ml	1VL								25000			
<b>20025016</b>	<b>Industrial Gloves</b>	<b>1pair</b>								<b>1800</b>			
20025019	Barium Sulphate 95% W/W For Double Contrast Radiography	300GM								4100			
20036003	Catgut Chromic 0, 75cm, 1/2 circ, round body, 40mm	12P								16000			
20036008	Catgut Chromic 2, 75cm, 1/2 circ, hvy tapercut, 35mm	12P								16000			
20036027	Silk Braided 0, 75cm, 3/8 circ, reverse cutting, 45mm	12P								15000			
20036035	Umbilical cotton tape 3mm Roll, 100m	Moja								3500			
20036050	Silk Braided 1/0, 75cm, 3/8 circ, reverse cutting, 45mm	12P								7000			
20111003	Gloves Examination Latex Non-Sterile size M	100pieces								4000			
20111041	Gloves Surgical Size 7	50pair								11000			
20111042	Gloves Surgical Size 7.5	50pair								17000			
20111045	Syringe disposable w/ needle, 10cc	100P								7000			
20111046	Syringe disposable w/needle 2cc	100P								4200			
20111047	Syringe disposale w/needle 5cc	100P								4200			
<b>20119412</b>	<b>2ml AD Svringe-RUP KOJAK</b>	<b>Moja</b>								<b>0</b>			
<b>20119411</b>	<b>5ml AD Svringe-RUP KOJAK</b>	<b>Moja</b>								<b>0</b>			
<b>20119413</b>	<b>10ml AD Svringe-RUP, KOJAK</b>	<b>Moja</b>								<b>0</b>			

PRIORITY SUPPLIES FOR HOSPITALS													
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			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
20119414	3ml Syringe Auto Retractable-VANISH	Moja								0			
20119415	5ml Syringe Auto Retractable-VANISH	Moja								0			
20119416	10ml Syringe Auto Retractable-VANISH	Moja								0			
20110105	Safetv Boxes	Moja								0			
20133002	Blood Lancets	200P								3500			
20133004	I.V. giving set	25P								6000			
20144004	I.V. canula 20 G	50P								13000			
20144005	I.V. canula 22 G	50P								13000			
20155011	Scalp vein set 23 G	100P								6000			
20166009	Bandage Hospital Quality 7.5cm x 4 m	12P								1000			
20166012	Cotton Wool Absorbent 500 G	Moja								2000			
20166013	Plaster Zinc Oxide 2.5cmx5m	12P								4200			
20166028	Gauze Absorbent BPC 90cm X 100m	Moja								12200			
20211809	Ball Point Pen	Moja								150			
20211811	Opd Cards	250P								2900			
20211812	Ante-Natal Cards MCH #4	25P								4500			
20211813	MCH Growing Charts MCH #1	25P								0			
20211814	Client Card MCH #5	Moja								0			
20211842	Daily Dispensing Register Book	Moja								2000			
20211877	Prescription Form A5	100P								2400			
20211878	Daily Collection Register Book	100P								1700			
20212003	Fomu 2B: Taarifa na Maombi	Moja								7000			
20212004	Fomu 2C: Fomu tupu ya maombi	Moja								1700			
20212007	Leja ya mali	Each								2400			
20222004	Cassettes for x-ray film 24x18cm, w/intensifying screen	Moja								138000			
20222005	Cassettes for x-ray film 30x24cm, w/intensifying screen	Moja								200000			



PRIORITY SUPPLIES FOR HOSPITALS													
MSD Code	Supply Item	Unit of Issue	Opening Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Closing Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)×7-D] (F)	Quantity Requested (G)	Price FY 08 (H)	Cost [G×H] (I)	Approved Quantity (J)	Approved Cost (K)
20222006	Cassettes for x-ray film 35x35cm w/intensifying screen	Moja								300000			
20222007	Cassettes for x-ray film 40x30cm w/intensifying screen	Moja								290000			
20222009	Cassettes X-Ray Films 43x35cm w/intensifying screen	Moja								340000			
20255026	Scalpel Blade Size 10	100P								4000			
20277001	A- B- O- D- Blood Grouping Reagents, kit of 4	KIT								16000			
20277002	Albustix protein in urine Reagent Strip	50P								5000			
20277004	Clinistix strips	50P								5000			
20277005	Glucostix glucose In blood Reagent strip	50P								24000			
20277007	Urinalysis strips (Multistix)	100P								16000			
20277009	Widal Reagent	KIT								12000			
20277010	Coombs Reagents	10ML								11000			
20277011	Icomplete Ant -D	10ML								2300			
20277012	Bovine Albumin 22%	10ML								8000			
20277430	Pregnancy test strips	25P								6500			
20291539	RPR for syphilis antigen test 100 tests	KIT								9300			
20297075	Field Stain A	25GM								5000			
20297076	Field Stain B	25GM								5000			
20297088	Oil For Microscope (Oil Immersion)	25ML								5700			
20297092	Sodium Chloride	500GM								2300			
20307102	Applicator Stick Wood	100P								1000			
20307121	Stool Specimen Container Plastic disposable	Moja								500			
20307123	Swab sterile	Moja								70			
20307214	Silver nitrate single use stick	Moja								2200			
20307383	Cover Slips 22x22mm	100P								1000			
20318439	Patient Register	Moja								4500			
20318440	Injection Register	Moja								2300			

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PRIORITY SUPPLIES FOR HOSPITALS													
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30018134	Copper T IUD	Moja								0			
30018135	Norplant implant	Moja								0			
30308105	Male condoms	Moja								0			

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Hospital sends copy A to MSD. Keeps copy B.

COST SUMMARY		
PAGE	TOTAL COST	COST APPROVED
1		
2		
3		
4		
5		
6		
7		
8		
Sub-total		
Total cost of additional supplies from Form 2C: Blank R&R (if any)		
Total cost of order		
Total available allocation		
Total Supplemental funding Used		

SUPPLEMENTAL FUNDING USED	
SOURCE	AMOUNT
CHF	
NHIF	
UF	
TOTAL	

Completed by: \_\_\_\_\_

Signature: \_\_\_\_\_

Approved by: \_\_\_\_\_

Signature: \_\_\_\_\_







### FORM 3: ORDER COMPILATION

DISTRICT /REGION \_\_\_\_\_

GROUP:  
(A, B, OR C) \_\_\_\_\_

BEGINNING  
MONTH: \_\_\_\_\_

ENDING  
MONTH: \_\_\_\_\_

YEAR: \_\_\_\_\_

S/No.	DISPENSARY OR HEALTH CENTER CODE	DISPENSARY OR HEALTH CENTER NAME	APPROVED COST OF ORDER	SUPPLEMENTAL FUNDS USED
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
Total:				

Cheque enclosed with order to cover supplemental funds used:

Cheque number: \_\_\_\_\_

dated: \_\_\_\_\_

in the amount of: \_\_\_\_\_

Submitted to MSD on (date): \_\_\_\_\_

DMO Signature: \_\_\_\_\_









### FORM 5: CUSTOMER STATEMENT OF ACCOUNT

Facility Code: \_\_\_\_\_ Facility Name: \_\_\_\_\_

Type of Facility: \_\_\_\_\_ District/Region: \_\_\_\_\_

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

Ending Balance Previous Quarter (A):	
Value of Current Order (B):	
Supplemental Funds Used (C):	
New Funds Added (D):	
Ending Balance (E): A-B+C+D=E	



## FORM 6: GOODS RECEIVED NOTE

### MINISTRY OF HEALTH GOODS RECEIVED NOTE

**PART I**

Received goods from Supplier:                      Indent/LPO No. ....

Name of Supplier:.....                                      Supplier Receipt No.:.....

Supplier Invoice No.:.....                                      Supplier Delivery Note:.....

Transporter:.....    Driver:.....

Boxes in Shipment:.....                                      Boxes Received:.....

**Condition of Items Received**

Code	Item Description	Unit	Quantity	Condition
In charge of the Hospital Pharmacy			Witness 1, Name	
Signature			Signature	
Date...../...../.....			Date...../...../.....	

**PART II**

**Physical Control of Received Items:**

**Items Ordered but not Received**

Order from	Code	Item Description	Unit	Ordered	Received

**Items with close Expiry Date (3 months)**

Code	Item Description	Unit	Quantity	Expiry Date

Breakages						
	Invoice	Code	Item Description	Unit	Quantity	Remarks
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Invoiced but missing						
	Invoice	Code	Item Description	Unit	Quantity	Remarks
1						
2						
3						
4						
5						

Over-Issued						
	Invoice	Code	Item Description	Unit	Quantity	Remarks
1						
2						
3						
4						
5						
6						
7						

Other						
	Invoice	Code	Item Description	Unit	Quantity	Remarks
1						
2						
3						
4						
5						

In charge of the Hospital Pharmacy

Name.....

Witness 1, Name.....

Signature ..... Date.../.../.....

Date.....Signature

Witness 2, Name.....

Signature.....Date.../.../.....

**FORM 7: VERIFICATION AND CLAIMS FORM**

**UNITED REPUBLIC OF TANZANIA  
MINISTRY OF HEALTH**

Name of Health Facility ..... Cycle ..... Group .....

Name of Supplier ..... Supplier delivery note .....

Supplier Invoice NO. .... Supplier Receipt No. ....

Transporter ..... Driver .....

**Physical Control of Received Items**

Item Ordered but not received accordingly			
Order Form	Item Description	Quantity Ordered	Quantity Received

Items with close expiry date (3 months)		
Item Description	Quantity	Expiry Date

**Discrepancy**

Breakages					
Invoice No.	Code	Item Description	Unit	Quantity	Remarks

Invoiced but missing					
Invoice No.	Code	Item Description	Unit	Quantity	Remarks

Over Issued					
Invoice No.	Code	Item Description	Unit	Quantity	Remarks

Name of HF in-charge .....Signature.....Date .....

Name of Witness 1 .....Signature.....Date .....

Name of Witness 2 .....Signature.....Date .....

Name of Witness 3.....Signature.....Date .....

**DMO Office:**

Seen and forwarded to MSD/ZMS

Name.....Signature.....Date .....



## **XIV. WORKSHEETS**

This section contains all of the worksheets listed throughout the manual. These are:

<b>Worksheet #</b>	<b>Worksheet Name</b>
1	Assignment of Facilities to Delivery Groups
2	Supervision Checklist



## WORKSHEET 2: SUPERVISION CHECKLIST

Council/Region: \_\_\_\_\_

Health facility Name: \_\_\_\_\_

Date of supervision visit: \_\_\_\_\_

Date of last supervision visit: \_\_\_\_\_

Name and title of the staff member(s) interviewed: \_\_\_\_\_

Name and title of the supervisor: \_\_\_\_\_

### Supervision for health centre/dispensary

#### A. Preparation for a supervision visit

1. Develop an objective for the visit.
2. Arrange for transport and allowances at least one week prior to visit.
3. Notify the dispensary or health center of your visit after you have confirmed transport.
4. Liaise with the DMO to obtain and review *Forms 2A-C: Report & Request for Medicines, Related Supplies and Equipment* completed since the last visit.
5. Review the report from the last visit and the recommendations that were made.
6. Take along an *ILS Procedures Manual*, *ILS supervision checklist* and a calculator.

#### B. Upon arriving at the facility

1. Meet with the facility in-charge, make introductions, give your objectives for the visit, and ask for permission to visit with the staff (e.g. pharmacy, lab, and other providers).
2. Assemble the staff when appropriate.
3. Make any necessary introductions.
4. Explain the objectives of your visit.
5. Enquire and verify if an ILS Manual is available in the facility and kept in the areas where ILS functions are undertaken for reference purposes.

### C. Check Storage Area

Use the following key to score your observations of the storage area:

Very Weak	1
Weak	2
Satisfactory	3
Good	4
Excellent	5

Step	Criteria	Score					Remarks
		1	2	3	4	5	
1	Determine if the storeroom is clean and disinfected regularly.						
2	Is the Store room well lit, — protected from direct sunlight?						
3	Is the Store well ventilated?						
4	Is the storeroom adequately protected from leakage or flooding?						
5	Is appropriate fire safety equipment available, accessible, and functional, and are employees trained to use it?						
6	Are latex supplies kept away from electric motors and fluorescent lights? E.g. gloves, condoms, catheters						
7	Is cold chain maintained as required? (equipment working well and temperature chart updated).						
8	Is storage area access limited to authorized personnel?						
9	Are Controlled substances stored in a secure cabinet, under lock and key?						
10	Are stacked cartons at least 10 cm off the floor (on pallets), 30 cm away from the walls and not stacked so high as to show signs of crumbling?.						
11	Are cartons arranged with arrows pointing up (↑), and with identification labels, expiry dates, and manufacturing dates clearly visible?						
12	Are supplies stored to facilitate “first-to-expire, first-out” (FEFO) procedures and stock management?						
13	Are supplies stored away from insecticides, chemicals, flammable supplies and hazardous materials?						
14	Are damaged Separate damaged and expired health supplies separated from usable supplies?						
	<b>TOTAL SCORE</b>						

#### D. Stores Ledger

Review entries in the stores ledger and score your observations using the following key in the following criteria:

Very Weak	1
Weak	2
Satisfactory	3
Good	4
Excellent	5

Step	Criteria	Score					Remarks
		1	2	3	4	5	
1	Do quantities noted on <i>Stores Ledger</i> match the physical stock (selected/tracer items)?						
2	<i>Is Stores Ledger</i> correctly and completely filled out (in units, with dates, etc.)?						
3	Are physical inventory results noted at least monthly for Priority Supplies?						
4	Ledger entries are mathematically correct.						
5	Are Losses and adjustments (due to pilferage, expiration and damage) noted, with the reasons, in <i>Stores Ledgers</i> ?						
	TOTAL SCORE						

#### E: ILS R & R forms

Review ILS forms and score your observations using the following key for each criterion listed below.

Very Weak	1
Weak	2
Satisfactory	3
Good	4
Excellent	5

Step	Criteria	Score					Remarks
		1	2	3	4	5	
1	Are the forms filed, organized and accessible.						
2	Check R&R for correctness of the following						
a	The opening Balance (A) for the current report equal to the closing Balance (D) from the previous report.						
b	the Estimated Consumption (E) equal (E=A+B±C-D)						

c	the Quantity Required (F) equal ( $F=[E\div 3]X7-D$ )						
d	The Cost equals ( $I=GXH$ )						
e	Timely Report submission						
	Total score						

### Responsiveness and facility satisfaction

Step	Criteria	Score					Remarks
		1	2	3	4	5	
1	Do supplies arrive on time?						
2	Is the VHC participating well?						
3	Do you have adequate supply of management tools?						
4	Review sales invoice and allocated issue voucher from the district for timeliness of order receipts						
	Total score						

F. Review previous action plan for recommendations that have not been implemented or problems that have not been resolved

G. Describe any new problems identified during the current supervisory visit.

H. Action plan for problems identified:

Have a joint supervisor/supervisee session to develop the action plan to address the problems identified. Make sure a copy is left at the facility.

#	Problem	Possible solutions	Actions
1			
2			
3			

1. Summary of the visit

1. Positive Observations:

2. Areas for improvement:

3. Any other Recommendations:

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Supervisee Signature

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Supervisor Signature





## XV. ANNEXES

As noted in the introduction, the ILS includes several special categories of supplies that are managed in a similar, but modified system. These include vaccines, TB/leprosy medicines, controlled substances, HIV tests, and anti-retroviral (ARV) medicines. Consequently, the following annexes are included to detail the modified procedures for managing these supplies:

<b>Annex</b>	<b>Annex Name</b>
A	Handling Vaccines
B	Handling HIV Test Kits
C	Handling Anti-Retroviral Medicines (ARVs)

## **ANNEX A—HANDLING VACCINES**

[The information in this annex has not yet been approved for use by the EPI Program. Consequently, EPI staff should continue to use their current procedures for managing vaccines.]

### ***A. What makes vaccines a special category of supply?***

Vaccines are a special category of supply because they require cold storage (2-8°C) at all times in the “cold chain.” This means that facilities handling vaccines must be capable of storing them at cold temperatures at all times through the use of cold chain refrigerators, which are powered by electricity, solar power, gas, or paraffin.

Vaccines also have a short shelf life. Depending on the manufacturer, the shelf life can range from 6 months to 2 years. Most vaccine vials, once opened, must be used within 6 hours to 4 weeks. This makes it better to order vaccines more frequently than quarterly, as with most supplies in the ILS.

Because of the need for cold chain storage and because of the short shelf life, vaccine logistics is different from other supplies. MSD delivers vaccines from its central and zonal stores directly to regional cold chain facilities. Regions deliver to districts and districts deliver to facilities. The addition of the region to the supply chain makes vaccines a special category of supply. District and Regional Cold Chain Officers (DCCOs and RCCOs) help support the vaccine logistics system.

Vaccines have been supported for many years through assistance from the United Nations Children’s Fund (UNICEF) to the Expanded Programme on Immunization (EPI). This support has included logistics management practices that have been proven effective. The ILS, therefore, will continue to support these practices as described below.

### ***B. What vaccine supplies are used?***

Currently five different vaccines, often called antigens, are used in Tanzania. These may be manufactured by different companies and may have different expiration dates. Therefore, you should always refer to the expiration date printed on the vial. The vaccine antigens are:

Supply	Explanation
BCG	BCG stands for Bacillus Calmette-Guerin and is used to immunize children against TB. It is injected only once in infants as soon as possible after birth. BCG is packed in vials of either 10 or 20 doses per vial. BCG comes in a powder form and is reconstituted with water for injection to prepare it for injection. A vial of BCG, once reconstituted, must be discarded after 6 hours. It should be stored at a temperature of 2-8 °C and should not be frozen. BCG is injected with a special syringe and needle that are included with the vials of antigen.
DPT-HB	DPT-HB stands for Diphtheria/Pertussis/Tetanus/Hepatitis B and immunizes infants against all of these illnesses. It is injected 3 times in infants at 4, 8, and 12 weeks after birth. DPT-HB is packed in vials of 1 dose per vial. DPT-HB comes in a liquid form. A vial of DPT-HB, once opened, can only be used for 4 weeks. It should be stored at a temperature of 2-8 °C and should not be frozen.
OPV	OPV stands for Oral Polio Vaccine and immunizes against polio. It is administered 4 times in infants, as soon as possible after birth, then again at 4, 8, and 12 weeks. (It can be given at the same time as DPT-HB.) OPV is packed in soft capsules with enough drops for 10 infants. Once opened, a capsule can be used for up to 4 weeks. Capsules should be stored at -20 °C or at 2-8 °C.
Measles	The measles virus immunizes against measles. It is injected 1 time any time after 9 months. (Infants have a natural immunity up to 9 months. In the event of a measles outbreak, infants under 9 months should be given the vaccination, but this would need to be repeated over 9 months.) Measles is packed in vials of 10 or 20 doses per vial. Measles comes in a powder form and is diluted with a special diluent (not water). A vial of measles vaccine, once reconstituted, can only be used for 6 hours. It can be stored at -20 °C when dry and should be stored at 2-8 °C when either dry or reconstituted.
TT	TT stands for tetanus toxoid and immunizes against tetanus infections. It is used in mothers rather than infants, but the protection is passed through the mother to the fetus. It is injected in women of child-bearing age (15-49 years) when they come to an MCH clinic, whether they are pregnant or not. The first injection provides no protection. The second injection is given after 4 weeks and provides 3 years of protection. A third injection after 6 months increases the protection by 5 years. A fourth injection a year later increases the protection by 10 years. A fifth injection a year later and increases the protection by 20 years. TT is packed in vials of 1 dose. TT comes in liquid form. A vial of TT, once opened, can

Supply	Explanation
	only be used for 4 weeks. It should be stored at a temperature of 2-8 °C and should not be frozen.

All vaccine antigens are packed with all of the supplies that are needed to provide injections. These include:

- vaccine vials
- syringes
- needles
- water or diluent for reconstitution
- safety boxes for disposal of used syringes

It is not necessary to order these items separately. MSD will provide these items with vaccine orders. RCCOs and DCCOs should deliver these to dispensaries or health centers when issuing to these facilities.

### **C. Facilities, People, & Forms for Managing Vaccines**

#### Facilities offering vaccines

Vaccines are offered at nearly every dispensary, health center, and hospital in Tanzania. Facilities that offer vaccinations will need to have a working refrigerator. For facilities without a working refrigerator, they will need to schedule vaccination days and times during which vaccines can be stored in cool boxes that are delivered from the district. Cool boxes will be delivered by the District Cold Chain Officer (DCCO) and will be picked up at the end of the day.

#### People and their role in vaccination

At the facility level, the Prescriber for vaccines will usually be an MCH nurse who provides vaccines in the MCH area of the facility. The Facility or Hospital Storekeeper may assume responsibility for storing and distributing vaccines, or may prefer to transfer vaccine responsibility to a member of the MCH staff where the vaccine refrigerator is usually found. The Dispenser of vaccines is almost always the same person as the Prescriber in a facility.

At the district level, the District Cold Chain Officer (DCCO) manages stocks of vaccines for all facilities in the district. In the EPI, the DCCO visits each facility with a sufficient level of supplies to bring the facility up to its maximum level. This is often referred to as a “topping up” system. Therefore, unlike in the ILS, health facilities do not order vaccines; they wait until the DCCO visits them, at which time they are topped up by the DCCO. The DCCO calculates the amount to be left at the facility.

At the regional level, the Regional Cold Chain Officer (RCCO) manages stocks of vaccines for all districts in the region. The RCCO receives supplies of vaccines from MSD and issues them to DCCOs.

#### Forms in vaccine management

There are three forms associated with vaccine management. These are:

Number	Form Name	Purpose	Primary User
Register	Stores Ledger	To account for supplies stored in storerooms.	Dispensary or Health Center Storekeeper or Hospital Storekeeper or DCCO or RCCO
Form VAC1	Vaccine Tally Sheet	To account for the use of vaccines.	Dispenser (MCH staff)
Form	Report & Request for	To order vaccines for	DCCO

Number	Form Name	Purpose	Primary User
VAC2	Vaccines for Facilities	dispensaries or health centers.	or RCCO
Form VAC3	Report & Request for Vaccines for Districts or Regions	To order vaccines for dispensaries, health centers, or hospitals.	DCCO or RCCO

#### ***D. Completing Forms for Managing Vaccines at the Dispensary or Health Center***

##### ***Completing the Stores Ledgers for Vaccines***

Stores ledgers are used for vaccines in the same way as for all other supplies. Because vaccines are stored in the refrigerator generally kept in the MCH area, it may be necessary to establish a separate book for this storage area.

Remember that while the unit of issue from MSD is one vial, the dispensing unit is one dose. Therefore, the *Stores Ledgers* should be recorded in doses.

See the job aids for the *Stores Ledger* for detailed information.

##### ***Completing Form VAC1: Vaccine Tally Sheet***

Vaccines have a higher loss/adjustment rate than most other supplies. In EPI programs, this is often referred to as the “wastage factor.” This is because vaccines, which are often packed in vials of 10 or 20 doses, should be opened even if only a single child is to be immunized. Since vaccines like measles, expire after being opened and diluted after just 6 hours, it is very likely that vaccines will be wasted. The overall benefit to the health of the community, however, is considered more important than the wastage of a few doses of vaccines. *Form VAC1: Vaccine Tally Sheet* has been introduced to help facilities determine how many doses were given to children. This form records the number of doses given to clients. (This form is the same as Form MOH-F202, with only minor modification. Form MOH-F202 should be used until it is finished.)

*Form VAC1: Vaccine Tally Sheet* is used by Dispensers in the MCH area. See the *Job Aid, “Completing Form VAC1: Vaccine Tally Sheet”* for detailed information.

##### ***Completing Form VAC2: Report & Request for Vaccines for Dispensaries and Health Centers***

*Form VAC2: Report & Request for Vaccines for Dispensaries and Health Centers* is not used by the facility (as noted above) because they do not place orders for vaccines. Instead, it is used by the District Cold Chain Officer (DCCO) to determine the amount of vaccines to be left at the facility.

#### ***E. Ordering Vaccines for the Dispensaries and Health Centers by the DCCO***

##### ***Completing Form VAC2: Report & Request for Vaccines for Dispensaries or Health Centers***

The DCCO will use *Form VAC2: Report & Request for Vaccines for Dispensaries or Health Centers* to determine the number of doses of each vaccine to top up each dispensary or health center.

The formula on *Form VAC2: R&R for Vaccines for Dispensaries or Health Centers* is somewhat different from the formula for most supplies in the ILS. The formula is based on several key differences:

- the quantity of vaccines actually dispensed is recorded and can be taken from *Form VAC1: Tally Sheet for Vaccines*
- losses/adjustments (the wastage rate) can be determined mathematically by comparing the number of doses dispensed to the total removed from storage
- the maximum stock level will depend on the level ordering, because dispensaries and health centers will receive vaccines monthly, while the district will receive supplies quarterly

The maximum level for orders for dispensaries and health centers is also different from most supplies in the ILS. This is because orders are made monthly and because the time to place and receive an order is eliminated because the DCCO will visit each facility without waiting to receive an order. The maximum stock level for dispensary and health centers, therefore, is only a 2 month supply, rather than a seven month supply for most ILS supplies. A two month supply will provide a dispensary or health center sufficient stock of each vaccine to use during a full month, plus a buffer stock of one month of supply, so a facility should never stock out of any vaccine.

Remember that because vaccines may be packed in vials of ten or twenty doses, all numbers entered into *Form VAC2: R&R for Vaccines* should be entered in doses.

See the *Job Aid, "Completing Form VAC2: R&R for Vaccines for Dispensaries and Health Centers by the DCCO"* for detailed information.

## ***F. Completing Forms for Vaccines at the District Level by the DCCO***

### Completing *The Stores Ledgers* for Vaccines

Vaccines will be stored at the district level in bulk for all health facilities in the district. Stores ledgers are used for vaccines in the same way as for all other supplies. Because vaccines are stored in a refrigerator generally kept separately from other storage areas for the district, it may be necessary to establish a separate book for this storage area.

See the job aids for the *Stores Ledger* for detailed information.

### Completing Form VAC3: Report & Request for Vaccines for Districts or Regions

The DCCO will need to order bulk supplies of vaccines for distribution to the health facilities. Therefore, the DCCO will need to complete *Form VAC3: R&R for Vaccines for Districts or Regions* to order vaccines from the regional store of vaccines.

The formula for the DCCO to order vaccines is different from the formula to be used by the DCCO when issuing vaccines to dispensaries or health facilities. This is because districts should keep sufficient supplies of vaccines to last for 1 month, and because districts will need to keep supplies on hand while the district's order is being sent to the region and sent back to the district. The maximum stock level for districts, therefore, is a 3 month supply. A 3 month supply will provide a district with sufficient stock of each vaccine to use during a full month, plus a buffer stock and a supply to be used after placing the order and waiting for it to arrive, so a district should never stock out of any vaccine.

See the *Job Aid, "Completing Form VAC3: R&R for Vaccines for the District or Region"* for detailed information.

### **G. Completing Forms for Vaccines at the Regional Level**

#### Completing The Stores Ledgers for Vaccines

Stores ledgers are used for vaccines in the same way as for all other products. Because vaccines are stored in a larger refrigerator kept in its own storage area, it will be necessary to establish a separate book for this storage area.

See the job aids for the *Stores Ledger* for detailed information.

### Completing Form VAC3: Report & Request for Vaccines for the District or Region

The Regional Cold Chain Officer (RCCO) will need to order bulk supplies of vaccines for distribution to the districts it serves. Therefore, the RCCO will need to complete *Form VAC3: R&R for Vaccines for the District or Region* to order vaccines from MSD.

The formula for the RCCO to order vaccines is different from the formula to be used by the DCCO when issuing vaccines to health facilities. This is because regions should keep sufficient supplies of vaccines to last for 7 months, and because regions will need to keep supplies on hand while the region's order is being sent to the MSD and sent back to the region. The maximum stock level for regions, therefore, is a 7 month supply. A 7 month supply will provide a region with sufficient stock of each vaccine to use during a quarter, plus a buffer stock and a supply to be used after placing the order and waiting for it to arrive, so a region should never stock out of any vaccine.

See the *Job Aid, "Completing Form VAC3: R&R for Vaccines for the District or Region"* for detailed information.

### **H. Receiving and Storing Vaccines at the Dispensary, Health Center, or Hospital Level**

The DCCO will deliver vaccines directly to each dispensary, health center, or hospital. When these are received, they should be placed directly into the refrigerator. The receipts should be recorded on the *Stores Ledger*.



## ***I. Receiving/Issuing and Storing Vaccines at the District or Regional Level***

### Receiving/issuing vaccines within the dispensary, health center, or hospitals

Because vaccines are likely to be stored in a centrally located refrigerator, the Facility Storekeeper may want to issue vaccines to the MCH area for use in a cool box. In this case, only enough vaccine should be issued for use during the day. The issue of vaccines should be recorded on the *Stores Ledger* and the return of unused vaccines recorded as a receipt, so that the balance is correct.

Within the facility, as with all other medicines, only a single vial of each type of vaccine should be open at one time.

### Storing vaccines at dispensaries, health centers, and hospitals

For storage, all of the guidelines in Section VIII of the main text apply to vaccines. But because all vaccines require cold chain storage, special emphasis should be placed on keeping the appropriate vaccines in cold storage until they are used for vaccination.

Cold chain storage is more complex than routine storage. This is obviously due to the use of refrigerators, which need regular maintenance. Additionally, the vaccines cannot be kept out of cold storage and maintain their potency and efficacy. In addition to refrigerators, therefore, cold boxes and ice packs are needed when providing vaccines through outreach and to minimize opening and closing of the fridge. Thermometers are needed to ensure that the temperature is kept between 2 and 8°C since vaccines can neither be frozen (except in their dry form) nor be allowed to become warm. All health facilities should record the temperature inside the fridge twice a day which the DCCO will check during deliveries. The record demonstrates that the cold chain was maintained throughout the period. Records may be permanently recorded on sheets or may be recorded on chalk boards which are erased monthly. Larger facilities may record the temperature automatically on cards.

Vaccinations create waste through the use of syringes. Used syringes should be properly disposed of in safety boxes. Some guidelines for the use of safety boxes are:

- do not recap syringes before disposal
- place the syringe and needle in the sharps box immediately after use
- keep the sharps box where the injections are given
- do not overfill the sharps container (about  $\frac{3}{4}$  full)
- when  $\frac{3}{4}$  full, close the box tab completely to cover the opening and tape it shut
- store the box in a safe and secure location until ready for final disposal
- do not empty and refill sharps boxes—fill once and discard immediately

### Storing vaccines at the district and regional level

All of the guidelines above apply to the district and regional level.

### Job Aid VAC1: Completing Form VAC1: Vaccine Tally Sheet

<b>TASK:</b>	Completing <i>Form VAC1: Vaccine Tally Sheet</i>
<b>COMPLETED BY:</b>	Vaccine Dispenser (usually MCH staff)
<b>PURPOSE:</b>	To document usage of vaccines each time a vaccine is administered and monthly
<b>WHEN TO PERFORM:</b>	Each time a vaccine is administered
<b>MATERIALS NEEDED:</b>	Pen

#### A. Each time a vaccine is administered

Step	Action	Notes
1	<b>Place a tick mark on each circle for each vaccine by vaccine type and injection number.</b>	
<b>THIS TASK IS COMPLETED WHEN:</b>		
<ul style="list-style-type: none"> <li>A tick mark is placed for each vaccine administered.</li> </ul>		

#### B. At the end of the month

Step	Action	Notes
1	<b>Total:</b> Count the number of tick marks for each vaccine and for each number.	Example for DPT-HB: 14 ticks for DPT-HB 1 for under 1 year olds
2	<b>Grand Total for Month:</b> Add the totals for each vaccine type.	Example for DPT-HB: 14 ticks for DPT-HB 1 for under 1 year olds, 10 ticks for over 1 year olds, 12 ticks for DPT-HB 2 for under 1 year olds, 8 ticks for over 1 year olds, 15 ticks for DPT-HB 3 for under 1 year olds, 5 ticks for over 1 year olds, grand total is $14+10+12+8+15+5=64$ .
<b>THIS TASK IS COMPLETED WHEN:</b>		
<ul style="list-style-type: none"> <li>The "Total" is completed for each vaccine and each number.</li> <li>The "Grand Total for Month" is calculated for each vaccine type</li> </ul>		

**Job Aid VAC2: Completing Form VAC2: Report & Request for Vaccines for Dispensaries or Health Centers**

<b>TASK:</b>	Completing <i>Form VAC2: Report &amp; Request for Vaccines for Dispensaries or Health Centers</i>
<b>COMPLETED BY:</b>	District Cold Chain Officer (DCCO)
<b>PURPOSE:</b>	<ul style="list-style-type: none"> <li>• To report on the quantities of vaccines administered during the month</li> <li>• To report on the quantities of vaccines lost/adjusted (wastage) during the month</li> <li>• To determine order quantities for each vaccine</li> <li>• To provide MOH with data and information on supply usage and stock levels</li> </ul>
<b>WHEN TO PERFORM:</b>	At the end of each month
<b>MATERIALS NEEDED:</b>	Blank <i>Form VAC2: Report &amp; Request for Vaccines for Dispensaries or Health Centers</i> , <i>Stores Ledger</i> book for vaccines, <i>Form VAC1: Vaccine Tally Sheet</i> , pen, calculator.

Step	Action	Notes
<b>Completing the Top Section of the Page</b>		
1	<b>Facility Code:</b> Write the facility code.	This code can be found on <i>Form 5: Customer Statement of Account</i> .
2	<b>Facility Name:</b> Write the facility name	
3	<b>Type of Facility:</b> Write the type of facility.	Facilities can be: <ul style="list-style-type: none"> <li>• (GOV) Government</li> <li>• (NGO) Non-government Organization</li> <li>• (FBO) Faith Based Organization</li> <li>• Other</li> </ul>
4	<b>Name of District:</b> Write the name of the district where the dispensary, health center, or hospital is located.	
5	<b>Date Submitted:</b> Write the date that the report is submitted.	
6	<b>Reporting Period:</b> Write the period that this report covers. Write in Beginning Month, Ending Month and Year.	Example: February – April, 2004
<b>Calculating the Quantity to Request</b>		
7	<b>(A) Beginning Balance:</b> Write the stock on hand balance at the beginning of the quarter.	The Beginning Balance for the current quarter equals the Ending Balance from the previous quarter.  Example: 200
8	<b>(B) Received This Month:</b> Write the quantity of the product your facility received from MSD during the month.	The quantity received is found in <i>the Stores Ledger</i> book and on <i>Form 4: MSD Sales Invoice</i> . Remember that the answer is the number of doses, not the number of vials.  Example: 60
9	<b>(C) Ending Balance:</b> This should be the result of a physical inventory.	Example: 160

10	<b>(D) Actual dispensed:</b> Write in the quantity of the supply dispensed from <i>Form VAC1: Vaccine Tally Sheet</i> .	Example: 72
11	<b>(E) Estimated Lost/Adjusted:</b> Use the formula to calculate the estimated lost/adjusted during the month. This is the total wastage for the month.	The estimated lost/adjusted should equal the beginning balance plus received this month minus the ending balance minus the actual dispensed.  Example: $200 + 60 - 160 - 72 = 28$
12	<b>(F) Total Removed from Stock:</b> Use the formula to calculate the total amount removed from stock.	Add the actual dispensed to the estimated lost/adjusted.  Example: $72 + 28 = 100$
13	<b>(G) Quantity Needed:</b> Write the quantity of the supply needed to reach the maximum stock level.	The Quantity Needed is Calculated as:  (Total removed from Stock x 2) – Ending Balance  Example: $(100 \times 2) - 160 = 40$
14	<b>(H) Quantity Issued:</b> Write the quantity of the supply the DCCO will issue to the dispensary or health center.	Round the Quantity Needed to the nearest whole vaccine vial.  Example: $40 = 4$ (vials of 10 doses)
Repeat Steps 7-14 for each vaccine		
15	<b>The form should be signed by the Facility Storekeeper and the DCCO.</b>	
<b>THIS TASK IS COMPLETED WHEN:</b> <ul style="list-style-type: none"> <li>• Data columns A through H have been filled for each vaccine.</li> <li>• The form is signed.</li> <li>• The DCCO has left the Quantity Issued for each vaccine, including the proper amount of vaccine syringes, water for solution, and diluents.</li> </ul>		

**Job Aid VAC3: Completing Form VAC3: Report & Request for Vaccines for Districts or Regions**

<b>TASK:</b>	Completing <i>Form VAC3: Report &amp; Request for Vaccines for Districts or Regions</i>
<b>COMPLETED BY:</b>	District Cold Chain Officer (DCCO) or Regional Cold Chain Officer (RCCO)
<b>PURPOSE:</b>	<ul style="list-style-type: none"> <li>To report on the quantities of vaccines received and issued during the quarter</li> <li>To determine order quantities for each vaccine</li> <li>To provide MOH with data and information on vaccine usage and stock levels</li> </ul>
<b>WHEN TO PERFORM:</b>	<ul style="list-style-type: none"> <li>For districts, at the end of each month.</li> <li>For regions, at the end of each quarter.</li> </ul>
<b>MATERIALS NEEDED:</b>	Blank <i>Form VAC3: Report &amp; Request for Vaccines for Districts or Regions</i> , <i>Stores Ledger</i> book for vaccines, pen, calculator.

Step	Action	Notes
<b>Completing the Top Section of the Page</b>		
1	<b>Facility Code:</b> Write the facility code.	This code can be found on <i>Form 5: Customer Statement of Account</i> .
2	<b>Facility Name:</b> Write the facility name.	
3	<b>Type of Facility:</b> Write the type of facility.	Facilities can be: <ul style="list-style-type: none"> <li>(GOV) Government</li> <li>(NGO) Non-government Organization</li> <li>(FBO) Faith Based Organization</li> <li>Other</li> </ul>
4	<b>Name of District:</b> Write the name of the district where the dispensary, health center, or hospital is located.	
5	<b>Date Submitted:</b> Write the date that the report is submitted.	
6	<b>Reporting Period:</b> Write the period that this report covers. Write in Beginning Month, Ending Month and Year.	Example: February – April, 2004
<b>Calculating the Quantity to Request</b>		
7	<b>(A) Beginning Balance:</b> Write the stock on hand balance at the beginning of the quarter.	The Beginning Balance for the current quarter equals the Ending Balance from the previous quarter.  Example: 200
8	<b>(B) Received This Period:</b> Write the quantity of the vaccine received during the period. For the district, this is the amount received during the month. For the region, this is the amount received during the quarter.	The quantity received is found in the <i>Stores Ledger</i> book and on <i>Form 4: MSD Sales Invoice</i> .  Example: 60

9	<b>(C) Lost/Adjusted:</b> Write the total quantity of losses/adjustment during the period. If they were not any losses/adjustments enter 0.	The quantity lost/adjusted is found in the <i>Stores Ledger Book</i> .  If the result is a positive place a plus (+) before the number  If the result is a negative place a negative (-) before the number.
10	<b>(D) Ending Balance:</b> Conduct a physical inventory and write the Ending Balance for the period by counting the total number of doses of each vaccine in the refrigerator.  Also include any doses that may be in cool boxes with the Dispensers.	Remember when you count the number of vials, convert to the number of doses.  Count vaccines quickly to minimize the time the refrigerator is open.  Example: 100 doses
11	<b>(E) Estimated Issued:</b> Calculate and write the estimated issued during the period.  The Estimated Consumption (E) equals Beginning Balance (A) plus Received This Period (B) plus or minus Lost/Adjusted (C) minus Ending Balance (D) $E = A + B \pm C - D$	$E = 200 + 60 - 0 - 100 = 160$
12	<b>(F) Quantity Needed:</b> Write the quantity of the supply needed to reach the maximum stock level.	The Quantity Needed is Calculated as:  For the district: (Total removed from Stock x 2) – Ending Balance  Example: $(160 \times 3) - 100 = 380$  For the region: (Total removed from Stock ÷ 3 x7) –Ending Balance  Example: $(180 \div 3 \times 7) - 200 = 220$
13	<b>(G) Quantity Requested:</b> Convert the quantity needed (f) to the number of vials.	Example for the district: 380 doses becomes 38 vials of 10 doses per vial.
14	<b>(H) Quantity Approved:</b> Write the quantity of the vials the RCCO will issue to the district.	
Repeat Steps 7-13 for each vaccine		
15	<b>The form should be signed by the DCCO and the RCCO.</b>	
<b>THIS TASK IS COMPLETED WHEN:</b> <ul style="list-style-type: none"> <li>Data columns A through H have been filled for each vaccine.</li> <li>The form is signed.</li> </ul>		



## FORM VAC2: REPORT & REQUEST FOR VACCINES FOR DISPENSARIES AND HEALTH CENTERS

Facility Code: \_\_\_\_\_ Facility Name: \_\_\_\_\_ Type (GOV/NGO/FBO/OTHER): \_\_\_\_\_

Name of District: \_\_\_\_\_

Date Submitted: \_\_\_\_\_ Reporting Period: Month: \_\_\_\_\_ Year: \_\_\_\_\_

MSD Code	Item	Unit of Issue	Opening Balance (A)	Received This Month (B)	Closing Balance (C)	Actual Dispensed (D)	Estimated Lost/Adjust [E=A+B-C-D] (E)	Total Removed from Stock [F=D+E] (F)	Quantity Needed [G=(F x2) -C] (G)	Quantity Issued (H)
10152003	BCG	vial of 10 doses								
10158204	Polio (OPV)	vial of 20 doses								
10158211	DPT-HB	vial of 10 doses								
10158202	Measles	vial of 10 doses								
10158218	TT	vial of 10 doses								

Facility Storekeeper: \_\_\_\_\_

Signature: \_\_\_\_\_

District Cold Chain Officer: \_\_\_\_\_

Signature: \_\_\_\_\_



### FORM VAC3: REPORT & REQUEST FOR VACCINES FOR DISTRICTS OR REGIONS

Facility Code: \_\_\_\_\_ Facility Name: \_\_\_\_\_ Type (GOV/NGO/FBO/OTHER): \_\_\_\_\_

Name of Council/Region: \_\_\_\_\_

Date Submitted: \_\_\_\_\_ Reporting Period: Beginning (Mo/Yr): \_\_\_\_\_ Ending (Mo/Yr): \_\_\_\_\_

MSD Code	Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Lost/Adjust (C)	Ending Balance (D)	Estimated Issued [E=A+B±C-D] (E)	Quantity Needed [see formula] (F)	Quantity Requested (G)	Quantity Approved (H)
10152003	BCG	vial of 10 doses								
10158204	Polio (OPV)	vial of 20 doses								
10158211	DPT-HB	vial of 10 doses								
10158202	Measles	vial of 10 doses								
10158218	TT	vial of 10 doses								

Quantity Needed (for districts):  $(E \times 3) - D = F$

Quantity Needed (for regions):  $(E \div 3) \times 7 - D = F$

Completed by: \_\_\_\_\_

Signature: \_\_\_\_\_

Approved by: \_\_\_\_\_

Signature: \_\_\_\_\_

District takes Original to the Region. Leave bottom copy at the District  
Regions take the original to MSD and Keep a copy.

## ANNEX B—HANDLING HIV TEST KITS

### A. What makes HIV tests a special category of supplies?

HIV tests are a special category of supplies because they have a relatively short shelf life (one year or less) and most tests require cool storage to maintain their shelf life. HIV tests are also a special category of supplies because demand for tests has been greater than the supply of tests. Therefore, consumption of HIV tests has been limited to the number of available tests. Over the next few years, it will therefore be necessary to closely track the consumption of HIV tests so the supply situation can be improved. The goal is to ensure, through the use of modified ILS forms, that HIV tests will be available in all qualified facilities.

HIV tests can be used for a variety of purposes. These are:

Test purpose	Explanation
Voluntary Counseling and Testing (VCT)	<p>Tests used for VCT are used to test clients who willingly request to be tested for HIV. These clients meet with trained counselors who discuss client behavior and risks, and the potential outcomes of the test in pre-test counseling sessions. Following the test, the counselor will provide post-test counseling, discussing future behavior and any follow-up actions.</p> <p>Tests for VCT are tracked separately from other testing purposes because of the continuing increases in demand for VCT.</p>
Prevention of Mother to Child Transmission (PMTCT)	<p>Tests used for as part of PMTCT services are tests are used specifically on pregnant women. The goal of the test is not only to test the mother for HIV and identify opportunities for prevention and treatment of the parents, but also to prevent the mother from passing on HIV to her baby, if the mother is HIV positive. Testing as part of PMTCT is a more specific type of VCT.</p> <p>Tests for PMTCT are tracked separately from other testing purposes because some donors donate HIV tests for PMTCT specifically and require accountability for these tests.</p>
Blood safety	<p>Tests used for blood safety are used to test blood from donors for HIV and other pathogens. Blood which tests positive for HIV cannot be used in blood transfusions.</p> <p>Tests for blood safety are tracked separately from other testing purposes because demand for transfused blood is generally stable over time.</p>

Clinical diagnosis	<p>Tests used for clinical diagnosis are tests requested by Prescribers when they believe that their client may be HIV positive. It is strongly preferred that those clients be referred for VCT. For example, when a client comes to the facility who is ill with an opportunistic infection, the Prescriber may request an HIV test along with other blood tests. The patient may not receive counseling and may not have given specific consent to be tested.</p> <p>Tests for clinical diagnosis are tracked separately from other testing purposes because Prescribers may conduct HIV tests in the absence of a VCT programme or in situations they believe require HIV testing.</p>
Quality Control	<p>Tests used for quality control are tests used to test the quality of the test itself. A small percentage of tests are recommended by the manufacturer to be used for monitoring the quality of the tests on a regular basis.</p> <p>Tests for control are tracked separately from other testing purposes because their use does not represent testing of actual clients. The number of control tests depends on the recommendations of each manufacturer.</p>
Sentinel Surveillance	<p>Tests used for sentinel surveillance are used in specific studies to determine the estimated level of HIV in the general population. These tests are not accounted for in the ILS because they are supplied and reported through a vertical system.</p>

### ***B. What HIV testing supplies are used?***

Currently three different brands of HIV tests are used in Tanzania. Different brands of tests check for the presence of different indicators of a client's being HIV positive. These tests are:

Supply	Explanation
Capillus	<p>Capillus is a rapid ELISA test. Capillus tests must be stored in cool storage (2-8 °C). Capillus is packed 100 tests/box.</p> <p>According to current testing guidelines from the National AIDS Control Program (NACP), Capillus is the first test used in HIV testing. If the result of the Capillus test is negative, the client is given a diagnosis of negative. (The patient might, however, be in the "window period." See NACP documents on HIV testing for more information.)</p>

Determine	<p>Determine is a rapid ELISA test. Determine may be stored at room temperature (2-30 °C). Determine is packed 20 tests/foil pouch or 100 tests/foil pouch.</p> <p>According to current testing guidelines from the National AIDS Control Program (NACP), Determine is the second test used in HIV testing. If the result of Capillus is positive and Determine is positive, the client is given a diagnosis of positive.</p> <p>If the result of Capillus is positive and Determine is negative, the result is considered indeterminate. The client is referred for a 'tie-breaker test' using a long ELISA test and/or is asked to return in six weeks for re-testing.</p>
Vironostika	<p>Vironostika is a long ELISA test. Vironostika must be stored in cool storage (2-8 °C). Vironostika is packed 192 tests/box.</p> <p>The use of Vironostika requires significant laboratory equipment, including an ELISA reader, an ELISA washer, and numerous consumable supplies.</p> <p>Vironostika is generally used in hospitals and facilities where significant numbers of tests are completed on a regular basis.</p>

All HIV tests are packed in a “kit” of tests. The kit contains some of supplies needed to conduct the tests. These supplies may have a different expiration date from the date of the test. For example, the chase buffer (a chemical used during testing) will have a different expiration date. Be sure to check the date of all items before issuing or using them.

HIV test kits do not contain all of the supplies needed to conduct HIV tests. There are a number of consumable laboratory items associated with HIV testing. Most of these are ordered through the routine ILS system and are therefore not treated as special supplies. The following items, however, are specific to HIV testing and are included in the special forms for ordering HIV tests. These are:

- vacuum tubes, 4-5ml
- vacutainer needles, 21gauge
- Pasteur pipettes, 3ml, graduated, disposable
- micropipette tips
- EDTA capillary tubes
- cryotube, 1.2-8ml

### ***C. Facilities, People, & Forms for Managing HIV Tests***

#### Facilities offering HIV testing

HIV tests will be limited in use to sites that have been qualified to use them. Orders for HIV tests will only be honored for qualified sites certified through the National AIDS Control Programme.

Sites for HIV testing will generally include all hospitals and all VCT sites. Some sites may only offer VCT services (i.e., they do not offer blood safety or diagnosis testing). Hospitals will also usually offer long ELISA testing, in addition to rapid testing.

NGOs, FBOs, and other VAs may offer both rapid and long ELISA testing.

#### People and their role in HIV testing

At the facility level, the Prescriber for HIV testing will be either a VCT counselor or a member of the medical staff. The Dispensary or Health Center or Hospital Storekeeper may assume responsibility for storing and distributing HIV tests, or may prefer to transfer HIV test responsibility to a member of the laboratory staff. The Dispenser of HIV tests should be a qualified member of the laboratory staff, or be supervised by the lab.

#### Forms in HIV Test Management

There are three forms associated with HIV Test Management. These are:

Number	Form Name	Purpose	Primary User
Register	Stores Ledger	To account for supplies stored in storerooms.	Dispensary or Health Center Storekeeper or Hospital Storekeeper or Designated Lab Staff
Form HIV1	HIV Test Tally Sheet	To account for the use of HIV tests.	Dispenser (Laboratory Staff)
Form HIV2	Report & Request for HIV Tests and Related Supplies	To order HIV tests from MSD.	Dispensary or Health Center Storekeeper or Hospital Storekeeper or Designated Lab Staff

*Forms 2A-C: R&R* are used to order additional laboratory supplies related to HIV testing.

### ***D. Completing Forms for Managing HIV Tests at the Facility Level***

#### Completing the Stores Ledgers for HIV Tests

Stores ledgers are used for HIV tests in the same way as for all other supplies. A separate page should be used for each type of test. Because HIV tests are likely to be stored in the laboratory area, it may be necessary to establish a separate book for this storage area.

See the job aids for the *Stores Ledger* for detailed information.

### Completing Form HIV1: HIV Test Tally Sheet

For Priority Supplies in the ILS system, the purpose for using each supply is not considered important for ordering purposes. For example, the use of Co-Trimoxazole is not measured by the numerous purposes for which one can use this vital anti-infective. For HIV tests, however, it is important during the introduction of these tests, to understand the proportion of tests being used for each purpose. Therefore, *Form HIV1: HIV Test Tally Sheet* has been introduced.

*Form HIV1: HIV Test Tally Sheet* is used by Dispensers in the laboratory. See the *Job Aid, "Completing Form HIV1: HIV Test Tally Sheet"* for detailed information.

### Completing Form HIV2: Report & Request for HIV Tests and Related Supplies

*Form HIV2: Report & Request for HIV Tests and Related Supplies* is completed monthly by the Storekeeper working with the Dispensers in the laboratory. The Storekeeper may wish to designate a member of the laboratory staff to complete the form.

The formula for ordering HIV tests and related supplies is based on ordering monthly to reach a maximum level of three months of supply. A 3 month supply will provide a facility sufficient stock of each supply to use during 1 full month, plus 1 month of stock while orders are being processed, plus 1 month to account for an increase in the number of tests needed. Therefore, even for a facility that doubles its number of tests in a month, there should still be sufficient supplies to avoid a stockout.

Additional information is collected on the bottom of the form in the "Totals" table. See the *Job Aid, "Completing Form HIV2: Report & Request for HIV Tests and Related Supplies"* for detailed information.

The information in the "Total" table can be used at the district level when establishing new VCT sites. The information will also be used by MSD when filling orders. See the next section for more information.

Storekeepers should also be sure to order all priority laboratory supplies associated with HIV testing on *Form 2B: Hospital R&R for Priority Medicines and Related Medical Supplies and Equipment*.

## ***E. Reviewing Orders for HIV Tests at the District and Hospital Levels and at MSD and MOH***

### Reviewing orders for HIV tests at the district and hospital levels

Review of *Form HIV2: Report & Request for HIV Tests and Related Supplies* by the District Pharmacist or by the Hospital Therapeutic Committee (HTC) is completed in the same way as for reviewing Forms 2A-B: *Report & Request for Priority Medicines and Related Medical Supplies and Equipment*. See Section V-B of the main text above for instructions on reviews at the district level and Section V-E on reviews at the hospital level.

One additional task for the district and hospital levels is to check the calculations in the "Totals" table. District Pharmacists and DMOs may find the information in the table useful when establishing new VCT sites. Using the data in the table, district-level supervisors can help determine the expected number of tests that will be consumed in new VCT sites. See the *Job Aid, "Reviewing Form HIV2: Report & Request for HIV Tests and Related Supplies at the District and Hospital Levels"* for detailed information.

### Reviewing orders for HIV tests at MSD and MOH and the effect on facility orders

Data in the “Totals” table will be used by MSD in the event that HIV tests are in short supply. If HIV tests are in short supply, MSD will have to ration tests. Rationing of tests will be done as follows:

- First priority for tests will be for blood safety. These are considered a “vital” use for HIV tests and MSD will work to ensure that tests for this purpose are always available.
- Second priority for tests will be for PMTCT.
- Third priority for tests will be for VCT.
- Fourth priority for tests will be for clinical diagnosis.

Currently, multiple donors are donating or plan to donate HIV tests. Some donated tests are limited to specific uses (e.g., Determine tests donated by the manufacturer are limited to use in PMTCT). Therefore it is necessary to track tests by usage.

In the event that MSD is unable to meet the demand, orders will be reduced based on the priorities listed above. Facilities will be informed if their requests are reduced. In this case, the Facility In-Charge, Facility Storekeeper, Prescribers, and Dispensers will have to more carefully manage the usage of HIV tests. This should never mean relying on a single test to give a diagnosis of “positive” to a client. In the event that Capillus is positive and there is no Determine test, the client should be referred to another testing facility and counseled to practice safe sex until the initial test is confirmed or determined to be incorrect.

## ***F. Receiving and Storing HIV Tests at the District Level***

As with other supplies in the ILS, MSD will deliver packages designated for specific facilities to the district. It is the responsibility of the district to deliver these packages, including HIV tests, to the facilities. Because Capillus and Vironostika HIV tests require cool chain storage, special emphasis should be placed on keeping the appropriate tests in cool storage until they are delivered to the facilities.

## ***G. Storing HIV Tests and Receiving/Issuing HIV Tests in the Facility and Hospitals***

### Storing HIV Tests at the Facility Level and Hospitals

All of the storage guidelines in Section VIII of the main text apply to HIV tests. Because some HIV tests require cool chain storage, special emphasis should be placed on Section VII-E of the main text. Remember that Capillus and Vironostika HIV tests require “cool” storage (2-8 °C), rather than “cold storage” (-20-0 °C) as is typical with vaccines.

### Receiving/Issuing HIV Tests within the Facility and Hospitals

Because HIV tests are likely to be stored in the laboratory area, the Facility Storekeeper may wish to issue all in-coming HIV tests directly to the lab on receipt. In this case, it would not be necessary for the Facility Storekeeper to record HIV tests on the *Stores Ledger* for the main storage area since the supplies would not be stored there for any length of time. The *Stores Ledger* should then be kept in the laboratory.

Within the laboratory, as with all other medicines, only a single box or pouch of HIV tests of each type should be open at one time.



## Job Aid HIV1: Completing Form HIV1: HIV Test Tally Sheet

<b>TASK:</b>	Completing <i>Form HIV1: HIV Test Tally Sheet</i>
<b>COMPLETED BY:</b>	Laboratory Dispenser
<b>PURPOSE:</b>	To document usage of HIV tests each time a test is conducted and monthly
<b>WHEN TO PERFORM:</b>	Each time an HIV test is conducted (except for sentinel surveillance studies)
<b>MATERIALS NEEDED:</b>	Pen

### A. Each time an HIV test is conducted

Step	Action	Notes
1	<b>Place a tick mark on each circle for each test conducted by type.</b>	
<b>THIS TASK IS COMPLETED WHEN:</b>		
<ul style="list-style-type: none"> <li>A tick mark is placed for each test performed.</li> </ul>		

### B. At the end of the month

Step	Action	Notes
1	<b>Count the number of tick marks for each test and for each purpose.</b>	Example for VCT: 70 ticks for Vironostika
2	<b>Write the "Total by purpose" for all test types for each purpose.</b>	Example for Vironostika for VCT: 70
3	<b>Transfer the "Totals by purpose" for each test type for each purpose.</b> Transfer the Total by Purpose for each test type to the appropriate box.	Example for VCT: 70 Vironostika tests for VCT
4	<b>Grand Total by Purpose:</b> Add all of the "Total by purpose" together.	Example: 70 Vironostika tests and 87 Capillus tests for VCT = 157 tests for VCT
5	<b>Total by Type:</b> Add all of the tests by type.	Example: 70 Vironostika tests for VCT and 105 Vironostika tests for PMTCT= 175 Vironostika tests.
<b>THIS TASK IS COMPLETED WHEN:</b>		
<ul style="list-style-type: none"> <li>The "Totals by Purpose" are completed</li> <li>The "Totals" table is completed including the boxes for "Grand Total by Purpose" and "Total by Type"</li> </ul>		

## Job Aid HIV2: Completing Form HIV2: Report & Request for HIV Tests and Related Supplies

<b>TASK:</b>	Completing <i>Form HIV2: Report &amp; Request for HIV Tests and Related Supplies</i>
<b>COMPLETED BY:</b>	Dispensary or Health Center Storekeeper or Hospital Storekeeper
<b>PURPOSE:</b>	<ul style="list-style-type: none"> <li>To report on the quantities of HIV tests received and performed during the quarter</li> <li>To determine order quantities for each test</li> <li>To provide MOH with data and information on supply usage and stock levels</li> </ul>
<b>WHEN TO PERFORM:</b>	At the end of each month
<b>MATERIALS NEEDED:</b>	Blank <i>Form HIV2: Report &amp; Request HIV Tests and Related Supplies</i> , <i>Stores Ledger</i> book for HIV tests, <i>Form 4: MSD Sales Invoice</i> for all shipments received during the quarter, <i>Form HIV1: HIV Test Tally Sheet</i> , pen, calculator.

### A. Top Section of the Page

Step	Action	Notes
1	<b>Facility Code:</b> Write the facility code.	This code can be found on <i>Form 5: Customer Statement of Account</i> .
2	<b>Facility Name:</b> Write the facility name.	
3	<b>Type of Facility:</b> Write the type of facility.	Facilities can be: <ul style="list-style-type: none"> <li>(GOV) Government</li> <li>(NGO) Non-government Organization</li> <li>(FBO) Faith Based Organization</li> <li>Other</li> </ul>
4	<b>Name of District:</b> Write the name of the district where the dispensary, health center, or hospital is located.	
5	<b>Date Submitted:</b> Write the date that the report is submitted.	
6	<b>Reporting Month:</b> Write the month and year that this report covers.	Example: February 2005

### B. For HIV tests

Step	Action	Notes
7	<b>(A) Beginning Balance:</b> Write the stock on hand balance at the beginning of the quarter.	The Beginning Balance for the current quarter equals the Ending Balance from the previous quarter.  Example: 1,500
8	<b>(B) Received This Month:</b> Write the quantity of the HIV test your facility received from MSD during the month.	The quantity received is found in the <i>Stores Ledger</i> book and on <i>Form 4: MSD Sales Invoice</i> .  Example: 1,000
9	<b>(C) Actual dispensed:</b> Write in the quantity	

	of the HIV “Test by Type” performed from <i>Form HIV1: HIV Test Tally Sheet</i> .	Example: 750
10	<b>(D) Lost/Adjusted:</b> Write the quantity of any test that is known to be removed from stock for reasons other than issues/dispensed or that were added to stock from sources other than MSD.  See the <i>Job Aid, “Updating The Stores Ledger.”</i>	Note losses and other removals from stock with a negative number (e.g., -5).  Note additions to stock with a positive number (e.g., 25).  Example: 0
11	<b>(E) Ending Balance:</b> Use the formula to calculate the ending balance. This should also be the result of a physical inventory.	The ending balance should equal the balance on the <i>Stores Ledger</i> plus the stock in the dispensing areas. If not, enter a loss/adjustment until the calculation matches the actual stock on hand.  Example: $1,500 + 1,000 - 750 \pm 0 = 1,750$
12	<b>(F) Quantity Needed:</b> Write the quantity of the supply needed to reach the maximum stock level.	The Quantity Needed is Calculated as:  (Actual dispensed x 3) – Ending Balance  Example: $(750 \times 3) - 1,750 = 500$
13	<b>(G) Quantity Requested:</b> Write the quantity of the supply you will order from MSD.	Round the Quantity Needed to the nearest MSD unit of issue.  Example: $500 \div 100 = 5$ (kits of 100)  Note: Supplies must be ordered according to MSD units of issue. You may not order less than the minimum unit of issue.
Repeat Steps 7-13 for each test type		

### C. For Related Supplies

Step	Action	Notes
14	<b>(A) Beginning Balance:</b> Write the stock on hand balance at the beginning of the quarter.	The Beginning Balance for the current quarter equals the Ending Balance from the previous quarter.  Example: 1,500
15	<b>(B) Received This Period:</b> Write the quantity of the product your facility received from MSD during the quarter.	The quantity received is found in the <i>Stores Ledger</i> book and on <i>Form 4: MSD Sales Invoice</i> .  Example: 1,000
16	<b>(C) Lost/Adjusted:</b> Write the quantity of any products that are known to be removed from	Note losses and other removals from stock with a negative number (e.g., -5).

	<p>stock for reasons other than issues/dispensed or that were added to stock from sources other than MSD.</p> <p>See the <i>Job Aid, "Updating The Stores Ledger."</i></p>	<p>Note additions to stock with a positive number (e.g., 25).</p> <p>Example: 0</p>
17	<p><b>(D) Ending Balance:</b> Add the "Balance" from the <i>Stores Ledger</i> and the quantity on hand in all dispensing areas.</p>	<p>The quantity on hand in all dispensing areas should be easy to count without damaging the tests.</p> <p>Example: 1,750</p>
18	<p><b>(E) Estimated Consumption:</b> Calculate the estimated consumption based on data in the other columns.</p>	<p>The Estimated Consumption equals Beginning Balance plus Received this Period plus or minus Lost/Adjusted minus Ending Balance:</p> $E = A + B \pm C - D$ <p>Example: <math>1,500 + 1,000 \pm 0 - 1750 = 750</math></p>
19	<p><b>(F) Quantity Needed:</b> Write the quantity of the product needed to reach the maximum stock level.</p>	<p>The Quantity Needed is Calculated as:</p> <p>[(Estimated Consumption x 3) – Ending Balance]</p> <p>Example: <math>[(750 \times 3) - 1,750] = 500</math></p>
20	<p><b>(G) Quantity Requested:</b> Write the quantity of the product you will order from MSD.</p>	<p>Round the Quantity Needed to the nearest MSD unit of issue.</p> <p>Example: 500 each</p> <p>Note: Products must be ordered according to MSD units of issue. You may not order less than the minimum unit of issue.</p>
Repeat Steps 14-20 for each supply		

C. For the totals table

21	<b>Copy the total by test type from the same table of <i>Form HIV1: HIV Test Tally Sheet</i>.</b>	Copy the entire tablet onto the report.
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D. After completing Steps 1-21 for tests and for related supplies and the totals table

22	<b>Completed By and Signature:</b> Person completing the form writes their name and signs.	
23	<b>Approved By:</b> Completed by the District or HTC	
24	<b>Take the completed form to the District or HTC for approval</b>	

**THIS TASK IS COMPLETED WHEN:**

- Data columns A through G have been filled for all products.

**Job Aid HIV3: Reviewing and Finalizing Form HIV2: Report and Request for HIV Tests and Related Supplies by the District or Hospital Therapeutic Committee**

<b>TASK:</b>	Reviewing and Finalizing <i>Form HIV2: Report &amp; Request for HIV Tests and Related Supplies</i> by the District or Hospital Therapeutic Committee
<b>COMPLETED BY:</b>	District Pharmacist and DMO in consultation with the Facility Storekeeper for Dispensary and Health Center orders, the Hospital Therapeutic Committee (HTC) for Hospital orders
<b>PURPOSE:</b>	<ul style="list-style-type: none"> <li>To approve order quantities for each HIV test or related supply</li> <li>To ensure that supply orders are within established guidelines</li> </ul>
<b>WHEN TO PERFORM:</b>	<ul style="list-style-type: none"> <li>Monthly</li> </ul>
<b>MATERIALS NEEDED:</b>	<i>Form HIV2: R&amp;R for HIV Tests and Related Supplies</i> , pen, calculator

Step	Action	Notes
1	<p><b>Review <i>Form HIV2: Report &amp; Request for HIV Tests and Related Supplies</i> for appropriateness and correctness and correct any errors found on the form.</b></p> <p>Below are questions to answer:</p> <ul style="list-style-type: none"> <li>Is the top section of the form complete?</li> <li>Are the quantities needed (column F) reasonable given the Ending Balance and the Estimated Consumed?</li> <li>Are the Quantities Requested (column G) correctly calculated based on the unit of issue?</li> <li>Is the Totals table completed?</li> </ul>	Select a few supplies at random to check the full calculation. If you find errors, check additional supplies or check all supplies.
2	<p><b>Approved Quantity:</b> For each supply being ordered on <i>Form HIV2: R&amp;R</i> write the final Approved Quantity (based on units of issue).</p>	<p>There should normally be no reason, other than mathematical error, to adjust the quantity requested.</p> <p>If no adjustments were made, then the Approved Quantity (column J) will equal the Quantity Requested (column G).</p> <p>If adjustments were made to a supply, then the Approved Quantity (column J) will be less than the Quantity Requested (column G).</p>
3	<p><b>Approved By and Signature:</b> The DMO or HTC approving the form writes their name and signs.</p>	

4	<p><b>Distribution of Form(s):</b></p> <ul style="list-style-type: none"> <li>• The top (original) copy is sent to MSD by the District DMO or HTC</li> <li>• The middle copy is retained by the DMO or HTC</li> <li>• The bottom copy is retained by the dispensary, health center, or hospital placing the order.</li> </ul>	
<p><b>THIS TASK IS COMPLETED WHEN:</b></p> <ul style="list-style-type: none"> <li>• The District Pharmacist or HTC has reviewed and corrected errors made in making the order.</li> <li>• Forms are distributed as per Step #4.</li> </ul>		

### FORM HIV1: HIV TEST TALLY SHEET

Month: \_\_\_\_\_

Year: \_\_\_\_\_

TEST NAME	PURPOSE OF TEST						
	VCT (a)			PMTCT (b)	Blood Safety (c)	Clinical Diagnosis (d)	Control (e)
Capillus HIV I/2	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
Total by Purpose: <sup>(1)</sup>							
Determine HIV I/2	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
Total by Purpose: <sup>(2)</sup>							
Vironostika	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
Total by Purpose: <sup>(3)</sup>							

TEST NAME	TOTALS						
	[Add the Total by Purpose for Each Type, e.g., a1+a2+a3+a4]						
	VCT (a)	PMTCT (b)	Blood Safety (c)	Clinical Diagnosis (d)	Control (e)	Total by Type (f)	
						[f=a+b+c+d+e]	
Capillus HIV 1/2							
Determine HIV 1/2							
Vironostika							
Grand Total by Purpose							



## FORM HIV2: REPORT & REQUEST FOR HIV TEST KITS AND RELATED SUPPLIES

Facility Code: \_\_\_\_\_ Facility Name: \_\_\_\_\_ Type (GOV/NGO/FBO/OTHER): \_\_\_\_\_

Name of District: \_\_\_\_\_

Date Submitted: \_\_\_\_\_ Reporting Period: Month: \_\_\_\_\_ Year: \_\_\_\_\_

MSD Code	Item	Unit of Issue	Beginning Balance (A)	Received This Month (B)	Actual Dispensed (C)	Lost/ Adjusted (D)	Ending Balance [E=A+B-C±D] (E)	Quantity Needed [F=(Cx3)-E] (F)	Quantity Requested (G)	Approved Quantity (I)
20277006	Capillus HIV 1/2	box 100 tests								
20271514	Determine HIV 1/2	pouch 100 tests								
20291340	Vironostika	box 192 tests								

MSD Code	Item	Unit of Issue	Beginning Balance (A)	Received This Month (B)	Lost/ Adjusted (C)	Ending Balance (D)	Estimated Consumed [E=A+B±C-D] (E)	Quantity Needed [F=(Ex3)-D] (F)	Quantity Requested (G)	Approved Quantity (I)
20118415	vacuum tube 4-5ml	Each								
20211900	vacutainer needles 21G	Each								
20307153	Pasteur pipette 3ml, graduated, disposable	Each								
20210099	micropipette tips	Each								
20307429	EDTA capillary tubes	Each								
20210100	cryotube 1.2-8ml	Each								

TEST NAME	TOTALS						
		VCT (a)	PMTCT (b)	Blood Safety (c)	Clinical Diagnosis (d)	Control (e)	Total by Type (f)
Capillus HIV 1/2							
Determine HIV 1/2							
Vironostika							
Total by Purpose							

Completed by: \_\_\_\_\_

Signature: \_\_\_\_\_

Approved by: \_\_\_\_\_

Signature: \_\_\_\_\_

## ANNEX C—HANDLING ANTI-RETROVIRAL MEDICINES (ARVs)

### A. What makes ARVs a special category of supplies?

Anti-retroviral medicines (ARVs) are a special category of supplies because they are a new group of medicines to be offered in Tanzania. Their use is complicated by several factors. Some of these factors and their effect for logistics are:

Factor	Logistics Effect
High cost	Because these medicines are considered to be of high value, it will be necessary to store them more securely than other categories of supplies. ARVs are being provided to facilities and clients for free, but the cost is covered by central government or donor funds. Expiration should be kept to an absolute minimum, because of the high cost of supplies.
Life-long usage	Clients will need to have uninterrupted access to ARVs for the rest of their lives. Therefore, inventory control for these supplies will have to be carefully managed.
Multi-drug treatment	Treating one client will require the use of at least three different medicines. In some cases, these will be in fixed-dose combination (FDC) tablets of more than one active ingredient. It will be necessary to ensure that all medicines in the treatment regimen are available at all times. Medicines in treatment may be changed for patients experiencing side effects.
Limited sites	ARVs, as a new class of medicines, will be in use only in specific facilities. During the first several years, it is anticipated that only hospitals will be qualified to dispense ARVs. Therefore, the management of ARVs is planned only to this level.

### B. What ARV supplies are used?

The current anti-retroviral medicines for use in Tanzania are:

Short Name	Name	Strength/Form
AZT (or ZDV)	Zidovudine	100mg tablet or 50mg/5ml solution
3TC	Lamivudine	150mg tablet or 100mg/ml solution
NVP	Nevirapine	200mg tablet or 50mg/5ml solution
EFV	Efavirenz	50mg, 200 mg or 600mg tablet
ABC	Abacavir	300mg tab or 20mg/ml solution
ddl	Didanosine	25 mg, 100mg, or 400mg tablet or 2gm for solution
LPV/r	Lopinavir/Ritonavir	133.3/33.3mg FDC tablet or 80mg/20mg/ml solution
SQv	Saquinavir	200mg tablet
RTV	Ritonavir	100mg tablet
NFV	Nelfinavir	250mg tablet or 10mg/ml solution
d4T	Stavudine	15, 20, 30 or 40mg tablet or 1mg/ml solution

3TC/d4T	Lamivudine, Stavudine	150/30mg or 150/40mg FDC tablet
ZDV/3TC	Zidovudine/ Lamivudine	300/150mg FDC tablet
3TC/d4T (30)/NVP	Lamivudine, Stavudine, Nevirapine	150/30/200mg FDC tablet
3TC/d4T (40)/NVP	Lamivudine, Stavudine, Nevirapine	150/40/200mg FDC tablet

\*FDC=fixed-dose combination

To be effective, ARVs are used in numerous combinations of medicines (i.e., regimens), making the management of these medicines more complicated than other medicines. The recommended ARV regimens from the National AIDS Control Program (NACP) are as follows:

*This table is produced here for informational purposes only. See the “Guidelines for the Clinical Management of HIV/AIDS” for appropriate clinical information, dosing, contraindications and other critical information.*

<b>Drug Regimen</b>	<b>Adult Use</b>
3TC/d4T (30)/NVP [single FDC tablet]	Preferred first line treatment for adults weighing less than 60kgs with no complications.
3TC/d4T (40)/NVP [single FDC tablet]	Preferred first line treatment for adults weighing more than 60kgs with no complications.
AZT/3TC + NVP	First line treatment for adults when Stavudine is contraindicated due to peripheral neuropathy and hb >7.
3TC/d4T (30) + EFV	First line treatment for adults weighing less than 60 kgs when Nevirapine is contraindicated due to severe hyper-toxicity and/or severe rashes or patients with TB.
3TC/d4T (40) + EFV	First line treatment for adults weighing more than 60 kgs when Nevirapine is contraindicated due to severe hyper-toxicity and/or severe rashes or patients with TB.
AZT + 3TC + EFV	First line treatment in adults when both Stavudine and Nevirapine are contraindicated.
ABC + ddl + LPV/r	Preferred second line treatment in adults
ABC + ddl + SQv + RTV	Second line treatment in adults when LPV/r contraindicated due to LPV/r intolerance.

<b>Drug Regimen</b>	<b>Pediatric Use</b>
NVP + AZT + 3TC [all solutions]	Preferred first line treatment in children under 3 years of age.
NVP + AZT + 3TC	Preferred first line treatment in children over 3 years of age.
EFV + AZT + 3TC	First line treatment in children more than 3 yeas of age when Nevirapine is contraindicated or in the case of TB.
NVP + d4T + 3TC	First line treatment in children more than 3 years of age when the patient has anemia.
3TC + EFV + d4T	First line treatment in children more than 3 years of age when NVP is contraindicated and the patient has anemia.
ABC + ddl + NFV [all solutions]	Second line treatment in children under 3 years of age.
ABC + ddl + LPV/r	Preferred second line treatment in children more than 3 years of age.

ABC + ddl + NFV	Second line treatment in children weighing more 3 years of age when LPV/r is contraindicated due to taste intolerance
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### **C. Facilities, People, & Forms for Managing ARVs**

#### Facilities offering ARVs

Orders for ARVs will only be honored for qualified facilities certified through the Care and Treatment Unit of the National AIDS Control Program (NACP).

Facilities for ARV provision will begin with referral hospitals and expand to regional and district hospitals. Non-governmental organizations (NGOs), faith-based organizations (FBOs), and other voluntary agencies (VAs) may also offer ARVs and will be approved by NACP on a case-by-case basis. Additional sites may not offer ARVs but might offer Fluconazole.

#### People and their role in ARV provision

Prescribers for ARVs will be clinical staff (generally doctors) who will prescribe ARVs for their patients. The Hospital Storekeeper will be responsible for storing and distributing ARVs. The Dispenser of ARVs should be a qualified member of the pharmacy staff.

#### Forms in ARV Management

There are three forms associated with ARV management. These are:

Number	Form Name	Purpose	Primary User
Form 1	Stores Ledger	To account for supplies stored in storerooms.	Hospital Storekeeper
Form ARV1	Dispensing Register for Anti-Retroviral Medicines (ARVs)	To account for the use of ARVs.	Dispenser (Pharmacy Staff)
Form ARV2	Report & Request for Anti-Retroviral Supplies	To order ARVs	Hospital Storekeeper

### **D. Completing Forms for Managing ARVs at the Hospital Level**

#### Completing the Stores Ledger for ARVs

The *Stores Ledger* is used to manage ARVs as it is 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. See the *Job Aid, Updating Stores Ledger* for additional information.

#### Completing Form ARV1: Dispensing Register for Anti-Retroviral Medicines (ARVs)

ARVs are special supplies because they are managed on the basis of the quantities dispensed to patients, rather than only the basis of the issues recorded on the *Stores Ledger*. *Form ARV1: Dispensing Register for Anti-Retroviral Medicines (ARVs)* is an additional form used to record the actual quantities dispensed to each patient. This form will be used by the Dispenser who dispenses ARVs directly to patients. Data from *Form ARV1: Dispensing Register* will be used to determine the quantity to order on *Form ARV2: R&R* (see below). See the *Job Aid, Completing Form ARV1: Dispensing Register for ARVs* for detailed information on how to complete this form.

#### Completing Form ARV2: Report & Request for Anti-Retroviral Medicines (ARVs)

*Form ARV2: Report & Request for Anti-Retroviral Medicines (ARVs)* is completed monthly by the Facility Storekeeper working with Dispensers of ARVs in the facility. The Facility

Storekeeper may wish to designate a member of the staff primarily responsible for ARVs to complete the form.

The formula for ordering ARVs is based on ordering medicines monthly to reach a maximum level of three months of supply. A 3 month supply will provide a facility sufficient stock of each drug to use during 1 full month, plus 1 month of stock while orders are being processed, plus 1 month to account for an increase in the number of patients being enrolled. Therefore, even for a facility that doubles its number of enrolled patients in a month, there should still be sufficient supplies to avoid a stockout. If orders are made monthly and on time, it is unlikely that the facility should stock out of any ARV.

See the *Job Aid, Completing Form ARV2: Report & Request for ARVs* for detailed information on completing the form.

### ***E. Reviewing Orders for ARVs at Hospital Level and at MSD and MOH***

#### Reviewing orders for ARVs at the hospital level

ARVs will initially be ordered only by hospitals. While hospitals can potentially order as many ARVs as they like, they should pay particular attention to the number of patients taking ARVs that they can manage. This includes the number of patients that can be counseled, treated for related illnesses (opportunistic infections, including STIs and TB), and the volume of monitoring tests (such as full blood counts and CD4 tests) that can be handled by the laboratory staff. The formula on *Form ARV2: R&R for ARVs* is designed to help limit the number of medicines ordered to the number of medicines needed for current patients and allows the hospital to increase its number of patients while ensuring that a stockout is unlikely to occur.

The most effective way for hospital supervisors to review orders for ARVs is to:

- 1) Verify that the data on *Form ARV1: Dispensing Register* is correctly recorded.
- 2) Verify that the data from *Form ARV1: Dispensing Register* is correctly copied to *Form ARV2: R&R*.
- 3) Verify that the Ending Balance from *Form ARV2: R&R* matches the Balance on the *Stores Ledger*. If the numbers do not match, it will be necessary to record a loss/adjustment on *Form ARV2: R&R*.

#### Reviewing orders for ARVs at MSD and MOH and the effect on facility orders

MSD will receive all orders and fill them from the available supplies. Because ARV therapy must be continuous, every effort will be made by the MOH and MSD to ensure that supplies of ARVs are available to all certified facilities.

In the unlikely event that MSD is forced to ration the issuing of ARVs, facilities will have to be cautious in adding new patients to be treated with ARVs. If the amount received is less than the quantity requested, the Facility Storekeeper should discuss with all ARV Dispensers the number of patients already on ARVs and they should work together to determine how many new patients can be added during the current month. Current patients must be given priority over new patients.

### ***F. Receiving/Issuing and Storing ARVs and Receiving ARVs in Hospitals***

#### Receiving/Issuing ARVs within the Hospital

ARVs will be delivered to the hospital by MSD. They should be received into controlled storage (with the exception of Lopinavir/Ritonavir which requires cold storage).

Within the hospital, ARVs should be issued on the same basis as for controlled substances.

Syrups should be issued in whole bottles. Most medicines are pre-packaged for a one-month supply, so most medicines will also be issued in whole bottles.

#### Storing ARVs in Hospitals

ARVs should be stored in the same manner as controlled substances (such as pethedine), due to the high value of these supplies.

Additionally, the fixed-dose combination (FDC) drug Lopinavir/Ritonavir must be kept in cool storage (2-8°C).

**Job Aid ARV1: Completing Form ARV1: Dispensing Register for ARVs**

<b>TASK:</b>	Completing Form A1: Dispensing Register for ARVs
<b>COMPLETED BY:</b>	Dispenser who dispenses ARVs to the patient
<b>PURPOSE:</b>	To provide ARVs to the patient To document products that are issued to each patient
<b>WHEN TO PERFORM:</b>	Each time a patient presents the appropriate prescription to the pharmacy. When the end of a page in the register is reached At the end of the month
<b>MATERIALS NEEDED:</b>	<i>Form A1: Dispensing Register for ARVs, pen</i>

<b>Step</b>	<b>Action</b>	<b>Notes</b>
1	<b>Date:</b> Write the date that the ARVs are dispensed to the patient.	
2	<b>Name:</b> Write the name or patient ID number.	
3	<b>Regimen:</b> Place a tick mark (an X or √) for the regimen that is prescribed.  A blank line is included for an additional regimen, however, only regimens approved by the Ministry of Health should be used.	Place a tick for only 1 regimen. Depending on how the Prescriber has written the prescription, you may need to determine the regimen based on which drugs are prescribed and the weight (or BMI) of the patient.
4	<b>Products dispensed:</b> Document the quantity of each ARV dispensed to the patient by writing the # of units dispensed in the column for that ARV.	Most tablets are taken one tablet twice daily however some are taken only once daily, while still others are multiple tablets taken twice daily.  For liquids, write the number of bottles dispensed.
5	<b>At the end of each day, write in the total number of patients for each regimen:</b> Add the tick marks for each regimen.	Skip a line after writing the totals for the day if it is not also the end of the page.
6	<b>At the end of each day, write in the total quantity of each ARV dispensed during the day:</b> Add the quantities of each product dispensed and write in the totals.	Skip a line after writing the totals for the day if it is not also the end of the page.
7	<b>At the end of each page, total for this page:</b> Add the total by regimen and the quantities of each product dispensed and write in the totals.	
<b>THIS TASK IS COMPLETED WHEN:</b>		
<ul style="list-style-type: none"> <li>• One line for each patient is completed for date, name/ID, regimen (tick mark), and actual quantity of drugs dispensed.</li> <li>• Daily totals are summed for each day.</li> <li>• Page totals are summed, at the end of each page.</li> </ul>		



## JOB AID Completing Form A2: Report & Request for Anti-Retroviral Drugs (ARVs)

<b>TASK:</b>	Completing <i>Form A2: Report &amp; Request for Anti-Retroviral Drugs (ARVs)</i> at the Hospital
<b>COMPLETED BY:</b>	Facility Stores In-charge
<b>PURPOSE:</b>	To report on the quantities of ARVs received and dispensed during the quarter To determine order quantities for each product To provide MOH with data and information on product usage, stock levels, number of patients by regimen, and number of patients waiting to begin ARV therapy.
<b>WHEN TO PERFORM:</b>	At the end of each month
<b>MATERIALS NEEDED:</b>	<i>Blank Form A2: Report &amp; Request for ARVs, Form 1: Stores Ledger</i> book(s) for all storage areas for ARVs, <i>Form 4: MSD Sales Invoice</i> for all shipments received during the quarter, <i>Form A1: Dispensing Register for ARVs</i> , pen, calculator. Also needed is the total number of patients waiting to begin ARV therapy and those who have died, which is known by the Prescribers.

### A. For each ARV

<b>Step</b>	<b>Action</b>	<b>Notes</b>
1	<b>(A) Balance Brought Forward:</b> Write the stock on hand balance at the beginning of the quarter.	The Beginning Balance for the current quarter equals the Ending Balance from the previous quarter.  Example: 1,500
2	<b>(B) Received This Month:</b> Write the quantity of the product your facility received from MSD during the month.	The quantity received is found in <i>Stores Ledger</i> and on <i>Form 4: MSD Sales Invoice</i>  Example: 1,020
3	<b>(C) Actual dispensed:</b> Write in the quantity of the product dispensed from <i>Form A1: Dispensing Register for ARVs</i> .	Example: 840

4	<b>(D) Lost/Adjusted:</b> Write the quantity of any products that are known to be removed from stock for reasons other than issues/dispensed or that were added to stock from sources other than MSD.	<p><b>Note losses and other removals from stock with a negative number (e.g., -5).</b></p> <p><b>Note additions to stock with a positive number (e.g., 25).</b></p> <p>Example: 0</p>
5	<b>(E) Ending Balance:</b> Use the formula to calculate the ending balance.	<p><b>The ending balance should equal the balance on <i>Stores Ledger</i> plus the stock in the dispensing areas. If not, enter a loss/adjustment until the calculation matches the actual stock on hand.</b></p> <p><b>Example: <math>1,500 + 1,020 - 840 = 1,680</math></b></p>
6	<b>(F) Quantity Needed:</b> Write the quantity of the product needed to reach the maximum stock level.	<p>The Quantity Needed is Calculated as:</p> $(C \times 3) - E$ <p>Example: <math>(840 \times 3) - 1,700 = 840</math></p>
7	<b>(G) Quantity Requested:</b> Write the quantity of the product you will order from MSD.	<p><b>Round the Quantity Needed to the nearest MSD unit of issue.</b></p> <p><b>Example: 14 (bottles of 60)</b></p> <p><b>Note: Products must be ordered and paid for according to MSD units of issue. You may not order less than the minimum unit of issue.</b></p>
8	IF the facility is ordering second-line drugs or pediatric formulations <b>for the first time</b> , THEN skip columns A-F. In column G, enter the estimated amount needed to treat the number of patients to receive the drug multiplied by 3.	<b>During subsequent months, these drugs should be ordered as normal.</b>
Repeat Steps 1 – 7 for all products.		

## B. For the “Summary of Patients by Regimen” table

9	For each regimen, enter the total number of patients on treatment from Form A1: Dispensing Register.	Enter adults and pediatric regimens separately.
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10	For “Number of patients to be initiated treatment (new)”, enter the number you are given by the Prescriber for each regimen.	The number of waiting patients who cannot currently be served should be known by the Prescriber. If the information cannot be found in a timely manner, enter “not available.” Enter the number for adults and pediatric patients separately
11	For “Number of patients who have died”, enter the number you are given by the Prescriber.	Information on the patients who have died may be known by prescribers. If the information cannot be found in a timely manner, enter “not available.”

C. After completing steps 1-11 for dispensing and summary of patients by regimen

	Take the completed form to the DMO for approval by the 10 <sup>th</sup> day of the month.	
<p><b>THIS TASK IS COMPLETED WHEN:</b></p> <ul style="list-style-type: none"> <li>• Data columns A through G have been filled for all products.</li> <li>• The Summary of Patients by Regimen table has been completed.</li> </ul>		



THE UNITED REPUBLIC OF TANZANIA  
MINISTRY OF HEALTH



**INTERGRATED LOGISTICS SYSTEM  
FORM A1: DISPENSING REGISTER FOR  
ANTI-RETROVIRAL DRUGS (ARVs)**

FACILITY CODE: \_\_\_\_\_

FACILITY NAME: \_\_\_\_\_

TYPE OF FACILITY (GOV/NGO/FBO/OTHER): \_\_\_\_\_

NAME OF DISTRICT: \_\_\_\_\_

STARTING DATE: \_\_\_\_\_

ENDING DATE: \_\_\_\_\_





Tablets Dispensed													Solutions Dispensed					Initials	
3TC/d4T(30)/NVP													Abacavir 20mg/ml					Providers	Patients
3TC/d4T(40)/NVP													Didanosine 2gm powder						
d4T(30)/3TC													Stavudine 1mg/ml						
d4T(40)/3TC													Lopinavir/Ritonavir 80/20 mg/ml						
ZDV(300)/3TC(150) mg													Nelfinavir 50mg/g powder						
Abacavir 300mg													Nevirapine 50mg/5ml						
Didanosine 25mg													Zidovudine 50mg/5ml						
Didanosine 100mg													Lamivudine 10mg/ml						
Efavirenz 50 mg																			
Efavirenz 200mg																			
Efavirenz 600mg																			
Lamivudine 150mg																			
Lopinavir/Ritonavir 133.3/33.3																			
Nelfinavir 250mg																			
Nevirapine 200 mg																			
Ritonavir 100mg																			
Saquinavir 200mg																			
Stavudine 15mg																			
Stavudine 20mg																			
Stavudine 30mg																			
Stavudine 40mg																			
Zidovudine 100mg																			



### FORM ARV2: REPORT & REQUEST FOR ANTI-RETROVIRAL MEDICINES (ARVs)

Facility Code: \_\_\_\_\_ Facility Name: \_\_\_\_\_ Type (GOV/NGO/FBO/OTHER): \_\_\_\_\_

Name of District: \_\_\_\_\_

Date Submitted: \_\_\_\_\_ Reporting Period: Month: \_\_\_\_\_ Year: \_\_\_\_\_

MSD Code	Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Actual Dispensed (C)	Lost/ Adjusted (D)	Ending Balance [E=A+B-C±D] (E)	Quantity Needed [F=(Cx3)-E] (F)	Quantity Requested (G)	Approved Quantity (I)
	3TC/d4T(30)/NVP Tab FDC	bottle 60 tablets								
	3TC/d4T(40)/NVP Tab FDC	bottle 60 tablets								
	d4T(30)/3TC Tab FDC	bottle 60 tablets								
	d4T(40)/3TC Tab FDC	bottle 60 tablets								
	ZDV/3TC Tab FDC 300/150mg	bottle 60 tablets								
	Abacavir Tab 300mg	bottle 60 tablets								
	Didanosine Tab 25mg	bottle 60 tablets								
	Didanosine Tab 100mg	bottle 60 tablets								
	Efavirenz Tab 50mg	bottle 30 tablets								
	Efavirenz Tab 200mg	bottle 90 tablets								
	Efavirenz Tab 600mg	bottle 30 tablets								
	Lamivudine Tab150mg	bottle 60 tablets								
	Lopinavir/Ritonavir Tab FDC 133.3/33.3mg	bottle 180 tablets								
	Nelfinavir Tab 250mg	bottle 270 tablets								

MSD Code	Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Actual Dispensed (C)	Lost/ Adjusted (D)	Ending Balance [E=A+B-C±D] (E)	Quantity Needed [F=(Cx3)-E] (F)	Quantity Requested (G)	Approved Quantity (I)
	Nevirapine Tab 200 mg	bottle 60 tablets								
	Ritonavir Tab 100mg	bottle 84 tablets								
	Saquinavir Tab 200mg	bottle 180 tablets								
	Stavudine Tab 15mg	bottle 60 tablets								
	Stavudine Tab 20mg	bottle 60 tablets								
	Stavudine Tab 30mg	blister pack 56 tablets								
	Stavudine Tab 40mg	blister pack 56 tablets								
	Zidovudine Tab 300mg	Bottle 60 Tabs								
	Zidovudine Tab 100mg	bottle 60 tablets								
	Abacavir 20mg/ml	bottle 240 ml								
	Didanosine Pdr for solution, 2gm	4 oz bottle contains 2gm								
	Stavudine 1mg/ml	bottle 200ml								
	Lopinavir/Ritonavir 80/20mg/ml	bottle 160ml								
	Nelfinavir Pdr 50mg/g	bottle 144gm								
	Lamivudine Susp. 10mg/ml	bottle 100ml								
	Nevirapine Susp. 50mg/5ml	bottle 240ml								
	Zidovudine Susp. 50mg/5ml, 100ml	bottle 100ml								

Summary of Patients by Regimen				
Regimens	Number of Patients on treatment	Number of Patients to be initiated treatment (new)	Number of patients who have died	Remarks
<b>Adults</b>				
3TC/d4T(30)/NVP (under 60kgs)				
3TC/d4T(40)/NVP (over 60kgs)				
3TC/AZT + NVP				
d4T(30) + 3TC + EFV (under 60 kgs)				
d4T(40) + 3TC + EFV (over 60 kgs)				
AZT/3TC + EFV				
ABC + ddl + LPV/r				
ABC + ddl + LPV//r				
ABC + ddl + SQV + RTV				
ABC + ddl + SQV + RTV				
<b>Pediatrics</b>				
3TC + AZT + NVP				
3TC + EFV + AZT				
3TC + NVP + d4T				
3TC + EFV + d4T				
ABC + ddl + LPV/r				
ABC + ddl + NFV				
Other				

Completed by: \_\_\_\_\_

Signature: \_\_\_\_\_

Approved by: \_\_\_\_\_

Signature: \_\_\_\_\_



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